



HEEMSKIRK  
CONSOLIDATED

ANNUAL REPORT 2015



# TABLE OF CONTENTS

LETTER FROM THE CHAIRMAN AND THE MANAGING DIRECTOR	1
RESERVES AND RESOURCES UPDATE	4
DIRECTORS' REPORT	37
AUDITOR'S INDEPENDENCE DECLARATION	40
OPERATING & FINANCIAL REVIEW	41
REMUNERATION REPORT	47
FINANCIAL STATEMENTS	55
Consolidated Statement of Comprehensive Income	55
Consolidated Balance Sheet	56
Consolidated Statement of Changes in Equity	57
Consolidated Statement of Cash Flows	58
NOTES TO THE FINANCIAL STATEMENTS	59
DIRECTORS' DECLARATION	95
INDEPENDENT AUDITOR'S REPORT	96
ADDITIONAL SHAREHOLDER INFORMATION	98
CORPORATE DIRECTORY	IBC

# LETTER FROM THE CHAIRMAN AND THE MANAGING DIRECTOR

Dear Shareholder,

In the past year the Company's key corporate performance indicators have been to:

- Operate safely and remain compliant;
- Strengthen the Balance Sheet prior to the full development of the Moberly Project;
- Advance the Moberly Project for long term value generation; and
- Remain focussed on general overhead costs.

From a safety and compliance perspective we have had one medically treated injury and no lost time injuries during the reporting period. We have not had any safety issues which have impacted our business or licence to operate. This is a minimum acceptable standard for our Company.

The balance sheet was addressed in two parts over the period.

1. Our outstanding Convertible Note Debt of \$2.739m was retired on time on 30 March 2015 to ensure the Company had a clean position setting up for the development initiative outlined below.
2. The Company completed a successful Private Placement and Rights issue in July/August which was well supported by our shareholders. This support was much appreciated.

With respect to our major project, our focus was to advance closer to value generation. We divided this work into physical and financial actions. On site we initiated and completed the first phase of construction with the completion of the 300,000 metric tonnes per annum (tpa) Process Plant Facility footings. In parallel with this process, we signed a two tranche US\$40m debt funding package with Taurus Funds Management to complete the US\$26.6m construction and development.

## Subsequent to the End of Financial Year

In December 2015 a capital raising of A\$10m was initiated mainly due to:

1. the conditions precedent for finance requiring coverage for both capital and additional working capital;
2. the capital estimate increasing by 14% to US\$26.6m; and
3. the working capital being adjusted to cater for the construction timeline being extended from 12 to 14 months.

The increase in capital estimate resulted from:

- the withdrawal of the subcontractor requiring the electrical design and procurement work to be retendered by the lead contractor and subsequently being requested at a higher price;
- the retendered electrical work also influencing the process installation element of construction and impacting the construction schedule; and
- exchange rate fluctuations impacting the estimate.

At the same time the Company is advancing the engineering and design work on the Stage 2 expanded production case of 600,000 tpa – work in relation to this will take approximately 18 months.

Whilst these post balance date outcomes are a disruption, the overall project metrics for the Stage 1 development remains robust. These are detailed below.

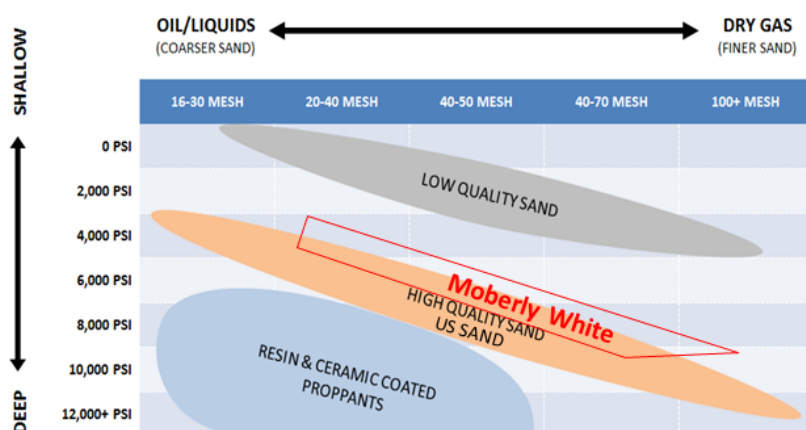
## Project Metrics – Key Assumptions Stage 1 Development

- Nameplate production output capacity – 300,000 tpa
- Recoveries in appropriate frac sand product size range of approximately 75%
- Capital costs with contingencies – US\$26.6m
  - Plant construction US\$23.9m
  - Other US\$2.7m
- Debt Funding Stage 1 – US\$25m
- Project Free Cash Flow Undiscounted annual average – C\$11.2m
- Ungeared Project Internal Rate of Return Stage 1: 33%
- Payback Period Stage 1: 2.9 years

## LETTER FROM THE CHAIRMAN AND THE MANAGING DIRECTOR

- Project ungeared NPV is C\$78 million for Stage 1<sup>1</sup> and AUD 33 cps (post December 2015 capital raising AUD 14 cps)
- Estimated time to completion of construction has extended from 12 to 14 months
- Canadian frac sand demand remains stable despite oil price volatility
- API specification frac sand product
- Defined in situ JORC Reserves & Resources is more than sufficient to satisfy current 20 year mine plan
- Appropriate permits in place
- The Project has an estimated terminal (residual) value of up to \$360 million<sup>2</sup> assuming Stage 1 construction only

FIGURE 1 PROPPANT QUALITY AND STRENGTH MATRIX



We believe that the “Moberly White” sand is a high quality domestic Canadian sand which has a broad application range for the oil and gas market. The product also has other industry applications, particularly for the glass and cement industries.

Figure 1 above illustrates the relative positioning of the Moberly material when compared with low quality sand, very high quality sand and resin & ceramic coated proppants. Sand still dominates overall proppant consumption being up to 90% of consumption. The Stage 1 Moberly development is anticipated to represent approximately 10% of current domestic consumption.

The overall corporate overhead has been reduced from \$2.329m in 2014 to \$2.004m in 2015. The Company will continue to focus on corporate costs in 2016 whilst supporting the Moberly development.

During the year Mr William (Lex) Hansen resigned as a Non Executive Director of the Company. Mr Hansen was a founding director of the Company. During his 11 years as a Non Executive Director, Mr Hansen made a valuable contribution to the Board and its subcommittees and we would like to thank him for his service.

We look forward to the forthcoming year as we develop our flagship project.

Yours sincerely

**Garry Cameron**  
Chairman

**Peter Bird**  
Managing Director

<sup>1</sup> Using a Real Discount Rate of 7.5% (10.6% Nominal). The discount rate has been recently reviewed with the real WACC calculated at 6.37% and hence the chosen discount rate of 7.5% is regarded as being conservative. The Project model was independently audited by EY with no material issue identified in model structure or inputs.

<sup>2</sup> Depending on valuation method used.



*Footings Construction at Moberly Plant Site.*





# RESERVES AND RESOURCES UPDATE

## MOBERLY SILICA DEPOSIT (100% OWNED BY HEEMSKIRK)

The Moberly silica deposit occurs on the flank of Mount Moberly approximately 7km north of the regional centre of Golden, British Columbia and about 215km west of Calgary.

The material that is mined at Moberly is the Ordovician Mount Wilson Quartzite unit. Near Golden it reaches a maximum thickness of 480 metres at Horse Creek (less in the mine area) and Mount Moberly is the northern limit of the unit, where it is terminated by a thrust fault. The quartzite occupies a faulted syncline in the Beaverfoot Range and outcrops in parallel, structurally repeated layers. The quartzite is typically grey to buff coloured massive orthoquartzite with some evidence of crudely laminated and cross laminated beds near the base.

At the mine site the geology is simple. Bedding generally strikes around 118° magnetic and is vertical to steeply NE dipping. The rock consists of an orthoquartzite mostly but variably de-cemented (ie by removal of the silica 'cement' binding the grains) so that most of the area exposed consists of 'altered' quartzite, said to be friable or 'sandy' to varying degrees. Only a small percentage of the rock could be described as 'quartzite' in hand specimen; mostly there is a siliceous skeletal texture with beds, blebs and irregular masses of sand which flows freely when the rock is dug. There appears to be no systematic variation or control of the de-cementing. The composition of the rock is +99% SiO<sub>2</sub> as quartz, with the remainder being silicate clays and very rare other silicate minerals.

Petrological studies show that the sand grains within the rock vary between 0.841mm to 0.105mm in diameter (20 mesh to 100 mesh on the US scale).

The deposit was mined from the early 1980s to 2009 for silica processed to silica sand for glass making, golf course sand and similar products. Over these almost 25 years, the resource has been exposed and mined over 200m in vertical extent (along bedding), about 800m in strike (along bedding) and over 250m across strike (perpendicular to bedding) and for at least the last 10 years of full scale production, no portion of the pit varied from silica quality suitable for glass making, confirmed by customer analyses every shipment. The north-east margin of the quartzite unit has not been exposed in the mine area and the quartzite can be traced in air photos to the south-east for at least double the exposed length in the mine area.

Criteria for sand for glass making are SiO<sub>2</sub> +99.5% with Al<sub>2</sub>O<sub>3</sub> <0.25%, Fe<sub>2</sub>O<sub>3</sub> <0.1% and Cr<sub>2</sub>O<sub>3</sub> <0.005%. The Moberly deposit and plant consistently delivered within spec during its operation.

During 2010 – 12 Heemskirk investigated, via an internal pre-feasibility and then a feasibility study (which was updated in early 2015) the possibility of treating the quartzite to produce a 'frac sand' suitable for use in the oil & gas sector as a proppant<sup>1</sup>. The studies found the project to be economically viable and the project moved to engineering design of a new frac sand plant on the existing plant site and an increased mining rate, within the same mine footprint, with at least a 35 year mine life. The plant engineering is now complete. Non frac sand residues are saleable either as silica flour (with additional treatment) or as additives for cement making.

Testing conducted while engineering design was being done found that a change in 'scrubber' equipment (used as the last stage of grain liberation and to 'polish' the sand grains to increase sphericity and roundness) would increase the yield of frac sands from the feedstock whilst still yielding ISO/API quality frac sands. This led to the incorporation of a commercial mixer unit in the process flow sheet. Recoveries in test work were up to 80% 30# -140# (64% 20# to 140# previously) but the Competent Person settled on 70% recovery of 30# to 140# for the estimation of Resources and Reserves to allow for uncertainties in applying the mixers at full scale. The cut-off for frac product was set at 30# due to the presence of a proportion of grain 'clusters' in the 20# to 30# fraction.

Frac sand is defined within a range of qualities (such as grain size, roundness, sphericity, acid solubility, turbidity, crush resistance and conductivity), each measured to ISO or API (American Petroleum Institute) specifications, rather than a single pass/fail specification, with customers defining the range of each quality that is acceptable for their particular use at a particular time (ie well depth, well location, availability of other product, well logistics).

In the past year Heemskirk continued to negotiate finance arrangements to build the new plant and other works to allow the expanded mining operation. These negotiations have been concluded on terms satisfactory to Heemskirk and the project remains financially robust.

Estimated Mineral Resources and Ore Reserves of silica at Moberly have changed from last year.

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1 Frac sand consists of silica sand which, having certain characteristic roundness, sphericity, strength and certain other properties is suitable to act as a proppant in oil and gas wells. Proppants are injected into such wells in order to keep fractures open, allowing the continued free flow of the gas or oil from the reservoir. Frac sand is usually used by customers in certain size brackets, e.g. 20 mesh to 40 mesh, 40 mesh to 70 mesh and 70 mesh to 140 mesh.

As noted above, the estimated recovery of frac sand from the silica ore has changed from 64% of 20#-140# frac sand, to 70% of 30#-140# frac sand as a result of test work leading to a design change to incorporate a pair of commercial mixers into the process design, replacing a 'scrubber' unit of different design.

Also, the strike extent of published Resources has been increased by 150m and consequently, published Reserves by 50m, resulting in increases of tonnages of silica for frac sand or, alternatively, glass making sand and a material increase in recoverable frac sand. The reason for the increased strike extent in Resources is largely historical. When the Competent Person initially began estimating silica Resources and Reserves at Moberly, the future of the western 50m and eastern 100m extents of the resource was uncertain – vegetation regrowth was progressing and there were adequate resources in the smaller area given the production rates. With the increased tonnages required for the frac plant, and greater certainty of the most recent Mine Plan, the ends of the resource have been brought back into the published figures.

Resources of frac sand residues have decreased due to the increased recovery factor used for frac sands.

Resources and Reserves of silica at Moberly in 2015 are again reported separately for the traditional markets of Moberly silica – firstly for frac sand (with residues suitable for cement making or further processing into silica flour as an additional resource) and also for glass making. These estimates are largely for the same area of the deposit, but utilising different processing routes and end markets. Therefore the resource estimates are not additive, but rather alternatives to one another. Due to the simplicity of the geometry of the resource blocks, traditional cross-sectional techniques were able to be used, based on volumes estimated from AutoCad applied to a digital terrain model (DTM) of the deposit and a 35 year Mine Plan.

Further information is contained in the JORC defined 'Table 1' which is included as Appendix 1 here due to the increase in Resources and Reserves. Parts of Table 1 which have changed are labelled "UPDATE".

Ore Reserves and Mineral Resources this year are estimated as at 30 September, to align with Heemskirk's financial reporting date. The prior estimation was as at 30 June 2014. No changes in the estimations resulted from this date change.

## A. Silica for frac sand, frac sand residues and silica flour markets

These Resources and Reserves are for an alternative processing route and market to the glass sand and other products reported in Section B. Resources and Reserves presented in this Section A are therefore not additive to those presented in Section B but rather are alternatives.

In-situ silica destined for the frac sand market has an estimated 70% yield to 30 mesh to 140 mesh sized sand<sup>2</sup>, with the balance (frac sand residues) suitable for cement additives or further processing to silica flour for high temperature cement additives. Therefore the frac sand is expressed as a tonnage and percent frac sand yield, with the frac sand residue Mineral Resource expressed as in-situ tonnage.

**Table 1: In situ Estimated Mineral Resources of silica suitable for frac sand, at 30 September 2015**

Resource Category	Dry tonnes	
	2014 20 mesh to 140 mesh frac sand	2015 30 mesh to 140 mesh frac sand
Measured*^	10.8 million tonnes @ 64% frac sand	12.5 million tonnes @ 70% frac sand
Indicated*^	21.6 million tonnes @ 64% frac sand	25.0 million tonnes @ 70% frac sand
Total Measured + Indicated*^	32.4 million tonnes @ 64% frac sand	37.5 million tonnes @ 70% frac sand

\* Mineral Resources for frac sand include that proportion modified to produce Ore Reserves of frac sand.

^ Frac sand Resources are not additive to Resources for glass making etc

Columns may not add up due to rounding

<sup>2</sup> Updated recovery and size range following test work using a mixer 'scrubber' unit and the adoption of this equipment in the circuit.

## RESERVES AND RESOURCES UPDATE

The tonnage of Mineral Resources of silica to produce frac sand have increased due to a 150m increase in the strike extent of published Resources due to changed certainty of use of the east and west extents of the resource area. A change in designed processing equipment, following test work on bulk samples had led to an increase in expected recoveries to frac sand and a narrowing of the expected range of frac sand mesh size.

Residues from the production of frac sand (ie -140 mesh) are suitable for use as cement additives, or further processing to silica flour for high temperature cement additives, so the following Mineral Resources for frac sand residues are in addition to the Mineral Resources for frac sand.

**Table 2: In situ Estimated Mineral Resources of silica as frac sand residues, at 30 September 2015**

Resource Category	Dry tonnes (millions)	
	2014	2015
Measured*^	3.9	3.8
Indicated*^	7.8	7.5
Total Measured + Indicated*^	11.7	11.3

\* No proportion of these Resources are contained in the frac sand Ore Reserves below

^ Frac sand residue Resources are not additive to Resources for glass making etc

Columns may not add up due to rounding

Expected recoveries to frac sand have increased from 64% to 70%, so silica reporting to frac sand residues will decrease proportionately. However the increase in strike extent of published Resources has increased the total tonnage of Resources, offsetting most of the decrease in Resource of silica reporting to frac sand residues.

A Feasibility Study in 2012 found the Moberly frac sand project to be economically robust at 64% recoveries and other assumptions at the time. The Feasibility Study was updated in early 2015; incorporating the increased expected recoveries and updating capital and operating costs. A further update to the economic model late in 2015 demonstrates that the project still yields an attractive NPV and IRR.

All permits to produce frac sand are in place, except for an amendment to the one pertaining to dust emissions. This amendment application cannot be made until the precise dust filtration equipment specifications and locations of that equipment are known. The amended permit is not required until production commences. An Operating Permit to use treated on site bore water as potable supply is required, but the project is not dependent on that, as potable water could be trucked in. The mine haul road needs to be upgraded before production commences and engineering plans and costings are in place. The upgrade plan has been approved as part of the Mining Permit.

From the estimated Mineral Resources for frac sand were estimated the following Ore Reserves of frac sand. These are contained within a fully Permitted and engineered pit of 35 years duration at a mining rate of 400,000 tpa. Frac sand residue Resources have not been converted to Ore Reserve status.

**Table 3: Estimate of Ore Reserves of silica suitable for frac sand, at 30 September 2015**

Reserve Category	Dry tonnes	
	2014	2015
Proved^	8.9 million tonnes @ 64% frac sand#	9.3 million tonnes @ 70% frac sand##
Probable^	4.6 million tonnes @ 64% frac sand#	4.6 million tonnes @ 70% frac sand##
Total Proved + Probable^	13.5 million tonnes @ 64% frac sand#	13.9 million tonnes @ 70% frac sand##

^ Frac sand Reserves are not additive to Reserves for glass making etc

# 20 mesh to 140 mesh

## 30 mesh to 140 mesh

Columns may not add up due to rounding



Ore Reserve tonnages of silica for frac sand have increased due to the extension of the reported Resources envelope, as noted above, but the Mine Plan was only affected by this in a small way. Recoveries to frac sand have increased from 64% 20 mesh to 140 mesh to 70% 30 mesh to 140 mesh due to a change in equipment in the wet circuit following test work on bulk samples.

## B. Silica for glass sand and silica flour markets

These Resources and Reserves are for an alternative processing route and market to the frac sand reported in Part A. Resources and Reserves presented in this Section B are therefore not additive to those presented in Section A but rather are alternatives.

In-situ silica for glass making sand and silica flour yields 100% saleable product and so is expressed as in-situ tonnes.

**Table 4: Estimated Mineral Resources for silica for glass making and golf course sand, silica flour markets at 30 September 2015**

Resource Category	Dry tonnes (millions) of silica product	
	2014	2015
Measured*	21.6	25.0
Indicated*	21.6	25.0
Total Measured + Indicated*	43.2	50.0

\* Mineral Resources include that proportion modified to produce Ore Reserves.

Columns may not add up due to rounding

The tonnage of Mineral Resources of silica to produce sand for glass making etc have increased due to a 150m increase in the strike extent of published Resources due to changed certainty of use of the terminal extents of the resource area.

From the above in-situ Mineral Resources were estimated the Ore Reserves given in Table 5. These are contained within a fully Permitted and engineered pit of 35 years duration at a mining rate of 400,000 tpa.

**Table 5: Estimated Ore Reserves for silica suitable for glass making sand and silica flour markets at 30 September 2015**

Reserve Category	Dry tonnes (millions) of silica product	
	2014	2015
Proved	12.8	13.2
Probable	0.7	0.7
Total Proved + Probable	13.5	13.9

Columns may not add up due to rounding

Ore Reserve tonnages of silica for glass making have increased due to the extension of the reported Resources envelope, as noted above, but the Mine Plan was only affected by this in a small way.

*The information in this report that relates to Mineral Resources or Ore Reserves is based upon information compiled by Malcolm Ward, BSc (Hons), MSc (Queen's), who is a Fellow of the Australasian Institute of Mining and Metallurgy.*

*Malcolm Ward is employed by and is Principal of Mining Advisory Pty Limited. Malcolm Ward and Mining Advisory Pty Ltd are retained under contract by Heemskirk to provide geological and other services, including the estimation of Ore Reserves and Mineral Resources. The work on Ore Reserves and Mineral Resources is undertaken independently. No remuneration is contingent on the outcome of that aspect of work and Heemskirk is not permitted to review or comment on the Ore Reserves and Mineral Resources estimate and accompanying technical documentation during preparation and afterwards may only comment on the estimate to correct errors of fact.*

*Malcolm Ward has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Malcolm Ward consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

# RESERVES AND RESOURCES UPDATE

## APPENDIX 1

### JORC Code, 2012 Edition – ‘Table 1’

Preamble: Please refer to the geological description of the Moberly silica deposit in the main body of this report.  
Sand for glass making and frac sand come from essentially the same areas of the deposit.

For the industrial mineral sand for glass making and frac sand, the concept of ‘grade’ as a percent or ppm of the material sought within the host rock is not applicable. Both these types of sand are bulk industrial products. Silica for glass making is required to be +99% SiO<sub>2</sub> with specified low levels of aluminium, iron and chrome. Silica for frac sand is defined by a number of qualities, measured by ISO and API specified techniques, including grain roundness, sphericity, acid solubility, turbidity, crush resistance and conductivity, with each quality determined for certain grain sizes such as 20/40, 30/50, 40/70 and 70/140 mesh. The range of acceptable values for each quality varies and the customer will define the requirements for each particular shipment. Thus, other than being in a size range between 30 mesh (0.595mm diameter) to 140 mesh (0.105mm diameter) there is no set ‘hurdle’ as to whether a sand is frac quality or not.

Sand produced for frac sand could be sold for glass making and tests have found that sand previously produced for glass making is largely frac quality.

### Section 1 Sampling Techniques and Data

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

Changes in this section from June 2014 are prefaced ‘UPDATE’.

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"><li><i>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.</i></li><li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li><li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li><li><i>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 types (eg submarine nodules) may warrant disclosure of detailed information.</i></li></ul>	<p>The Moberly silica sand deposit was drilled by four cored holes in 1982 with logging was largely done on a qualitative basis and indicates the homogeneity of the deposit at depth, although this would be essentially down-dip of the sandstone beds.</p> <p>Extensive exposure and mining in three dimensions by open cut mining in the subsequent 25 years, with processing through the former sand plant (producing silica sand for glass making) has attested to the purity and homogeneity of the silica in the deposit. During this time, every silica shipment to customers was analysed by the customer with very few quality issues. Forward mining will be in the same area as previous mining.</p> <p>Sampling for frac sand quality and feasibility comprised several phases. Firstly, five bulk (+300kg) samples were taken by excavator. The first was of ‘random’ run-of-mine ore from a stockpile, then four were taken from in situ representing various degrees of alteration/sand production within the pit and also spread over the extent of the existing pit. A second phase of sampling took 15 samples, each approx. 20kg from a 3D network across the mine area. From these samples, sub samples were taken for petrological description and some SEM work. Petrological studies show that the sand grains within the mine area vary entirely between 0.841mm to 0.105mm in diameter (20 mesh to 100 mesh on the US scale), that is, all within the range for frac sand.</p>

Criteria	JORC Code explanation	Commentary
		<p>The sampling was done under geological supervision and control to cover variability in the critical component of the frac sand quality which is the degree of cementation of the grains ('alteration').</p> <p>The bulk samples were submitted to an independent metallurgical laboratory to produce sand under the proposed frac sand wet circuit conditions (essentially crush, then 'scrub' or attrition). After consideration of recoveries for the various bulk samples, an overall recovery factor of 64% of 'frac sand' (sized from 20 mesh to 140 mesh) was determined by the met laboratory. The 36% non-frac sand product (mostly &lt;140 mesh) is saleable as cement additive, and/or silica flour, grouting products or other silica sand applications.</p> <p>The laboratory produced sand from the bulk samples (approximately 40kg each) was split and about 5kg sieved to the standard mesh size ranges of 20/40, 40/70 and 70/140 mesh and examined under the microscope, photographed and described. The various fractions were then sent to accredited laboratory StimLabs of Oklahoma, USA for thorough testing for frac sand quality according to ISO and American Petroleum Institute (API) standards for roundness, sphericity, bulk density, acid solubility, turbidity and crush resistance ('K value'). A composite sample from several of the sands from the bulk samples was made to simulate the characteristics of ore to be mined in the early phases of the new operation, and similarly tested, with frac sand 'conductivity' also measured under ISO standard methodology for the various mesh sizes. This is a very exacting 'stress' test for frac sand material.</p> <p>The Moberly sands satisfy all the ISO/API criteria for frac sands. A sample of the plain 'glass sand' from an existing stockpile, without any scrubbing or attrition ('polishing') also qualified as frac sand. A number of sand samples, including the above, were sent to customers for their in-house testing and assessment. All customers reported their satisfaction, although the results of their testing were not disclosed.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<p>UPDATE: A third phase of sampling occurred in late 2014, when ten +800kg bulk samples were taken from throughout the pit area via excavator under the supervision of the Mine Manager. The samples were subjected to jaw crushing, VSI crushing and then testing using a mixer unit at the mixer company's manufacturing and testing facility.</p> <p>The deposit has not been drilled in recent times as the open cut area, on the side of a mountain, yields a 3 dimensional exposure and sampling opportunity much more effective than a drilling program would produce. Also, due to the orientation of the beds, drilling would sample along or across the bed planes only, which can be done on the 3D pit surface. Bulk samples via excavator under geological control were taken from the 3D pit area surface and placed in steel drums.</p> <p>UPDATE: The 2014 +800kg bulk samples were placed in industrial Super Sacks for transport.</p>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<p>As noted above, drilling has not been undertaken recently. Bulk samples were taken using an excavator under geological supervision to ensure representivity and sample recovery was 100% in these cases.</p> <p>Grade is not an appropriate concept in this situation however it is possible that sand which might have 'escaped' during bulk sampling could produce a biased sample overall. Care was taken to avoid this situation.</p>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>Although core / chip sampling has not been undertaken, the pit has been geologically mapped over a number of years, backed up by microscopic examination of a range of samples by a professional petrologist, including thin section micro photography and some SEM photography. Sample sites were photographed and described geologically. Bulk samples were taken and resultant processed sands also examined, described and photographed. This level of work is appropriate to support Mineral Resource estimation for both glass sand and frac sand.</p> <p>All of this work has confirmed the uniform nature of the deposit, in terms of silica content (or rather, near absence of non-silica grains) and the roundness and sphericity of the grains.</p>



Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>No sampling specifically for glass sand production has been done recently, however the deposit has been processed successfully for 25 years by the former sand plant and each sand shipment for many years was sampled and analysed with little indication of off-spec product.</p> <p>As noted above, no coring has been done but five bulk samples were taken via excavator for treatment and then very exacting frac sand quality determination.</p> <p>Given the homogeneity of the deposit, and the fact that the samples were +300kg bulk samples, sample duplication was not considered necessary. The samples were taken in sealed steel drums to a metallurgical laboratory in Vancouver, where a sub-pilot scale circuit had been established. The samples were split, with portion crushed to 25mm for grinding in closed circuit with a 1.7mm screen in 10kg batches at 30% solids for 2 hours per batch. Screen oversize was returned to the grinder for treatment, 140 mesh material was discarded to tailings and the product was decanted for settling, drying and weighing. Both the yield of feed reporting to the product fraction from each sample, as well as the size distribution of the product fraction retained was determined from the testing.</p> <p>The optimal scrubber configuration produced about 40kg of sand from each sample, which was then riffle split and sieved down into various mesh sizes for description, photography and laboratory testing for frac sand qualities.</p> <p>Bulk sand from each sample was sent to accredited frac sand testing laboratories in the USA. There, the samples were analysed for bulk mesh size, then the various size ranges such as 20-40 mesh, 40-70 mesh and 70-140 mesh for each sample were analysed for cluster presence, roundness, sphericity, bulk density, acid solubility, turbidity, crush resistance ('K value') according to ISO and API standards and methodologies.</p> <p>Two samples from the area to be mined initially were composited and again tested, this time including and long term conductivity and permeability.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
		<p>The size of the samples at all stages was appropriate to the grain size of the deposit and the proposed processing circuit. The samples were damp when collected, later dried but scrubbing was done with a wet circuit, therefore the moisture state is largely irrelevant.</p> <p>UPDATE: As noted above, in late 2014 ten +800kg bulk samples were taken from throughout the pit area, under supervision of the Mine Manager. They were jaw crushed, VSI crushed and then tested in the mixer unit. The samples were transported in industrial 'Super Sacks'.</p> <p>At the jaw crush and VSI crush stages, the samples were re-homogenised using sheet rolling and/or riffle splitting. At the mixer testing facility, the tote bags were tumbled to re-homogenise, but some settling effect may still have been present. Sub samples of +50kg were taken by shovel from the Super Sacks for mixing ('scrubbing') tests.</p> <p>Minor contamination of two samples was found following the VSI crushing stage. The contamination was not sufficient to materially affect the results.</p> <p>At each of the jaw crushing, VSI crushing and mixing stages, at least 2kg of sample was split off for size analysis at an accredited laboratory.</p> <p>Sand from mixed (scrubbed) samples were further riffle split and sub-samples of +6kg sent to an accredited ISO laboratory to test for frac sand qualities.</p> <p>The sampling technique, location of samples and sample preparation were all appropriate for the grain size, type of deposit and analytical techniques being used.</p>

Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<p>Historically, sand for glass making was analysed for % SiO<sub>2</sub>, and deleterious element oxides Al<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub> and Cr<sub>2</sub>O<sub>3</sub> each shipment and each month by broad spectrum ICP/AA (total analysis). This is considered appropriate.</p> <p>The analyses for frac sand quality conducted by StimLabs (an accredited frac sand testing laboratory) is a thorough test of frac sand quality and is one of two major laboratories that conducts these tests for the industry in North America. Test are conducted to exacting ISO 13503-2 and API RP19C standards and protocols, specifically Sections 6, 7, 8, 9, 10, 11; some included conductivity and permeability.</p> <p>Analytical procedures are given in the ISO standard: <a href="https://www.iso.org/obp/ui/#iso:std:iso:13503:-2:ed-1:v1:en">https://www.iso.org/obp/ui/#iso:std:iso:13503:-2:ed-1:v1:en</a> (Subscription may be required; full text available from Heemskirk.)</p> <p>This testing is entirely industry standard and those including conductivity can be regarded as a total test. Whether or not conductivity is included, the testing regime is considered appropriate.</p> <p>No geophysical tools have been used.</p> <p>Measurements for frac sand properties are conducted under strict ISO/API procedures. Calibrations at the StimLabs facility are done weekly to annually depending on the piece of equipment; major equipment is calibrated by an independent contractor. Many tests are repeated up to three times and if repeats vary by a certain fraction of SD, the test is repeated. An internal standard is run as a 'blind' sample three times per month.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<p>The results obtained in the StimLabs testing were returned to Heemskirk Canada and separately analysed and interpreted by several people, including the Competent Person and their interpretations and conclusions were the same. This analysis and interpretation is equivalent to the calculation of 'significant intersections'.</p> <p>The results were also shown to potential clients and industry experts and no doubts were expressed that saleable frac quality sand had been produced.</p> <p>No twinning or duplicate sampling was undertaken, however the samples were bulks of ~330kg each.</p> <p>StimLabs reports were received in hard copy at the company office in Calgary and filed appropriately. The results did not require transferal into any digital database.</p> <p>No adjustments to the data were done.</p> <p>UPDATE: As noted above, the third round of sampling entailed +800kg bulk sampling.</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<p>Although a historical grid exists at the silica open pit, it is not currently used. The sample locations were recorded by GPS and transferred to Google Maps and aerial imagery. The scale of the sampling and homogeneity of the silica within the pit means that this location accuracy was sufficient.</p> <p>The hand held GPS uses WGS 84 datum and spheroid and displays latitude and longitude to one decimal point of seconds.</p> <p>The pit is surveyed periodically via GPS by licenced surveying contractors although the lack of mining in recent years has meant that a full survey has not been conducted in the past year. The current survey control is adequate for the sampling exercise described above and for resource and reserve estimation.</p>



Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>The sampling was not undertaken for Exploration.</p> <p>As the silica content and grain sizes are totally and reasonably homogenous throughout the mine area respectively, data spacing and distribution was adequate for the purposes of establishing the continuity of frac sand and also glass sand quality for the Mineral Resource and Ore Reserve estimation procedures, using the recovery process(es) to be employed.</p> <p>Although the samples were not composted, the frac sand recovery factor determined by the metallurgical lab was a single figure, determined by the met lab to be appropriate across the deposit.</p> <p>Resources and Reserves are not estimated and reported to the level of the ISO testing described above, but to the recovery level of 20 mesh to 140 mesh frac sand.</p> <p>Sample compositing was applied in one round of ISO quality testing. Sands from two of the bulk samples representing the area to be first mined for frac sand were composited and tested for a full suite of frac sand characteristics, including conductivity and porosity, with good results.</p> <p>UPDATE: No compositing was applied to the 2014 bulk sampling exercise until the final frac quality analysis where two samples were combined. This was done both to achieve the quantity of sand required and to achieve a more representative sample across a wider area of the deposit.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<p>Although the deposit is bedded, there is no discernible variation in silica composition or trends in grain size either across bedding or along strike. The samples taken did represent an unbiased sampling along and across structures.</p> <p>The deposit was not sampled for frac sand quality by drilling. The bulk sampling took account of the bedding structures.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<p>Samples were sealed in steel drums during transport to the metallurgical laboratory and the resultant sands sent by courier between the laboratory and Calgary office in sealed plastic drums and from there to the sand testing laboratory.</p> <p>These measures are adequate for the type and size of the samples in question.</p> <p>UPDATE: The +800kg bulk samples taken in late 2014 were collected into industrial 'Super Sacks' for transport. Some sand leakage may have occurred during transport but this would not be material to the results.</p> <p>These measures are adequate for the type and size of the samples in question.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>The sampling program was reviewed by a consultant firm on behalf a second party investigating the deposit and the amount and locations of the samples were questioned (eg 'unknown' sample locations). However it became apparent that the reviewer was not given access to several critical documents, such as the geological report on the sampling program, which included sample locations and descriptions nor the last detailed Mineral Resources and Ore Reserves estimation report.</p> <p>Heemskirk and the Competent Person are confident that the sampling was well controlled and adequate and has rejected or addressed most of the reviewer's comments.</p> <p>UPDATE: The late 2014 bulk sampling and testing program, along with the rest of the frac sand project technical data and plans was reviewed by an independent engineering company and a frac sand expert engaged by a prospective financier. This review found no issues with the sampling and testing program.</p>

## Section 2 – not applicable

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Changes in this section from 2014 are prefaced 'Update'.

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"><li><i>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.</i></li><li><i>Data validation procedures used.</i></li></ul>	<p>The data relating to this silica / sand / frac sand deposit is relatively simple. Hardcopy reports were handled entirely by professional persons and figures produced in spreadsheets relating to averages etc were reviewed internally.</p> <p>There is no database involved.</p> <p>As no database is employed, no validation procedures were employed other than re-checking results received in hardcopy from the laboratory against sample numbers and descriptions sent.</p>
<b>Site visits</b>	<ul style="list-style-type: none"><li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li><li><i>If no site visits have been undertaken indicate why this is the case.</i></li></ul>	<p>The site is visited several times a year by the Competent Person, including one visit annually specifically in relation to Mineral Resource and Ore Reserve Estimation. No unusual features or occurrences have been noted. The CP also visited the metallurgical laboratory in Vancouver at the time of initial frac sand recovery test work.</p> <p>UPDATE: The Competent Person attended the mixer plant in the USA for the testing of bulk samples using mixers. A visit to the Moberly mine and plant site was made in September 2015.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>The mineral deposit is a simple bedded sandstone/orthoquartzite deposit, broadly folded so bedding is near vertical throughout the mine area, with no hinge zone apparent, well exposed in the open cut. Variation in the de-cementing of the grains occurs on a mm to metre scale, but this does not affect the frac or glass making sand quality except to the degree that silica shards may remain on the grains in the less altered rock (and which are removed in the scrubbing stage). Confidence in the geological interpretation of the deposit is high.</p> <p>Data used is geological mapping and petrological examination of samples taken across the mine area. The main assumption made is that the deposit continues in its present form for a further 100m or so at depth; note that this direction is along bedding and that more than this vertical extent is already exposed within the open cut workings.</p> <p>There is no other reasonable geological interpretation to the deposit; the entire deposit is exposed in three dimensions, over hundreds of metres in each direction.</p> <p>Geology controls the Mineral Resource estimation in that the resource lies entirely within a consistent bedded sandstone/quartzite unit. There are no other rock types involved.</p> <p>'Grade' is not a quality associated with glass sand or frac sand deposits but various, separate, glass and frac sand qualities are determined. The factors affecting the continuity of these qualities and geology relate to primary sedimentary deposition processes. Any variations which are present are not material to the Mineral Resource estimation.</p>



Criteria	JORC Code explanation	Commentary
<b>Dimensions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>Within the exposed and previously mined area of the altered orthoquartzite (800m plan length (along bedding), 250m plan width (perpendicular to bedding) and 200m in vertical extent below surface (along bedding), the frac sand resource has been estimated and reported for a length of 600m in plan length (along bedding), between 220 and 180m in plan width (perpendicular to bedding) and 25m for Measured then a further 50m for Indicated Resource below surface (along bedding).</p> <p>The glass making silica resource has been estimated and reported for a plan length of 700m (along bedding), between 220 and 180m plan width (perpendicular to bedding) and 50m for below surface for Measured and a further 50m for Indicated Resource (again, along bedding).</p> <p>Both the Mineral Resource and Ore Reserves are estimated entirely within the quartzite unit; no country rocks or non-resource lithotypes are within the Mineral Resource or Ore Reserves envelopes.</p> <p>UPDATE: '600m' in the first paragraph above should have read '700m', the same as for glass making silica resources. This was a typographical error. The strike extent of the published Resources in 2015 has been increased by a total of 50m to the west and 100m to the east due to greater certainty that this resource will be able to be recovered, rather than the land left to re-vegetate.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>As the deposit is massive and largely homogenous, the cross section technique is employed for Mineral Resource estimation, with sections 100m apart and Mineral Resource outlines projected 50m either side of a section line. No domaining is used. This is considered appropriate to the type of deposit. No computer software is employed, other than Autocad, by the pit engineer to derive the pit shape.</p> <p>For silica for glass making, the resources were extended in the Measured category for 50m from the surface (ie along strike) and for Indicated category, a further 50m. For silica for frac sand the Mineral Resources were extrapolated 25m from the surface for Measured category and for Indicated category, a further 50m.</p> <p>Prior to the current phase and methodology of resource estimation, commencing in 2006, no resources were estimated at the deposit. Production and customer records before and subsequent to 2006 confirm the purity of the deposit with respect to silica and lack of significant deleterious elements.</p> <p>By products from both glass making and frac sand are silica 'fines' – variably defined depending on the use to which the silica sand is used. The recovery of -140 mesh proportion in the frac sand was determined by metallurgical testing and the equipment design. The fines from either processing route can be sold for cement additive, or made into silica flour. A silica flour circuit is in operation at the plant site.</p> <p>There are no deleterious elements in the deposit expected to impact product sales. Iron occurs occasionally as small pisolites but is eliminated in the initial magnetic scalping of the mill feed or in the washing process. Historically deleterious elements iron, aluminium and chrome have all been analysed routinely and have not been a customer issue in sand for glass making.</p>

Criteria	JORC Code explanation	Commentary
		<p>Block modelling is not employed and no selective mining is employed (the pit lies entirely within 100% resource rock).</p> <p>No assumptions between variables are made.</p> <p>Geology is used to control resource estimates to the extent that the entire unit is homogenous and the resource is contained entirely within the geological unit.</p> <p>Grade cutting or capping is not applicable because the resource is based on +99% silica with a homogenous spread of sand grain sizes.</p> <p>Validation is not made to a computer model, but the assumption of +99% SiO<sub>2</sub> is validated against historic shipments of product as glass sand, with each shipment tested by customers.</p>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	Estimation is on a dry basis.
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	The concept of cut-off grade is not applicable to this bulk sand deposit; see above. Quality parameters such as the amount of in-situ sand development is used in surface mapping, but is not used in Mineral Resource estimation.
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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 an explanation of the basis of the mining assumptions made.</i></li> </ul>	<p>The deposit has been mined by open cut mining since the early 1980s and it is reasonable to assume that this will continue to be the most appropriate method for a very long time.</p> <p>The margins of the geological unit being mined have not been fully exposed on the surface, so it is reasonable to expect that all the current resource will be accessible eventually.</p> <p>Mining occurs entirely within the resource geological unit, with no 'waste rock', so mining recovery factors do not come into play.</p> <p>The 35 year mine plan of 2012 which is still current, is the basis for current mining assumptions.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>The deposit has been processed and sold for glass making silica for about 25 years. It has a simple composition of +99% SiO<sub>2</sub> as sand grains and the silica variably cementing the grains. Most of the remainder is silicate clay minerals. It is easily produced into sand feed for glass plants by crushing, washing, drying and screening, which makes it ideal for this purpose. Residues are suitable for cement additives or silica flour.</p> <p>A metallurgical laboratory test program was initiated to look at the recovery of frac sand from the deposit. Across a number of bulk (+300kg) samples, this found a 64% recovery as frac sized sand (20 mesh to 140 mesh), the balance being silica fines, amenable to sale as concrete additive, or silica flour. ISO standard measurement of frac sand qualities of the sand produced gave good to very good results.</p> <p>UPDATE: Ten +800kg bulk samples were taken from throughout the pit and subjected to jaw crushing, VSI crushing (as already planned in the new plant) and despatched to the mixing facility in the USA. Nine of the ten samples were subjected to a variety of tests including varying the mixer settings and the length of time under mixing. Recovery to 30# to 140# sand was between 75% and 80% and sands tested in an ISO accredited laboratory confirmed that they were of frac quality. The Competent Person has decided that a recovery factor of 70% should be used for Resource and Reserve estimation, to allow for variations between the test facility and the new plant, notwithstanding that an independent review concluded that a recovery figure of 75% was permissible.</p>



Criteria	JORC Code explanation	Commentary
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>The mine site, in operation since the early 1980s, is fully permitted for planned operations.</p> <p>The plant site also began operation for sand processing in the early 1980s. It is currently fully permitted for glass making sand and frac sand production, except a permit amendment relating to dust emissions, which regulators advise will not be an issue with the dust collection measures planned to be employed.</p> <p>All of the material trucked to the plant site is ultimately saleable, including the fines/ residues. Any lag in sales of the latter can be accommodated by stockpiling on site (which has been done previously), for which there is ample room. Permission has been given by agricultural authorities for that part of the site not zoned industrial to be used for 'non-farm use' including stockpiling and rail sidings. No environmental permitting for this is required, other than dust suppression.</p>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<p>Bulk density of the feedstock for both glass making and frac sand silica has been determined by several phases of laboratory determination. A number of approximately 10kg samples were submitted in 2006 and in 2008 to a certified laboratory, representing varying degrees of silica de-cementing (" % sand") across the deposit. Each sample was sawn in half. One half was dried in an oven (ie removing adsorbed water), coated in wax and had its bulk density measured by the water displacement method. The other half was placed uncoated in water and then had its bulk density measured by the same water displacement method. A computation of the bulk density of the samples if the pores and voids were removed was also made. Thus a matrix of bulk densities was determined from wet, dry and voids excluded, and for the range of almost no to almost complete silica de-cementing.</p> <p>The dry bulk densities ranged from 2.26 to 2.64 and the bulk density without voids ranged from 2.39 to 2.65.</p> <p>Given the non-systematic nature of the de-cementing across the deposit a, uniform bulk density of 2.50 was adopted.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>Whether appropriate account has been taken of all relevant factors (ie 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).</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>The basis of classification into Measured and Indicated categories is based on the depth below current pit surface. The current pit surface (on the slopes of a mountain) is well exposed in 3 dimensions and is the product of open cut mining for over 25 years, all of which has yielded the same quality silica. Bedding is vertical or very close to it. For sand for glass making, Measured category is taken from surface to 50m below surface, and Indicated category for a further 50m below that. For frac sand, the Measured category is taken only 25m below surface, with Indicated category a further 50m.</p> <p>This takes appropriate account of the historic homogeneity of the deposit in respect of silica content and grain sizes, the location of bulk samples used to determine recoveries for frac sand and the vertical attitude of bedding.</p> <p>Appropriate account has been taken of the various factors, continuity and the distribution of data, and reflects the view of the Competent Person.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<p>The 2012 Mineral Resource estimate, which remains unchanged to date, was reviewed by an independent geologist for a third party company undertaking due diligence. Although the report of the geologist has not been sighted, another independent reviewing report states that the independent geologist 'agreed with the methodology and result' of the Heemskirk Competent Person's estimations. Further, discussions with the independent geologist at the mine site by the Competent Person revealed no material issues of contention.</p> <p>UPDATE: A second independent review of the 2014 Mineral Resource estimates was undertaken in early 2015 during due diligence by a proposed financier. No significant issues in the technique or estimations were brought forward.</p> <p>The Mineral Resource estimate has been amended in 2015, as noted above (this announcement). This has not been reviewed by an independent person.</p>

Criteria	JORC Code explanation	Commentary
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>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.</li> <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> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<p>The deposit is one of a massive, bedded quartzite/sandstone unit with no waste rock within the pit. No geostatistical manipulation has been used in the Mineral Resource estimates. The estimate is accurate as there is no waste rock within the geological unit and all rock is suitable for saleable products.</p> <p>The Resource estimate is for a single body of rock hosting a single pit, so the estimate is considered global.</p>

## Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <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>	<p>The Mineral Resource estimate for the massive silica deposit was via simple cross sectional method, from surface to a reasonable depth based on geological and continuity factors. The conversion to Ore Reserves was by application of the Mining Plan, other Modifying Factors and the frac sand Feasibility Study.</p> <p>The Mineral Resources for silica for glass making etc and for frac sand are inclusive of the Ore Reserves for each respective type of use.</p>
<b>Site visits</b>	<ul style="list-style-type: none"> <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>	<p>The Competent Person visited the site on a number of occasions in the past year, most recently in September 2014. As no mining has taken place in the past year, nor any change to mining or processing options, no different conclusions or observations in respect of Mineral Resources and Ore Reserves were drawn.</p> <p>UPDATE: The Competent Person attended the mixer plant in the USA for the testing of bulk samples using mixers. A visit to the Moberly mine and plant site was made in September 2015.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Study status</b>	<ul style="list-style-type: none"> <li><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li><i>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.</i></li> </ul>	<p>A Feasibility Study was undertaken in 2011 to determine the economics and feasibility of producing frac sand from the silica resource, which had previously been mined for decades for glass making sand. The outcome of the study was economically positive and robust.</p> <p>The most recent Mine Plan was an update to that in the Feasibility Study, and takes account the planned, permitted increase in mining rate.</p> <p>UPDATE: The Feasibility Study was revised and updated in early 2015, incorporating updated capital and operating costs and incorporating the mixer ('scrubber') in the treatment process. Cost figures have been revised again late in 2015 and the economics of the project remained robust.</p>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<p>For bulk mining of this massive silica deposit, there are no cut-off parameters applied as the deposit and all material is ultimately saleable, irrespective of grain size.</p>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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 preliminary or detailed design).</i></li> <li><i>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.</i></li> <li><i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li><i>The mining dilution factors used.</i></li> <li><i>The mining recovery factors used.</i></li> <li><i>Any minimum mining widths used.</i></li> <li><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<p>A 25 year Mine Plan (open pit) was completed with detailed designs in July 2009 by Clifford Lusby P.Eng, a licensed professional engineer in British Columbia. Although this was a mine plan for mining silica for glass sand, it was adopted in the FS for frac sand as the material mined, and the mining technique was no different, because the deposit is massive and all material in the pit is ultimately saleable via either processing route.</p> <p>The Mine Plan was revised in 2012 as a 35 year plan, mining 400,000 tpa silica ore for frac sand (which is also saleable as glass making sand). Permits are in place to accommodate the increased mining rate.</p> <p>This is an appropriate mining technique, as the open cut mine plan occurs entirely within the known boundaries of the silica resource; there is no waste rock within the pit. There is no pre strip required (although some soil will need to be removed) and access will be via the existing access and haul road, which will be up-graded along its full length.</p> <p>The Mine Plan contains detailed consideration of geotechnical aspects, including a detailed separate, earlier, geotechnical report. Benches: 12m high; 78 degree face angle, 48.7 degree inter-ramp angle, 8m wide catchment berms, 15m wide ramps and 12 percent ramp grade. There will be no pre-production drilling, as there is abundant pre-existing exposure.</p>

Criteria	JORC Code explanation	Commentary
		<p>Mining dilution factor is 0%, as all material excavated and trucked is ultimately saleable.</p> <p>Mining recovery factor is 100% as the pit lies entirely within the silica resource.</p> <p>There is no minimum mining width.</p> <p>The Mine Plan is insensitive to the inclusion of Inferred Resources.</p> <p>The open cut will require only the infrastructure already in place, namely the haul road, which will be upgraded (and engineering and permits are in place for this work).</p>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<p>It is proposed to utilise VSI crushing to liberate the sand grains from the sandstone/quartzite (which is already de-cemented in large part), then scrub or 'polish' the grains to remove adhering silica cement/over-growths, dry the sand and screen it into appropriate size categories. This type of processing is appropriate to the type of ore feed, and product required.</p> <p>Overall the process is conventional and well tested however it includes a VSI in combination with a mill or scrubber stage which is not conventionally used in frac sand plants which are usually based around less consolidated feedstock mainly in Wisconsin and nearby states in the USA. It is included in the Moberly circuit at the recommendation of the met lab testing.</p> <p>For frac sand testing, in addition to a random 'ROM' sample, four 'variability' samples of about 330 kg each from various silica de-cementing and geographic areas were taken from the deposit, representing variations of characteristics spread over the resource. The samples were supplied to an independent met testing laboratory in Vancouver who derived the 'VSI and mill/scrubber' component of the flow sheet and reported on frac sand recoveries, arriving at a single recovery figure across the deposit (as the de-cementing is not systematic). The sand samples derived from this testing were supplied to specialized laboratories for ISO standard testing for frac sand qualities, and all produced satisfactory results for all sand size fractions.</p> <p>Due to the irregular nature of the 'de-cementing' (natural in-situ 'sand' production), processing domaining has not been possible and it is recognized that commissioning will need to be cognisant of the source of the early feedstock and plant settings adjusted accordingly.</p>



## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
		<p>Deleterious elements are generally absent from the deposit, although there are ferruginous zones, mainly along the footwall contact of the sedimentary unit. In past processing of these zones for glass making silica, the ferruginous particles (nodules up to 5mm) were eliminated in the magnetic scalping or the washing stage.</p> <p>Mining for frac sand will not occur in this area for many years. No allowances have been made for deleterious elements, except for the inclusion of scalping magnets after the crush stage.</p> <p>The met testing of the ~330kg 'variability' samples could probably not be characterised as pilot scale testing but the samples were bulk samples covering the spectrum of differences in de-cementing. The 'variability' samples were representative of the extremes of the variation in the deposit (which is the amount of de-cementing or alteration, not of inherent composition), as well as surface geographic extremes of the deposit and combined with the 'ROM' bulk sample is regarded as representative of the deposit as a whole.</p> <p>The Ore Reserve has been based on the appropriate mineralogy, as well as the qualities of that mineralogy.</p> <p>UPDATE: In late 2014, ten +800kg bulk samples were taken from throughout the pit area and subjected to jaw crushing, VSI crushing and then testing using a 'mixer' at the company's manufacturing and testing facility in the USA. The samples were subject to a range of tests, including same mixer settings across nine of the samples and then varying the mixer parameters on repeated aliquots of four of the samples. Recoveries to 30# to 140# sand varied between 75% and 80% and testing via an ISO certified laboratory verified that the sands were of frac quality.</p> <p>The Competent Person had decided that for the estimation of Resources and Reserves, a recovery factor of 70% should be used, to allow for possible scaling-up effects to the 2.5 tonne capacity mixers that will be used in the plant. The frac range 30# to 140# will replace the former range of 20# to 140# due to the presence of clusters in the 20# to 30# product from the mixers. It is possible that tuning of the VSI crushers and the mixers when in production will de-cluster the 20# to 30# range and allow it to be sold.</p> <p>An independent review in early 2015 noted mixer recoveries in the range of 70% to 75% were possible, and settled on a figure of 75%.</p>

Criteria	JORC Code explanation	Commentary
<b>Environmental</b>	<ul style="list-style-type: none"> <li><i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<p>An independent 'Phase 1' environmental report (carried out to ISO and British Columbia Ministry standards) was carried out in 2011 and was incorporated into the Feasibility Study. It covered both the existing open cut and the processing plant site, which hosted the de-commissioned glass sand processing plant.</p> <p>Several relatively minor issues at the plant site were identified, most of which were rectified before a follow-up visit in March 2013. Any remaining issues will be rectified as the site is redeveloped for frac sand.</p> <p>As the open cut is entirely within silica sandstone/quartzite, no 'acid' type drainage issues are present either at the open cut or at the processing plant. Both sites have porous silica sand substrates and most run-off drains naturally into the ground.</p> <p>All material taken to the processing plant is ultimately saleable and no waste stockpile is planned. Fines generated in the frac sand process are saleable for cement manufacture, or can be consumed in the existing silica flour plant on site. A stockpile of fines may grow if sales lag production but no permit is required for this. A stockpile of fines from the old glass making process already exists on site and is being slowly consumed in the silica flour plant. Approval from the Agricultural Land Commission has been granted to store fines etc on the portion of the plant site not already classified for industrial use.</p> <p>All permits required for frac sand production by the planned process circuit are in place, except for an amendment to that relating to dust emission. The amendment cannot be sought until the final equipment specifications and locations are known; discussions with regulators indicate that it will be a minor amendment, and is not required until the new plant is commissioned.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li><i>The existence of appropriate infrastructure: 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.</i></li> </ul>	<p>The plant site was in operation for over 25 years to 2009 for glass sand production and remains in operation producing silica flour. It is fully serviced by grid electricity and a 300m access road to the Trans-Canada Highway. It has its own rail spur off the main line Canadian Pacific Railway which also runs by the plant. Water can be drawn under an existing Permit from the Blaeberry River which runs by the plant, and two new water bores have been sunk and pump tested demonstrating an adequate availability of process water for 24/7 operation. The current plant site, owned under freehold, is easily large enough to accommodate the new frac sand plant, ROM stockpiles, the existing fines pile, a proposed extended rail spur and any new temporary stockpiles.</p> <p>The plant is about 16km north-west via the Trans-Canada Highway of the regional centre of Golden, a town of about 4,000 people and a focus for skiing, lumber and rail industries. All except technical specialists and senior management are expected to be sourced from Golden.</p>
<b>Costs</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li><i>The methodology used to estimate operating costs.</i></li> <li><i>Allowances made for the content of deleterious elements.</i></li> <li><i>The source of exchange rates used in the study.</i></li> <li><i>Derivation of transportation charges.</i></li> <li><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li><i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<p>Capital costs have been established by a combination of a) detailed quotes from suppliers based on engineering drawings and specifications for specific equipment items, b) engineering cost specialists for items such as concrete and steel and c) contractor quotes for labour and project management (checked by engineering cost specialists).</p> <p>Operating costs were estimated via a combination of quotes from contractors and suppliers (mining, electricity, gas, labour) and historical and current operating costs from the plant and mine already in place.</p> <p>Allowance for deleterious elements is not appropriate as the ore is processed to final product on site and deleterious 'elements' are not present.</p> <p>The study was costed in Canadian dollars. Costs quoted in US dollars were converted at spot at the date of their receipt.</p> <p>Transport charges were derived from contractor quotes and historic and current contract costs.</p>

Criteria	JORC Code explanation	Commentary
		<p>TC/RCs are not applicable as the ore is processed on site to final product. Off spec material would be returned to the plant but for frac sand it is likely to have been used by the purchaser in an application requiring the lower spec.</p> <p>No royalties are payable.</p> <p>UPDATE: Capital costs are in the process of being refined by the likely contractor to construct the plant, for a fixed price quote for construction; operating costs are continuously reviewed.</p> <p>As previously announced, a gross sales royalty of 2% of sales will be payable to a financing party if the agreed financing package is fulfilled.</p>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<p>Frac sand is not subject to long term supply contracts and prices are struck as prevailing rates for the quality and size fraction of the sand being purchased, the market availability for a particular spec of sand derived from a particular source and its intended use (including location).</p> <p>The finished product is produced on site at Moberly so TC/RCs or 'smelter penalties', and 'net smelter returns' are not applicable. The finished product is mainly defined in terms of US mesh size (eg 20-40 mesh, 30-50 mesh, 40-70 mesh, 70-140 mesh) with acceptable frac qualities, although the benchmark of these qualities can vary depending on the location (oil/gas field) that the customer is operating in, and the availability of alternatives.</p> <p>Prices used for frac sand in the FS model were based on extensive personal consultations with potential customers, who had been supplied with examples of the sand product from the met testing.</p> <p>No revenue has been assumed in the Feasibility Study for the fines by-product, which would either be sold to the cement industry or consumed in the existing silica flour plant and then sold as a high value product.</p> <p>No revenue has been assumed for the silica flour product, although the flour plant is currently operational and sales are being made.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Market assessment</b>	<ul style="list-style-type: none"> <li><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li><i>Price and volume forecasts and the basis for these forecasts.</i></li> <li><i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<p>Currently the demand for frac sand in North America is rising every year as horizontal drilling and completion techniques are yielding higher production rates compared to vertical wells and each well is using more frac stages, on average. Frac sand consumption in 2013 was estimated to be about 37 million tonnes, up from 15 million tonnes in 2010 and 5 million tonnes in 2007.</p> <p>In Canada, emphasis is now on the export of liquefied gas from planned new export facilities on the coast of British Columbia, underpinning the increase in exploration for gas (drilling of wells requiring frac sand) in western Canada.</p> <p>Supply of frac sand from the traditional USA suppliers to Canada is often squeezed by USA demand; shortages are not unknown. Heemskirk is targeting the Western Canadian Sedimentary Basin oil and gas fields (Yukon, northern British Columbia and Alberta).</p> <p>Although there are local competitors in western Canada, Heemskirk will have the better quality frac sand according customer technical reviews. The sands from the United States are of superior quality but location and logistical advantages of Heemskirk to service the western Canadian drilling market are significant. Heemskirk has direct access to the Canadian Pacific Railway via its own siding and frontage to the Trans-Canada Highway. These are logistical advantages unmatched by competitors in Canada.</p> <p>The price for sand is currently reported at \$55-85 per ton in the US. HCA plans on being competitive with pricing using the transportation differential to provide value to its customers.</p> <p>There is no specific specification for frac sand, but customer requirements on a general or per-shipment basis are dictated by a matrix of sand qualities, including grain size (eg 20-40 mesh, 30-50 mesh, 40-70 mesh, 70-140 mesh), roundness, sphericity, acid solubility, turbidity, crush resistance and conductivity. These qualities are defined in the ISO 13503 and API RP19C standards but the customer determines the actual values required for any particular shipment.</p>

Criteria	JORC Code explanation	Commentary
		<p>Potential customers have been supplied with sands from Heemskirk's test work and have been satisfied with the quality. On-going customers will generally test sand product periodically and form a view about the general acceptability of the producer's sand for specific, or general usages by them.</p> <p>UPDATE: Demand for frac sand has decreased slightly in the past year as gas prices have fallen and well completion numbers have fallen. However sand demand has held up relatively well, due to the trend to longer wells, and an increasing number of 'frac stages' per well. Canadian suppliers are well placed due to a drop in the value of the Canadian dollar against the US dollar – Canadian product is now much cheaper in the US and US product much more costly in Canada, leading to an attractive situation for Canadian producers. For these reasons, pricing for quality Canadian sands remains virtually unchanged.</p> <p>UPDATE: Revenue from silica flour, with production at the same rate from the 'fine grind' plant prior to its suspension, is now included in the project economic model, with marginal effect overall.</p>
<b>Economic</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<p>General Project Parameters: capital cost estimate is C\$26m<sub>2013</sub>; initial design production rate is 300,000 tonnes of saleable frac sand per annum at full production (year 2 onwards); project is readily expandable to double the initial production capacity once all initial operational and product sales milestones have been met; estimated Project NPV<sub>7.5</sub> C\$66m, NPV<sub>10</sub> C\$48m; total net assets of project valued at \$8.0m as at 31 March 2014; estimated Internal Rate of Return of 30%; the Payback Period from start of production is approximately 3 years; construction time estimate 9-12 months from a development decision.</p> <p>Product pricing used is commercial in confidence.</p> <p>UPDATE: The capital cost estimate has increased due to rising electrical and other component prices, compounded by some equipment being sourced from the United States of America and to be purchased in US dollars. This cost estimate is also subject to fluctuations in the US/Canadian currency exchange rates.</p>



## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
		<p>Estimated Project NPV<sub>7.5</sub> is now C\$78m due to increased recoveries (announced to ASX on 23 February 2015) and refined capital numbers (announced to ASX on 15 December 2015). NPV<sub>10</sub> is now C\$58m.</p> <p>Total net assets of the project increased to C\$10.6m due to completed foundations footings and detailed engineering.</p> <p>Estimated IRR has increased to 33% and Project Payback for Stage 1 from start of production is 2.9 years (also announced to ASX on 15 December 2015).</p> <p>Construction time estimate from a development decision is 12-14 months. This time has been increased due to refined engineering.</p>
<b>Social</b>	<ul style="list-style-type: none"> <li><i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<p>The Moberly mine and plant has been operating from the early 1980s, although the scale of both has been substantially reduced since 2009. Local people and townspeople are aware of the proposed new development and are generally welcoming of it, as it will bring welcome economic activity and employment opportunities. No formal agreements exist with 'stakeholders' (including First Nations).</p>
<b>Other</b>	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> <li><i>The status of material legal agreements and marketing arrangements.</i></li> <li><i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. 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.</i></li> </ul>	<p><b>T</b>here are no material naturally occurring risks; the area is not seismically active and the slopes of Mt Moberly around the pit are heavily vegetated and have proved stable during the over 25 years of prior operation. The Blaeberry River could flood the plant site under very exceptional circumstances however this has not occurred in the memory of the operators and flood bunding is planned for the new plant.</p> <p>There are no sand supply contracts in place, as frac sand is supplied on short term, as needed basis. However customers have been supplied with sand product and are satisfied with the quality, and the Moberly project occupies a niche to supply the northern British Columbia/Alberta market, with excellent infrastructure, both highway and rail. Letters of Intent to buy have been received from likely customers. No change to material legal or marketing arrangements, to the extent that they exist, is likely to impact the Ore Reserves.</p> <p>All Permits required to operate the new frac sand plant and the expanded mining operation at the open pit / quarry are in place, except for an amendment to the dust emission permit which is necessary as several aspects of the operation will change.</p>

Criteria	JORC Code explanation	Commentary
		<p>Discussions with the regulators indicates that the amendment will be processed as a relatively easy 'minor amendment', which will be submitted once final specifications for the dust collection equipment are known. The new Permit is not required until the new plant is operational.</p> <p>The mine haul road must be upgraded before mining/hauling is re-commenced (engineering and approvals are complete) and negotiations with a contractor are on-going. There is nothing to indicate that a satisfactory price won't be arrived at. The mining contract for the new operation has yet to be struck but is expected to be with the former, long term operator, who may also upgrade the haul road and no difficulty in renewing the mining contract at a satisfactory price is expected.</p>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<p>Proved Ore Reserves are derived from that portion of Measured Resources that lie within the 35 year, open cut Mine Plan after consideration of Modifying Factors. Probable Ore Reserves are derived from that part of the Indicated Resources that lie within the 35 year, open cut Mine Plan after consideration of Modifying Factors.</p> <p>The classifications accurately reflect the Competent Person's view of the deposit.</p> <p>No Probable Ore Reserve has been derived from Measured Resources.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<p>The 2012 Ore Reserve estimate, which remains unchanged to date, was reviewed by an independent geologist for a third party company. Although the report of the geologist has not been sighted, another independent reviewing report states that the independent geologist 'concurred with' the Heemskirk Competent Person's estimates. Further, discussions with the independent geologist at the mine site by the Competent Person revealed no material issues of contention.</p> <p>UPDATE: A second independent review of the Ore Reserve estimates was undertaken by an engineering firm and a frac sand expert in early 2015 during due diligence by a proposed financier. No significant issues in the technique or estimations were brought forward.</p> <p>The Ore Reserve estimate has been amended in 2015, as noted above (this announcement). This has not been reviewed by an independent person.</p>

## RESERVES AND RESOURCES UPDATE

Criteria	JORC Code explanation	Commentary
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <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 tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to 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>	<p>The Ore Reserve is based on and is entirely contained within a large, massive silica resource with is relatively homogenous in respect of silica / sand grain content, but varies in respect of de-cementing of the silica grains ('alteration'). As such, confidence is high that silica for both glass making and frac sand Ore Reserves have been adequately, appropriately and accurately assessed via application of the 35 year Mine Plan and other Modifying Factors to the Mineral Resources estimated by the relatively simple cross sectional method. No geostatistical manipulation has been used.</p> <p>The estimation is considered to be a global one. Modifying Factors which could affect the relative accuracy and confidence of the method would be hitherto un recognized zones of, say, variable mechanical strength of the silica grains, as this may affect the quality of the frac sand product. There is no indication that such zones exist at the moment and if such zones did exist, on the basis of current sampling, it would be unlikely to account for such a large proportion of the deposit so as to make the deposit unviable. Furthermore the weak grains would probably report to 70-140 mesh, which still constitutes saleable frac sand. Historically, no material unsuitable for silica for glass sand has been mined at the site. Silica for glass sand was tested and found to be of frac sand quality.</p>

# DIRECTORS' REPORT

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

The Directors present their report together with the consolidated financial report of the Heemskirk Consolidated Group, comprising the Company and its controlled entities for the year ended 30 September 2015.

### DIRECTORS

The names and details of the Directors of the Company in the office during the financial year and until the date of this report are:

- Garry Cameron, Non-Executive Chairman
- Peter Bird, Managing Director
- John Taylor, Non-Executive Director
- William A (Lex) Hansen, Non-Executive Director (retired 26 February 2015)

### PRINCIPAL ACTIVITIES

The Company's principal activities during the year was the development the Moberly Frac Sand Project and resource equity investments.

### CONSOLIDATED RESULTS

The Company recorded a net loss after income tax of \$5.244 million in 2015 compared with a net loss of \$2.379 million in 2014.

Refer to the Operating and Financial Review for further details. The Operating and Financial Review is set out on pages 41 to 46 and forms part of this Directors' Report.

### DIVIDENDS

During the year, no dividends were paid in respect of the 2014 year and no dividend has been declared in respect of the 2015 year.

### SIGNIFICANT CHANGES IN STATE OF AFFAIRS

The review of operations presented on pages 41 to 46 sets out a number of matters which have had a significant effect on the state of affairs of the Company during the financial year.

### SIGNIFICANT EVENTS AFTER THE BALANCE DATE

There are no matters or circumstances which have arisen since 30 September 2015 that have significantly affected or may affect the operations of the Company, the results of those operations or the state of affairs of the Company in subsequent financial years.

### LIKELY DEVELOPMENTS AND EXPECTED RESULTS

In general terms, the review of operations of the Company gives an indication of likely developments and the expected results of the operations. In the opinion of the directors, disclosure of any further information would likely result in unreasonable prejudice to the Company.

### ENVIRONMENTAL COMPLIANCE

The Company holds licences issued by the relevant environmental protection authorities of the various countries in which the Company operates. These licences specify limits and regulate the management of mining and processing operations.

The Company has permits to enable the Moberly Frac Sand Project to proceed and these are being amended progressively as required to maintain compliance. No material issues have arisen to date.

There have been no significant known breaches of the Company's licence conditions.

### OPTIONS GRANTED AND SHARES ISSUED ON THE EXERCISE OF OPTIONS

The following ordinary shares of Heemskirk Consolidated Limited were issued during the year ended 30 September 2015 on the exercise of options issued in accordance with the terms of the Debt Facility Agreement entered into with Taurus Funds Management on 15 July 2015.

Date options granted	Issue price of shares	Number of shares issued
15 July 2015	\$0.0878	8,750,596

At 30 September 2015, there are 3,859,122 million options that have vested and are exercisable. A further 12,609,718 options will vest pro rata for amounts drawn under the facility. No amounts have been drawn under the facility at 30 September 2015.

### INDEMNIFICATION AND INSURANCE OF DIRECTORS AND OFFICERS

The Company has entered into agreements to indemnify all of the Directors named in this report and the Company Secretary against all liabilities to persons (other than the Company), which arise out of the performance of their normal duties as Directors or Executive Officers unless the liability relates to conduct involving a lack of good faith. The Company has agreed to indemnify the Directors and the Company Secretary against all costs and expenses incurred in defending an action that falls within the scope of the indemnity and any resulting payments.

# DIRECTORS' REPORT

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

Since the close of the financial year, the Company has paid a premium for an insurance policy for the benefit of the Directors and the Officers of the Company. In accordance with common commercial practice, the insurance policy prohibits disclosure of the nature of the liability insured against and the amount of the premium.

### INDEMNIFICATION OF AUDITORS

To the extent permitted by law, the Company has agreed to indemnify its auditors, Ernst & Young, as part of the terms of its audit engagement agreement against claims by third parties arising from the audit (for an unspecified amount). No payment has been made under this indemnity to Ernst & Young during or since the end of the financial year.

### NON-AUDIT SERVICES

Details of the amounts paid or payable to the external auditors of the Company, Ernst & Young, for audit and non-audit services provided during the year are disclosed in Note 20 to the Financial Report.

### ROUNDING OF AMOUNTS

The financial report is presented in Australian dollars and all values are rounded to the nearest thousand dollars (\$'000) unless otherwise stated under the option available to the Company under ASIC Class Order 98/0100. The Company is an entity to which the class order applies.

### CORPORATE GOVERNANCE STATEMENT

The Board is committed to following the ASX Corporate Governance Council Corporate Governance Principles and Recommendations (ASX Recommendations). The Board and Management regularly review the Company's policies and practices to ensure that the Company continues to maintain and improve its governance standards by following the eight ASX Corporate Governance Principles.

The Corporate Governance Statement, Appendix 4G and details of the Company's key corporate governance policies that were in place during the year are available on the Company's website [www.heemskirk.com](http://www.heemskirk.com) in the Corporate Governance section.

### SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS

No significant changes in the state of affairs other than those contained in this report.

### REMUNERATION REPORT

The Remuneration Report is set out on pages 47 to 54 and forms part of this Directors' Report.

### INFORMATION ON DIRECTORS

The Directors' qualifications, experience and special responsibilities are disclosed below.

#### Garry Cameron PSM

*BBus(A/c), BEc(Hons), MEC, FAICD, FCPA*

#### Non-Executive Chairman

Garry was Managing Director of a listed property group for 10 years and prior executive roles include Executive Director Finance for Telstra. He is currently a Non Executive Director with ANZ Specialised Asset Management. The ANZ roles over the past nine years have been in funds management of energy and infrastructure projects particularly focused on large coal, gas and biofuels projects from exploration to delivery.

Garry was formerly a Non Executive Director of Molopo Energy Limited.

Garry was recognised on the Australia Day Honours list for his contributions to the Finance and Telecommunications industries.

Garry joined the Board on 24 February 2011 and was appointed Chairman on 20 March 2014.

#### Peter Bird

*BSc(Hons), MAICD, AFin, MAusIMM*

#### Managing Director

Peter has worked in the resource industry for over 20 years. He brings operational and corporate experience combined with a strong understanding of company analysis and global investment markets.

Peter is a geologist and has held technical, management, investment and human resources positions with major companies such as Western Mining Corporation Limited, Merrill Lynch Equities and Newmont Mining Corporation and executive positions with Normandy Mining Limited and Newcrest Mining Limited. Peter is Non-Executive Chairman of Excelsior Gold Limited.

Peter is a Founding Director of the Company and was appointed Managing Director on 1 December 2011.

#### John Taylor

*BE(Chem), MBA, FIChemE.*

#### Non-Executive Director

John Taylor was Managing Director of Outotec Australasia Pty Ltd (previously Outokumpu Technology and prior to that, Lurgi Australia) for 18 years. He has held senior positions in management, process engineering and plant construction, primarily in the mining, minerals processing and environmental sectors.

John is a Non Executive Director of KGL Resources Limited and was previously a Non Executive Director of listed companies Ticor Ltd, Environmental Group Ltd and Ausmelt Limited.

He is a part time consultant to Outotec South East Asia Pacific.

John joined the Board on 9 May 2011.

**William A (Lex) Hansen** – retired 26 February 2015  
BSc, MBA, FAusIMM, FAICD  
**Non-Executive Director**

Lex has more than 45 years' experience within the mining industry. He was an Executive Director of Corporate Finance (Mining) at HSBC Bank Australia Limited with regional responsibility for resources debt and equity investment appraisals and underwriting transactions.

Lex was a Director and Partner of share-broking firm Roach & Co. Prior to that, he held technical and finance positions with CSR Limited, Tenneco Corp and Utah Development Company. Lex has been a Non-Executive Director of Endocoal Limited and was previously a Non-Executive Director of Platinum Australia Limited.

Lex joined the Board on 1 March 2004 and retired on 26 February 2015.

**Andrew Metcalfe**  
B.Bus, CPA, FGIA, MAICD  
**Company Secretary**

Andrew has over 25 years of corporate experience across a range of industry sectors holding the position of Company Secretary, Governance Advisor and Chief Financial Officer for a number of ASX listed entities, unlisted public entities and not-for-profit organisations operating in Australia, Canada, UK and China; operating in resource/energy, property, retail, telecommunications/technology and media industries.

Andrew is employed by Accosec & Associates, a professional Chartered Secretary and Governance Advisory Firm and assists HSK in company secretarial practice and governance policies and procedures.

Andrew was appointed Company Secretary on 27 August 2014.

## DIRECTORS' MEETINGS

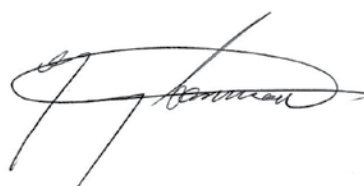
Attendance at Board meetings throughout the year is tabled below.

- A Number of meetings held during the time the Director held office during the period
- B Number of meetings attended

Board Meetings		
Director	A	B
Garry Cameron	16	16
Peter Bird	16	16
William A (Lex) Hansen <sup>(1)</sup>	8	8
John Taylor	16	14

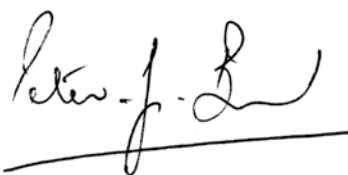
(1) Mr Hansen retired on 26 February 2015

Signed in accordance with a resolution of the Directors



**Garry Cameron**  
Non-Executive Chairman

Melbourne  
25 November 2015



**Peter Bird**  
Managing Director

Melbourne  
25 November 2015



# AUDITOR'S INDEPENDENCE DECLARATION



Ernst & Young  
8 Exhibition Street  
Melbourne VIC 3000 Australia  
GPO Box 67 Melbourne VIC 3001

Tel: +61 3 9288 8000  
Fax: +61 3 8650 7777  
ey.com/au

## Auditor's Independence Declaration to the Directors of Heemskirk Consolidated Limited

In relation to our audit of the financial report of Heemskirk Consolidated Limited for the financial year ended 30 September 2015, to the best of my knowledge and belief, there have been no contraventions of the auditor independence requirements of the *Corporations Act 2001* or any applicable code of professional conduct.

Ernst & Young

Michael Collins  
Partner

25 November 2015

A member firm of Ernst & Young Global Limited  
Liability limited by a scheme approved under Professional Standards Legislation

## OPERATING & FINANCIAL REVIEW

The sale of the Company's Lethbridge asset in 2014 has enabled the Company to advance the development of its high value Frac Sand Project "the Project" in British Columbia, Canada. During the financial year, the Company has maintained its focus on the development of the Project. Significant progress has been made on the Project including achievement of a number of key milestones; detailed design engineering and feasibility was completed. This resulted in increased projected plant recoveries. Construction for the footings at the plant was completed and funding for the full build of the Project was secured, subject to completion of conditions precedent.

### 2015 KEY PERFORMANCE MILESTONES

- Stage 1 footings completed for \$2.487 million at plant site
- Detailed engineering and feasibility for Stage 1 of the Project completed to enable progression to full build for \$1.811 million
- Convertible notes redeemed for \$2.739 million
- Raised \$1.325 million by way of a private placement to sophisticated investors
- Raised \$3.860 million via a fully underwritten 1 for 5 Rights Issue
- Subject to completion of conditions precedent, the Project will be fully funded under a USD40.0 million debt facility "debt facility". Under the terms of the debt facility, the Company:
  - Issued 10.773 million shares as settlement of the Loan Arrangement Fee; and
  - Issued 25.219 million options on date of signing the facility of which 50% vested immediately and 50% will vest pro rata for amounts drawn under the facility.

### US\$40 million Secured Debt Facility Agreement

On 15 July 2015, the Company entered into a USD40.0 million Secured Debt Facility Agreement to fund the construction of the Project. The financing facility is provided by Taurus Funds Management and will be available to draw down in two tranches. USD25.0 million will be available in tranche 1 to complete the 300,000 tpa construction and production development project (phase one) and USD15.0 million will be available in tranche 2 to complete an expansion of the project (phase two) to a 600,000 tpa production level, once phase one has been successfully completed.

The financing facility bears interest at 10% per annum, an arrangement fee of 2% of the facility amount, a commitment fee of 2% per annum on undrawn amounts at each phase, an issue of 25.219 million options and 2% Free on Train Gross Revenue Royalty, ex Plant Price. The facility maturity date is 31 December 2018, with a 12 month extension option.

The 2% arrangement fee was paid on signing of the facility via an issue of 10.773 million HSK fully paid ordinary shares. Of the 25.219 million options issued, 12.609 million options vested on the date of signing of which 8.750 million options was exercised on 24 July 2015. The remaining 12.609 million options will vest pro rata for amounts drawn. No amounts have been drawn under the facility at 30 September 2015. The strike price of the options is \$0.0878, a 25% premium to the 10 day VWAP prior to the date of signing the agreement.

The Company is currently working through completing conditions precedent to first drawdown of the facility and finalisation of construction contract to commence full build.

### INCOME STATEMENT

The Company recorded a net loss after income tax of \$5.244 million in 2015 compared with \$2.379 million for 2014. The decrease is primarily due to the gain of \$2.991 million from discontinued operations recognised in 2014.

The Company continues to monitor corporate expenditure. Savings from corporate restructuring strategies implemented previously (employment and other expenses) of \$0.421 million was offset by legal and other consultancy fees incurred on the Project of \$0.455 million.

**Gross Profit** – Gross Profit was up 138.7% compared to previous corresponding period principally due to Canada overheads being recognised in their respective expense categories in 2015 as there was no production during the year. Sale of goods was from inventory stockpile as production ceased during the construction of footings at the Moberly plant site. Interest received was 55.8% lower than previous corresponding period due to the lower average cash balance during the year.

## OPERATING & FINANCIAL REVIEW

	2015 \$'000	2014 \$'000	Change \$'000	Change %
Sale of goods	117	337	(220)	(65.3%)
Dividends received	–	126	(126)	(100.0%)
Interest received	107	242	(135)	(55.8%)
<b>Total Revenue</b>	<b>224</b>	<b>705</b>	<b>(481)</b>	<b>(68.2%)</b>
<b>Total Cost of Sales<sup>(1)</sup></b>	<b>(52)</b>	<b>(1,146)</b>	<b>1,094</b>	<b>95.5%</b>
<b>Gross Profit</b>	<b>172</b>	<b>(441)</b>	<b>613</b>	<b>139.0%</b>

(1) Canada overheads are recognised in their respective expense categories in 2015 as there was no production during the year.

**Net equity losses** – Net equity losses of \$0.567 million were lower compared to the previous corresponding period loss of \$2.150 million. The loss in the prior corresponding period included a \$0.664 million loss from the expiry of the Almonty warrants and \$1.266 million unrealised loss from Almonty shares. At 30 September 2015, the Almonty share price was AUD0.61 (2014: AUD0.69) per share. This decline in share price was the main driver of the net equity loss recognised in the current year.

**Other income** – Other income includes foreign exchange gains on AUD spot rate versus the CAD spot rate of \$0.006 million in 2015 versus \$0.379 million in the previous corresponding period. This is due to a lower average CAD cash balance during the year.

**Employee benefits expense** – Employment expenses of \$2.195 million in 2015 includes Canada employment expenses. These costs were recognised in cost of sales in the prior year. Corporate expenses were down 19.6% compared to prior corresponding period as a result of a reduction in director and staff numbers.

	2015 \$'000	2014 \$'000	Change \$'000	Change %
Corporate	1,031	1,282	(251)	(19.6%)
Canada	1,164	–	1,164	100.0%
<b>Total employment costs</b>	<b>2,195</b>	<b>1,282</b>	<b>913</b>	<b>71.2%</b>

**Other costs** – Other costs includes corporate and consultancy expenses – totalled \$2.173 million in 2015. This includes Canada other costs which were recognised in cost of sales in the prior year. The increase in corporate costs primarily relates to legal and due diligence costs incurred on the Project.

	2015 \$'000	2014 \$'000	Change \$'000	Change %
Corporate	1,450	1,073	377	35.1%
Canada	723	–	723	100.0%
<b>Total other costs</b>	<b>2,173</b>	<b>1,073</b>	<b>1,100</b>	<b>102.5%</b>

**Finance costs** – Finance costs were down 37.2% to \$0.285 million compared to previous corresponding period of \$0.455 million. This was mainly driven by lower interest expense recognised on the convertible notes. These notes were redeemed at 30 March 2015 and accordingly interest expense for half of the year was recognised in the current year.

## FINANCIAL POSITION

The net assets of the Company have increased by \$2.503 million to \$23.665 million at year end. The increase is primarily due to share capital issued during the year, net of transaction costs of \$6.652 million offset by the current year's loss after tax and redemption of convertible notes of \$2.739 million.

**Cash and cash equivalents** – Cash and cash equivalents decreased by \$6.127 million to \$5.974 million. This reflects the operating cash flow of the Company, repayment of the convertible notes, capital investment in the Project; offset by capital raisings during the year.

**Property, plant and equipment** – Property, plant and equipment increased by \$2.394 million to \$4.380 million. This primarily relates to the cost of the footings for the Project completed during the year.

**Exploration, evaluation and mine development** – Mine development increased by \$2.031 million to \$7.461 million. This represents the investment in completing the detailed design engineering of the Project.

**Other non current assets** – Other non current assets of \$1.974 million represents the initial prepaid borrowing costs of establishing the Secured Debt Facility for the Project. This includes the loan establishment fee of \$1.077 million, share based payment expense recognised on the issue of the 12.609 million options of \$0.483 million and legal and advisory fees of \$0.414 million.

**Interest bearing loans and borrowings** – Interest bearing loans and borrowings decreased by \$2.757 million reflecting the redemption of the convertible notes at 30 March 2015. The balance of \$0.084 million represents finance leases for equipment. Refer to Note 15 in the Financial Report for more details.

## REVIEW OF OPERATIONS

### Discontinued Operations – Sale of Lethbridge

On 20 March 2014, Heemskirk shareholders approved the sale of the Lethbridge mineral products plant in Alberta, Canada and optioned barite mineral claims in the United States to a wholly owned subsidiary of Marquis Alliance Energy Group Inc.

The sale consideration was announced on 21 January 2014 as CAD8.440 million plus inventory of CAD3.560 million, a total of CAD12.000 million. The final consideration received was CAD8.440 million plus CAD2.052 million for inventory at 31 March 2014, a total of CAD10.492 million. The inventory for sale had reduced by CAD1.508 million due to sales to customers.

The sale agreement also made provision for an adjustment to be made to the purchase price in respect of any earnings (which belongs to Marquis Alliance) that was generated by the business between 1 February 2014 and the closing date of the sale. The sale transaction completed on 1 April 2014. The earnings adjustment paid to Marquis Alliance was CAD0.519 million.

Sale transaction costs of CAD0.715 million were paid in 2H 2014. The profit on sale before tax is CAD3.140 million, income tax payable on the sale of approximately CAD0.501 million was paid during the year. The sale finalised with a net profit of CAD2.607 million.

### Corporate

Corporate costs for the year were \$2.459 million including \$0.455 million of legal and due diligence costs incurred on the Project.

	2013	2014	2015
Segment assets (A\$m)	8.497	11.564	5.938
Segment revenue <sup>(1)</sup> (A\$m)	0.413	0.531	0.151
Segment costs (A\$m)	2.879	2.329	2.459
Segment EBITDA <sup>(2)</sup> (A\$m)	(2.466)	(1.796)	(2.308)
Segment revenue as a percentage of Segment assets	5%	5%	3%

(1) Segment revenue is per Note 21 of the audited Financial Statements

(2) Segment EBITDA is per Note 21 of the audited Financial Statements

Finance costs for the year were \$0.156 million (2014: \$0.322 million).

## Portfolio

From time to time the Company undertakes investments in both listed and unlisted companies in the resource industry. This allows us to gain good geological and geographical reach and foster key strategic relationships in this industry.

## OPERATING & FINANCIAL REVIEW

At the end of the year, the Company holds 5.453 million shares in Almonty Industries Inc (Almonty) (TSXV:All), a TSX Listed tungsten producer. The shares were received as part payment for the sale of Heemskirk's Los Santos Tungsten Mine to Almonty in April 2011. The market value of the holding as at 30 September 2015 was \$3.365 million (2014: \$3.983 million).

Future Portfolio performance is dependent on individual company performance and overall market conditions.

### Canada

Heemskirk Canada (HCA) is a wholly owned subsidiary of the Company which has been a producer of industrial mineral products for over 30 years. HCA has an administrative office in Calgary and is now focused on developing the Moberly Frac Sand Project "the Project" to be able to produce high quality frac sands, glass sands and other high purity silica sands.

Revenue for the year was \$0.120 million compared to \$16.707 million in the previous year, reflecting the Lethridge asset sale on 1 April 2014.

2013	2014	2015	
Industrial Minerals sold (tonnes)	77,773	51,951	1,668
Segment revenue <sup>(1)</sup> (A\$m)	23.582	16.707	0.120
Segment revenue per tonne sold (A\$/t)	303	322	72
Segment EBITDA <sup>(2)</sup> (A\$m)	1.733	0.196	(1.818)
Segment EBITDA as a percentage of Segment revenue	7%	1%	-1510%

(1) Segment revenue is per Note 21 of the audited Financial Statements

(2) Segment EBITDA is per Note 21 of the audited Financial Statements

The Project is a silica sand operation suited to frac sand for oil and gas, glass manufacturing, and other industrial applications such as specialised cement. It is strategically located within the Western Canadian Sedimentary Basin (WCSB) at Golden, British Columbia (see figure 1).

Moberly has its own rail siding adjacent to Canadian Pacific Railways' main East West rail line, the Trans-Canada Highway, and on the western edge of the WCSB in British Columbia (figure 2) providing customers with logistical flexibility for delivery.

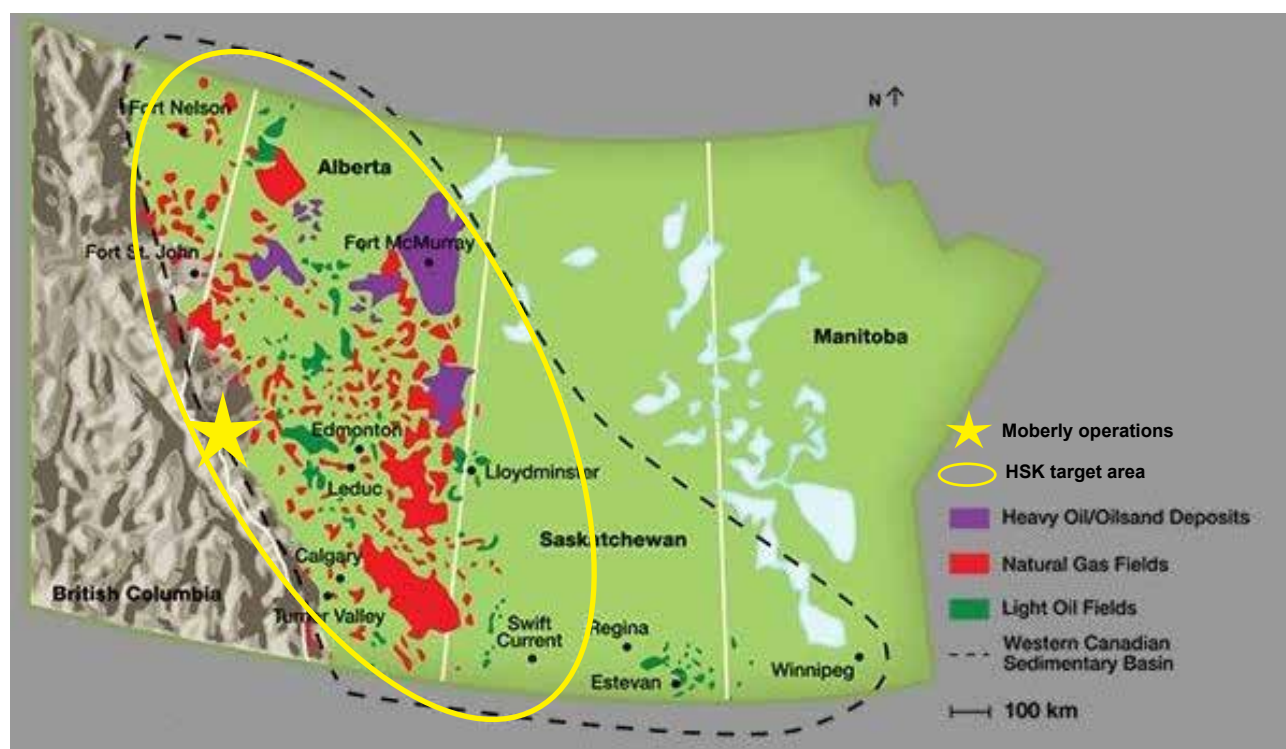


FIGURE 1: MOBERLY LOCATION IN THE WCSB – NORTH AMERICAN AREAS OF USE





FIGURE 2: LAYOUT OF PROPOSED PLANT AT EXISTING MOBERLY PLANT SITE

This project will primarily service the oil and gas drilling industry's frac sand requirements in British Columbia. On 14 October 2014 Heemskirk announced that the Board had approved the first stage of construction of the Project. The Company was able to break ground at Moberly in order to pour concrete footings before winter set in. The footings were completed in May 2015 by local construction and engineering group Maple Reinders and provides the Company the option of moving to the next stage of construction over the colder months.

Initial plans are for a 300,000 tonne a year facility servicing the Canadian drilling market of approximately 3.0 – 3.5 million tonnes a year. The Moberly plant is located approximately 16km from the mine which has a 32.4 million tonne measured and indicated resource.

Independent tests have verified that the project, as designed can produce American Petroleum Institute (API) specification 20/40, 30/50, 40/70 and 100 mesh Frac sands capable of meeting the requirements of exploration

and development companies operating in Canada.

Located approximately 700km from Grand Prairie, Alberta, an oil and gas hub, Moberly is well situated to provide a logistical advantage to its customers in the WCSB. Trucks can travel between Moberly and almost any wellsite in the WCSB in one day if the rail lines are busy or disrupted.

The Company invested CAD1.741 million (2014: CAD 0.541 million) in developing the Project, bringing the total cumulative exploration, evaluation and development expenditure on the project since inception to CAD 6.796 million (2014: CAD 5.055 million). Footings were completed in 2015 for a cost of CAD2.333 million.

Throughout the year the Company has explored a variety of funding alternatives for developing the Project to maximise shareholder value. On 15 July 2015, Heemskirk announced that it had entered into a US\$40 million secured debt facility with Taurus Funds Management. At the time of writing, the Company is completing conditions precedent.



## OPERATING & FINANCIAL REVIEW

### SAFETY

The health and safety of the Heemskirk workforce is of fundamental importance. The Company's safety policies and reporting procedures are reviewed continually in order to identify areas which can be improved and changes are implemented accordingly.

During the year one medically treated injury (MTI) and no lost time injuries (LTI) were recorded. At the end of the year the Company's MTI frequency rate was 27 and the LTI frequency rates was zero.

Heemskirk will continue to promote an intrinsic safety culture throughout all levels of the Company and endeavour to achieve and maintain zero MTI and LTI frequency rates.

### BUSINESS STRATEGY AND OUTLOOK

Our shorter-term strategy is to complete efficiently the construction and commissioning of the Project. More broadly, our strategy is to be the quality producer of frac sand in the Canadian oil and gas environment.

### OUTLOOK FOR 2016

As outlined in the chart below, the consumption of frac sand continues to rise despite a more subdued oil price environment. The relatively low cost of sand coupled with a greater amount of fracs per well is contributing to this outcome. In the Canadian context, the approximately 30% decline in the Canadian dollar versus the United States dollar has had a positive influence on domestic oil and gas revenue within lower cost basins and wells and has maintained a healthy outlook on domestically produced sand pricing.

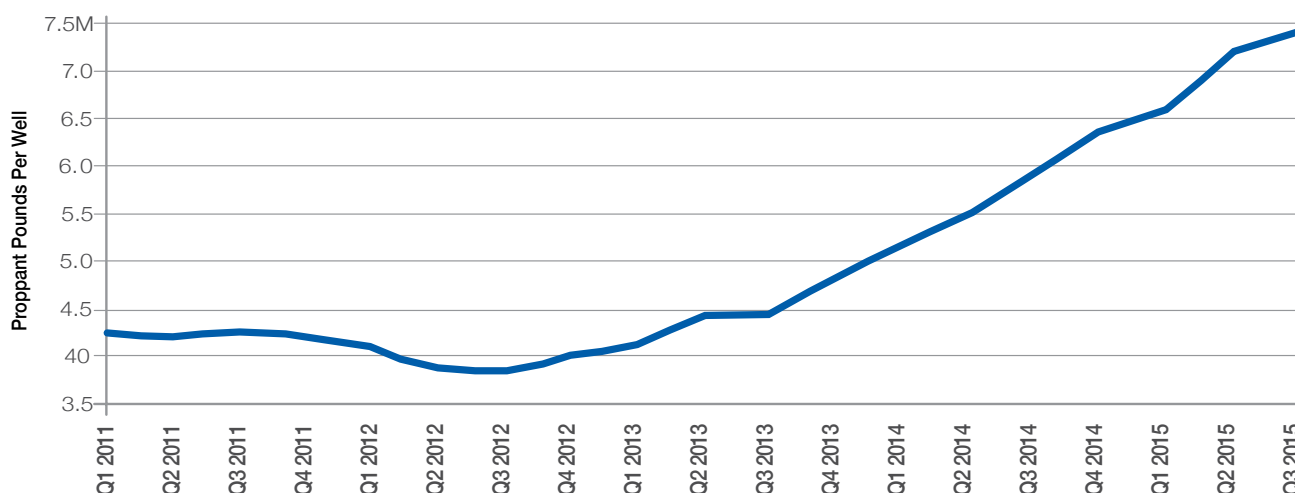


FIGURE 3: SAND USE IN FRACKING

We are looking to 2016 with ongoing commitment to complete the Moberly Project. Upon its commissioning we will examine new opportunities to grow shareholder value by targeting undervalued resource companies with existing cash flow assets.

Our positioning, at this stage, will not be for explorers but those with proven capability where Heemskirk can add value with minimal risk.

# REMUNERATION REPORT

## (AUDITED)

This Remuneration Report outlines the Director and Executive remuneration arrangements of the Company in accordance with the requirements of the Corporations Act 2001 and its Regulations for the year ending 30 September 2015.

For the purpose of this report, Key Management Personnel (KMP) of the Company are defined as those persons having authority and responsibility for planning, directing and controlling the major activities of the Company, directly or indirectly, including any Director (whether Executive or otherwise) of the Parent Company.

Non-Executive Directors (NEDs)	
Garry Cameron	Chairman (Non-Executive)
John Taylor	Director (Non-Executive)
William A(Lex) Hansen	Director (Non-Executive) – retired 26 February 2015
Executive Director	
Peter Bird	Managing Director
Other KMP	
Mark Connors	President of Heemskirk Canada

## REMUNERATION GOVERNANCE

The Company does not have a separate Remuneration Committee. The Board previously had a Remuneration & Nomination Committee which was disbanded in 2014 and the functions of this Committee were then absorbed by the Board.

The Board considers that given the current size and scope of the Company's operations, no efficiencies or other benefits would be gained by continuing to have a separate Remuneration Committee. The Board intends to reconsider the requirement for, and benefits of, a separate Remuneration and Nomination Committee as the Company evolves.

Prior to functions of the Remuneration and Nomination Committee being absorbed by the Board, the Committee operated under a formal charter to prescribe its purpose, key responsibilities, composition, membership requirements, powers and other administrative matters. The key remuneration function responsibilities under this charter included making recommendations to the Board on policy governing the remuneration benefits of Executive Directors, including equity-based remuneration, and to assist the Non-Executive Chairman to determine the remuneration benefits of Senior Management and advise on those determinations.

The Board is guided by this charter in its deliberations on matters which were previously under the delegation of the Remuneration and Nomination Committee. This Charter is posted on the Company's website at [www.heemskirk.com](http://www.heemskirk.com) under the Corporate Governance section.

## Use of remuneration consultants

From time to time the Board seeks external remuneration advice in order to ensure it is fully informed when making remuneration decisions.

Remuneration consultants are engaged by, and report directly to, the Board. In selecting remuneration consultants, the Board considers potential conflicts of interest and requires independence from the Group's key management personnel and other executives as part of their terms of engagement.

No external remuneration advice was obtained during the 2015 year.

## NON-EXECUTIVE DIRECTORS REMUNERATION

The Board seeks to set aggregate remuneration at a level which provides the Company with the ability to attract and retain directors of the highest calibre, whilst incurring a cost which is acceptable to shareholders.

Fees paid to NEDs reflect the demands made, and responsibilities of, NEDs in discharging their duties. The fees are fixed and no part of remuneration is tied to the Company's performance. Each NED receives a fee for being a director of the Company.

The remuneration of NEDs for the year ended 30 September 2015 is detailed on page 48 of this Report. The current maximum aggregate sum is \$500,000 per annum. This provides the Board with scope to appoint new NEDs in the future. It is not intended to distribute this full amount by way of fees in the current year.

In accordance with the Constitution, Directors are permitted to be paid additional fees for special services on execution. No such fees were paid during the year. Directors are also entitled to be reimbursed for all business related expenses, including travel on Company business as may be incurred in the discharge of their duties. Such reimbursements are not included in the remuneration cap.

Fees paid to NEDs are fixed and no remuneration is tied to the Company's performance.

# REMUNERATION REPORT

## (AUDITED)

### Non-Executive Directors' remuneration for the year ended 30 September

		Short Term Benefits	Post Employment	Total \$
		Salary, Fees & Commissions \$	Superannuation \$	
Garry Cameron	2015	89,794	8,530	98,324
	2014	76,735	7,154	83,889
John Taylor	2015	58,366	5,544	63,910
	2014	58,366	5,435	63,801
William A (Lex) Hansen <sup>(2)</sup>	2015	24,319	2,311	26,630
	2014	44,088	19,713	63,801
Graham Lenzner <sup>(1)</sup>	2015	–	–	–
	2014	42,242	3,907	46,149
<b>Total</b>	<b>2015</b>	<b>172,479</b>	<b>16,385</b>	<b>188,864</b>
	2014	211,431	36,209	247,640

(1) Mr Lenzner retired on 20 March 2014.

(2) Mr Hansen retired on 26 February 2015.

The table below summarises the NED Board remuneration including superannuation for the year ended 30 September 2015.

Chairman	\$98,324
Directors	\$90,540

The total remuneration for NEDs in 2015 was \$188,864.

## EXECUTIVE AND EXECUTIVE DIRECTOR REMUNERATION

### Details relating to Employment Contracts

Remuneration arrangements for executives are formalised in employment agreements. Details of these contracts are provided below.

#### Managing Director

The Managing Director is employed under an ongoing contract which can be terminated with notice by either the Managing Director or the Company.

Under the terms of the present contract as disclosed to the ASX on 1 December 2011 the Managing Director:

- receives fixed remuneration of \$450,000 per annum (inclusive of superannuation);
- the target STI opportunity is up to 33% of his fixed remuneration; and
- is eligible to participate in the Company's LTI plan on terms determined by the Board up to 44% of his fixed remuneration, subject to receiving any required or appropriate shareholder approval.

The Managing Director's termination provisions are as follows:

	Notice Period	Payment in lieu of notice	Treatment of STI on termination	Treatment of LTI on termination
Resignation	6 months	6 months	Unvested awards forfeited	Unvested awards forfeited
Termination for cause	None	None	Unvested awards forfeited	Unvested awards forfeited
Termination without cause	12 months	12 months	Unvested awards forfeited	Unvested awards forfeited

The employment contract contains a six month post-employment restriction which may be exercised at the election of the Company.

## Approach to setting remuneration

In 2015, the executive remuneration framework consisted of fixed remuneration and short and long-term incentives as outlined below.

The Company aims to reward its Executives and Executive Directors with a level of remuneration commensurate with their position and responsibilities within the Company so as to:

- Reward Executives and Executive Directors for Company, business unit and individual performance against targets set by reference to appropriate benchmarks.
- Reward Executives and Executive Directors having regard to the strategic goals and performance of the Company.
- Ensure total remuneration is appropriate to the position and is competitive by market standards.

Remuneration packages for staff, who report directly to the Managing Director, are based on the recommendation of the Managing Director subject to the approval of the Board in the annual budget setting process.

### (i) Fixed Remuneration – Remuneration that is “not at risk”

Fixed Remuneration refers to agreed Base Salary plus associated benefits. This also includes statutory benefits such as superannuation, annual and sick leave. Fixed Remuneration is benchmarked annually against industry and job role comparator groups. Personal performance will influence the changes in Fixed Remuneration.

In determining the Fixed Remuneration payable for each subsequent financial year, the Board will have regard to the performance of both the Company and the performance of the relevant individuals.

The remuneration of the Company’s Executive Directors and Executives for the financial period is set out on page 51 of this Report.

### (ii) Variable Remuneration – Remuneration that is “at risk”

Remuneration that is “at risk” and structured as an incentive. The payment of Variable Remuneration is split equally between cash and shares and is subject to performance measures that are linked to personal objectives and business objectives. The maximum percentage of fixed remuneration that can be earned in variable remuneration is 100% of fixed remuneration.

The Company will determine the business objectives for the ensuing 12 months within the context of a broader 3-5 year plan. Each employee’s Key Performance Indicators (KPIs) will be established during the annual Performance Review within the context of these Company business objectives and comparable industry job role parameters.

## Personal Performance

An employee’s Personal Performance is determined at the annual Performance Review and includes the extent to which KPIs and Key Behavioural Indicators (KBIs) were achieved during the year. The KBIs are generally the same for all employees.

## Company Performance

Company performance will be determined against one or more of: TSR, EPS, achieving budget targets and share price. The selection of the measure to be adopted for any business year shall be made by the board not later than the December board meeting of that year.

## Managing Director and Board adjustment

Once the Personal Performance and Company Performance figures have been determined, the Managing Director has the discretion to adjust each Other KMP’s variable remuneration. The Managing Director will propose aggregate cash and equity variable remuneration amounts, in respect of the completed year, to the Board.

The Board has the discretion to adjust the total variable remuneration figure proposed by the Managing Director for Other KMPs.

This process usually occurs within three months after the reporting date. Payments made are delivered as a cash bonus in the following reporting period. The Board also has the ability to award discretionary cash bonuses to executives.

# REMUNERATION REPORT

## (AUDITED)

The following table outlines the business unit performance in relation to the 2014 year.

Business unit	Performance measure	Performance versus budget 2014
Corporate & Portfolio	TSR, EPS, achieving budget targets, share price	Under performed
Canada	TSR, EPS, achieving budget targets, share price	Under performed

The following table outlines the proportion of maximum STI that was earned and forfeited in relation to the 2014 year.

	Proportion of maximum bonuses earned in 2014	Proportion of maximum cash bonuses forfeited in 2014
<b>Executive Director</b>		
P. Bird	29%	71%
<b>Other KMP</b>		
M. Connors (Canada)	30%	70%

The cash bonuses related to 2015 has yet to be decided and approved by the Board of Directors.

The following table outlines the proportion of maximum LTI that was earned and forfeited in relation to the 2014 year.

	Proportion of maximum LTI earned in relation to 2014	Proportion of maximum LTI forfeited in relation to 2014
<b>Executive Director</b>		
P. Bird	0%	100%
<b>Other KMP</b>		
M. Connors (Canada)	28%	72%

The LTI related to 2015 has yet to be decided and approved by the Board of Directors.

### Equity Component of Variable Remuneration

The objective of long term incentives is to encourage staff and executive performance to deliver sustained shareholder value. The Company Long Term Incentive (LTI) scheme is designed to reward participants for implementation of the strategic plan and to align the long term interests of the shareholders, senior executive management and the Company by linking a portion of participating employees' remuneration at risk to the Company's future performance. The Heemskirk Consolidated Employee Share Purchase Plan (the Plan) is designed to achieve this outcome.

### Heemskirk Employee Share Plan

The Plan involves the issue of shares in the Company. While Plan shares are "restricted shares", they may not be sold or transferred, mortgaged, hedged (or otherwise encumbered) or otherwise dealt with by a participant. The Plan is part of an executive's "at risk" salary component and issues may be made annually. Under the terms of the Plan an initial share allocation may be made after completion of a qualifying period of 12 months. The Company has adopted a four year vesting period for Shares issued under the Plan, Year 1 – 25%, Year 2 – 25%, Year 3 – 25%, and Year 4 – 25%.

Under the Plan an interest free loan is made to the Executive to fund the acquisition of shares in the Company. A portion of dividends are required to be applied to the loan reduction and the loan balance must be paid out from share sale proceeds. If the share sale proceeds are less than the value of the loan, the Executive pays the balance of the loan. If the loan balance is not retired, the employee is unable to receive any benefit from the shares. If an Executive leaves prior to vesting of shares then the shares are forfeited and the loan is cancelled.

Canadian Executives receive the right to acquire shares under the Plan rather than having the shares issued to them. The right to acquire is permitted after each vesting date.

### Termination provisions

For Other KMP, remuneration and other terms of employment are formalised in an employment contract that can be terminated with notice. This agreement provides for an annual review of annual base pay, provision of performance related cash bonuses, other benefits and participation in the Long Term Incentive Plan. The contract provides for notice of six months for resignation by the executive or termination by the Company.

	Notice Period	Payment in lieu of notice	Treatment of STI on termination	Treatment of LTI on termination
Resignation	6 months	6 months	Unvested awards forfeited	Unvested awards forfeited
Termination for cause	None	None	Unvested awards forfeited	Unvested awards forfeited
Termination without cause	6 months	6 months	Unvested awards forfeited	Unvested awards forfeited

## Relationships of Incentives to Company's Performance

At risk variable remuneration for Other KMP is based on Company performance on TSR, EPS, achieving budget targets, share price and individual KPIs. At risk variable remuneration for the Managing Director is based on the execution of the Company's strategic plan.

## Heemskirk's Financial Performance

Year Ended 30 September	2011	2012	2013	2014	2015
Net Profit After Tax (NPAT) (\$m)	(3.4)	(2.2)	(3.9)	(2.4)	(5.2)
Basic Earnings Per Share (EPS) <sup>(1)</sup> (cents)	(6.67)	(2.20)	(2.54)	(3.48)	(3.11)
Dividend declared (cents)	0	0	0	0	0
Share Price at 30 Sep (cents)	11.0	12.5	6.5	14.0	8.8
Share Price increase/(decrease) <sup>(2)</sup> (cents)	(15.0)	1.5	(6.0)	7.5	(5.2)

(1) Basic EPS is calculated as net profit after tax from continuing operations divided by weighted average number of ordinary shares

(2) Share Price movement during the financial year

## Executives' remuneration for the year ended 30 September

		Fixed Remuneration			Variable Remuneration <sup>(7)</sup>				
		Short Term Benefits		Post-Employment		STI	LTI		
		Salary, Fees & Commissions \$	Non-Monetary Benefits \$	Super-annuation \$	Cash Bonus \$	Share/ Rights Based Payments <sup>(1)</sup> \$	Termination Benefits <sup>(2)</sup> \$	Total Remuner-ation \$	Performance Related %
P Bird	2015	416,861	14,355	18,783	43,000	–	–	493,000	8.72%
	2014	437,512	14,324	19,737	22,707	–	–	494,280	4.6%
M Connors <sup>(6)</sup>	2015	307,765	7,403	16,838	43,384	6,907	–	382,297	13.15%
	2014	126,505	6,614	4,706	–	–	–	137,825	0.00%
M Flook <sup>(3)</sup>	2015	–	–	–	–	–	–	–	–
	2014	75,458	–	24,460	–	–	–	99,918	0.00%
S Gray <sup>(4)</sup>	2015	–	–	–	–	–	–	–	–
	2014	205,928	–	30,240	–	–	109,535	343,703	0.00%
A Minty <sup>(5)</sup>	2015	–	–	–	–	–	–	–	–
	2014	160,533	9,919	5,957	30,738	–	90,289	297,436	10.33%
Total	2015	724,626	21,758	35,621	86,384	6,907	–	875,296	
	2014	1,005,936	30,857	85,100	53,445	–	199,824	1,373,162	

(1) Fair value of Long Term Incentives granted to Executive.

(2) Termination benefits include payments in lieu of notice.

(3) Mr Flook retired 31 July 2013. Following completion of 6 months' notice the termination benefits were paid on 31 January 2014.

(4) Mr Gray was terminated on 27 August 2014. The termination benefits were paid on 15 September 2014.

(5) Mr Minty resigned 1 April 2014. The termination benefits were paid on 30 April 2014.

(6) Mr Connors met the definition of a KMP on his appointment as President Heemskirk Canada from 1 April 2014.

(7) Relating to the year ended 30 September 2014, paid in the 2015 year.



# REMUNERATION REPORT

## (AUDITED)

### Additional Disclosures

#### Long term incentives movements during the year<sup>(1)</sup>

Executive	Grant Date	Fair Value per share/ right at award date (c)	First Vesting Date	Final Vesting Date	Exercise price (c)	No. Shares/ Rights Granted	No. Shares Vested/ Exercisable rights	No. Shares/ rights lapsed
P. Bird	1 Mar 13	2.25	1 Mar 14	1 Mar 17	12.00	–	75,000	–
M. Connors <sup>(2)</sup>	12 Apr 11 <sup>(3)</sup>	2.08	12 Apr 12	12 Apr 15	26.67	–	75,740	–
	1 Mar 13 <sup>(3)</sup>	2.25	1 Mar 14	1 Mar 17	12.00	–	87,976	–
	1 Mar 14 <sup>(3)</sup>	1.34	1 Mar 15	1 Mar 18	6.52	–	95,633	–
	1 Mar 15	2.11	1 Mar 16	1 Mar 19	12.69	327,288	–	–

(1) At the date of this report, there has been no repayment of LTI loans or dividends applied against loans.

(2) Grant to Mr Connors are rights which are exercisable after each vesting date.

(3) Granted prior to Mr Connors becoming a KMP.

#### Long term incentives held and granted

Executive	Balance 1 Oct 14	No. Shares/ Rights Granted during the period	Balance 30 Sep 2015		
	No. Held		No. Held	No. Rights Exercisable	No. Shares Vested
P. Bird	300,000	–	300,000	–	150,000
M. Connors <sup>(1)</sup>	634,224	327,288	961,512	259,349	–

(1) Grant to Mr Connors are rights which are exercisable after each vesting date.

#### Long term incentives fair value movements during the year

Executive	Fair value of shares/rights granted during the year \$	Fair value of shares/rights exercised during the year \$	Fair value of shares/rights forfeited during the year \$	Remuneration consisting of shares/rights granted during the year %
P. Bird	–	–	–	–
M. Connors	6,906	–	–	1.81

## Shareholding of KMP

Balance at beginning of period 1 Oct 2014				Net change			Balance at end of period 30 September 2015			
Ordinary Shares	Class A\$0.25 Partly Paid Ordinary Shares	Class B \$0.50 Partly Paid Ordinary Shares	Employee Share Plan Reserved Shares / Rights (vested) <sup>(1)</sup>	Class A\$0.25 Partly Paid Ordinary Shares Granted	Class B \$0.50 Partly Paid Ordinary Shares Granted	Net Change Ordinary Shares <sup>(2)</sup>	Net Change Employee Share Plan Reserved Shares / Rights <sup>(3)</sup>	Class A\$0.25 Partly Paid Ordinary Shares	Class B \$0.50 Partly Paid Ordinary Shares	Employee Share Plan Reserved Shares / Rights (vested) <sup>(1)</sup>
<b>KMP</b>										
G. Cameron	175,000	–	–	–	–	100,000	–	275,000	–	–
J. Taylor	500,000	–	–	–	–	500,000	–	1,000,000	–	–
P. Bird	5,952,659	–	–	75,000	–	80,000	75,000	6,032,659	–	150,000
M. Connors	–	–	–	100,793	–	–	158,556	–	–	259,349
W. Hansen <sup>(4)</sup>	268,466	100,000	500,000	–	–	–	–	268,466	100,000	500,000
<b>Total</b>	<b>6,896,125</b>	<b>100,000</b>	<b>500,000</b>	<b>175,793</b>	<b>–</b>	<b>680,000</b>	<b>233,556</b>	<b>7,576,125</b>	<b>100,000</b>	<b>409,349</b>

(1) Employee share plan reserved shares including vested shares and rights which are exercisable after each vesting date.

(2) Net change ordinary shares refer to ordinary shares purchased or sold to the market during the financial year.

(3) Net change employee share plan reserved shares refers to shares and rights vested, forfeited and exercised during the financial year.

(4) Closing balance represents the balance at the date of departure.

## REMUNERATION REPORT (AUDITED)

### Founders' Plan (Executive Bonus Plan)

On 28 July 2010 the Company announced that it had agreed to terminate the Founders' Plan and settlement terms were agreed. This action had the full support of the Founders and the then Heemskirk Board. The settlement provided for all outstanding partly paid shares held by the Founders to be paid up on execution.

In conjunction with the Founder's Plan settlement, loan facilities were made available to the Founders to assist with discharging any Australian taxation liability as a result of the settlement. The drawdown of the facility as at 30 September 2015 is \$0.345 million (2014: \$0.310 million).

The loan facility is interest-bearing at market rates and repayable by cash or a predetermined number of pledged Company shares at a value of 50 cents per share plus termination payments. Any shortfall in repayments after the value of the loan facility has been reduced by cash, the pledged Company shares and termination payments will be forgiven and treated as an expense. In the unlikely event of a termination for cause, the Company has recognised in the accounts a potential shortfall in relation to the Managing Director of \$0.196 million (2014: \$0.129 million) as at 30 September 2015.

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 SEPTEMBER 2015

	Note	2015 \$'000	2014 \$'000
Revenue from continuing operations	3(a)	224	705
Cost of sales	3(b)	(52)	(1,146)
<b>Gross profit/(loss)</b>		<b>172</b>	<b>(441)</b>
Loss on sale of investments		(48)	(220)
Fair value loss on equity investments		(519)	(1,929)
Net loss on equity investments		(567)	(2,150)
Other income		84	429
<b>Total other expenses</b>		<b>(483)</b>	<b>(1,721)</b>
Depreciation and amortisation expense		(331)	(399)
Employee benefits expense	3(c)	(2,195)	(1,282)
Corporate costs		(1,072)	(544)
Consultants and advisory expense		(1,079)	(519)
Finance costs		(285)	(455)
Impairment expense		(22)	(11)
<b>Loss before income tax from continuing operations</b>		<b>(5,295)</b>	<b>(5,372)</b>
Income tax benefit from continuing operations	4	51	2
<b>Loss after income tax from continuing operations</b>		<b>(5,244)</b>	<b>(5,370)</b>
Profit from discontinued operations (net of income tax)	5	-	2,991
<b>Loss after income tax</b>		<b>(5,244)</b>	<b>(2,379)</b>
<b>Other comprehensive income:</b>			
<i>Items that will be subsequently reclassified to the income statement</i>			
Foreign currency translation		502	(283)
Foreign currency translation differences recycled to income statement on disposal of foreign operation		-	(29)
<i>Items that will not be subsequently reclassified to profit or loss</i>			
Asset revaluation		-	(453)
<b>Other comprehensive income/(loss) for the period, net of tax</b>		<b>502</b>	<b>(765)</b>
<b>Total comprehensive income/(loss) for the period</b>		<b>(4,742)</b>	<b>(3,144)</b>
<b>Earnings per share (EPS) from continuing operations</b>			
Basic earnings per share (cents)	6	(3.11)	(3.48)
Diluted earnings per share (cents)	6	(3.11)	(3.48)
<b>Earnings per share on profit/(loss)</b>			
Basic earnings per share (cents)		(3.11)	(1.54)
Diluted earnings per share (cents)		(3.11)	(1.61)

The above statement of comprehensive income should be read in conjunction with the accompanying notes.

# CONSOLIDATED BALANCE SHEET FOR THE YEAR ENDED 30 SEPTEMBER 2015

	Note	2015 \$'000	2014 \$'000
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents	7	5,974	12,101
Trade and other receivables	8	263	388
Inventories	9	1,398	1,397
Other financial assets	10	3,402	4,226
Other current assets		236	256
<b>Total current assets</b>		<b>11,273</b>	<b>18,369</b>
<b>Non-current assets</b>			
Property, plant and equipment	12	4,380	1,986
Exploration, evaluation and mine development	13	7,461	5,430
Deferred tax assets	4	7	2
Other non current assets	11	1,974	-
<b>Total non-current assets</b>		<b>13,822</b>	<b>7,417</b>
<b>TOTAL ASSETS</b>		<b>25,095</b>	<b>25,786</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade and other payables	14	957	707
Interest bearing loans and borrowings	15	19	2,776
Provisions		286	265
Income tax payable	4	-	783
<b>Total current liabilities</b>		<b>1,262</b>	<b>4,530</b>
<b>Non-current liabilities</b>			
Deferred tax liabilities	4	63	58
Interest bearing loans and borrowings	15	65	-
Provisions		40	35
<b>Total non-current liabilities</b>		<b>168</b>	<b>94</b>
<b>TOTAL LIABILITIES</b>		<b>1,430</b>	<b>4,624</b>
<b>NET ASSETS</b>		<b>23,665</b>	<b>21,162</b>
<b>EQUITY</b>			
Contributed equity	16	87,836	81,184
Reserves		1,984	889
Retained earnings/(losses)		(66,155)	(60,911)
<b>TOTAL EQUITY</b>		<b>23,665</b>	<b>21,162</b>

The above balance sheet should be read in conjunction with the accompanying notes.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 30 SEPTEMBER 2015

	Issued capital \$'000	Retained earnings \$'000	Asset revaluation reserve \$'000	Foreign currency translation reserve \$'000	Share based payment reserve \$'000	Total Equity \$'000
<b>Balance at 1 October 2013</b>	81,184	(59,874)	2,065	696	226	24,297
Loss for the period	-	(2,379)	-	-	-	(2,379)
Foreign currency translation differences recycled to income statement on disposal of foreign operation	-	-	-	(29)	-	(29)
Other comprehensive income net of tax	-	-	(453)	(283)	-	(736)
<b>Total comprehensive income for the period</b>	-	<b>(2,379)</b>	<b>(453)</b>	<b>(312)</b>	-	<b>(3,144)</b>
<b>Transactions with owners in their capacity as owners</b>						
Employee share based payments	-	-	-	-	9	9
Transfer of asset revaluation reserve on disposal of land	-	1,342	(1,342)	-	-	-
<b>Balance at 30 September 2014</b>	<b>81,184</b>	<b>(60,911)</b>	<b>270</b>	<b>384</b>	<b>235</b>	<b>21,162</b>
<b>Balance at 1 October 2014</b>	<b>81,184</b>	<b>(60,911)</b>	<b>270</b>	<b>384</b>	<b>235</b>	<b>21,162</b>
Loss for the period	-	(5,244)	-	-	-	(5,244)
Other comprehensive income net of tax	-	-	7	495	-	502
<b>Total comprehensive income for the period</b>	-	<b>(5,244)</b>	<b>7</b>	<b>495</b>	-	<b>(4,742)</b>
<b>Transactions with owners in their capacity as owners</b>						
Shares converted and issued during the period	7,032	-	-	-	-	7,032
Transaction costs on issued capital, net of tax	(380)	-	-	-	-	(380)
Employee share based payments	-	-	-	-	16	16
Other share based payments	-	-	-	-	577	577
<b>Balance at 30 September 2015</b>	<b>87,836</b>	<b>(66,155)</b>	<b>277</b>	<b>879</b>	<b>828</b>	<b>23,665</b>

The above statement of changes in equity should be read in conjunction with the accompanying notes.



# CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 SEPTEMBER 2015

	Note	2015 \$'000	2014 \$'000
<b>Cash flows from operating activities</b>			
Receipts from customers		327	20,581
Payments to suppliers and employees		(4,291)	(23,103)
Interest received		107	234
Income tax received/(paid)		(784)	(200)
Finance costs paid		(313)	(467)
<b>Net cash flows used in operating activities</b>	23(a)	(4,954)	(2,955)
<b>Cash flows from investing activities</b>			
Cash deposit for bank investments/guarantees		82	3
Proceeds from the sale of equity investments		176	61
Proceeds from the sale of property, plant and equipment		30	9,083
Purchases of property, plant and equipment		(2,590)	(173)
Exploration, evaluation and mine development expenditure		(1,397)	(535)
Dividends received		-	126
<b>Net cash flows from investing activities</b>		(3,699)	8,565
<b>Cash flows from financing activities</b>			
Proceeds from issue of share capital, net of transaction costs		5,575	-
Convertible notes redemption/buy back		(2,739)	-
Proceeds/(repayment) of borrowings		-	(2,285)
Borrowing costs paid		(414)	-
<b>Net cash flows from/(used in) financing activities</b>		2,422	(2,285)
Net increase/(decrease) in cash and cash equivalents		(6,231)	3,325
Cash and cash equivalents at beginning of period		12,101	8,502
Net foreign exchange differences		104	274
<b>Cash and cash equivalents at end of period</b>	7	<b>5,974</b>	<b>12,101</b>

The above statement of cash flows should be read in conjunction with the accompanying notes.

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

The financial report of Heemskirk Consolidated Limited and its controlled entities (the Company) for the year ended 30 September 2015 was authorised for issue in accordance with a resolution of the directors on 25 November 2015.

Heemskirk Consolidated Limited (the parent entity) is a company limited by shares incorporated in Australia whose shares are publicly traded on the Australian Securities Exchange.

The nature of the operations and principal activities of the Company and its controlled entities are mining, development and processing of industrial minerals and resource equity investments.

### Note 1: Summary of significant accounting policies

#### (a) Basis of preparation

The financial report is a general purpose financial report, which has been prepared in accordance with the requirements of the Corporations Act 2001 and Australian Accounting Standards. The financial report has also been prepared on a historical cost basis, except for derivative financial instruments, equity investments and land, which have been measured at fair value.

The financial report is presented in Australian dollars and all values are rounded to the nearest thousand dollars (\$'000) unless otherwise stated under the option available to the Company under ASIC Class Order 98/0100. The Company is an entity to which the class order applies.

The Company is a for profit entity.

Where necessary, comparative figures have been adjusted to conform with changes in presentation in the current year.

#### (b) Compliance with IFRS

The financial report complies with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.

##### *Adoption of New Standards and Interpretations*

The Company has adopted the following new and/or revised Standards, Amendments and Interpretations from 1 October 2014:

- AASB132 - Financial Instruments Presentation - *Offsetting Financial Assets and Financial Liabilities*
- AASB136 - Impairment of Assets – *Recoverable Amount Disclosures for Non-Financial Assets*

Adoption of the above Standards, Amendments and Interpretations did not have any material effect on the financial position or performance of the Company but resulted in some additional disclosure.

##### *New Accounting Standards and Interpretations not yet adopted*

The following standards, amendments to standards and interpretations have been identified as those which may impact the Company in the period of initial application. They have been issued but are not yet effective at 30 September 2015, but have not been applied in preparing this financial report.

Reference and Title	Details of the New Standard/Amendment/Interpretation	Impact on Company	Application date for the Company
AASB 9 Financial Instruments	AASB 9 includes requirements for the classification and measurement of financial assets. These requirements improve and simplify the approach for classification and measurement of financial assets compared with the requirements of AASB 139.	(ii)	1-Oct-18

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### (b) Compliance with IFRS (continued)

Reference and Title	Details of the New Standard/Amendment/Interpretation	Impact on Company	Application date for the Company
Amendments to IAS 16 and IAS 38	IAS 16 and IAS 38 both establish the principle for the basis of depreciation and amortisation as being the expected pattern of consumption of the future economic benefits of an asset.	(i)	1-Oct-16
Clarification of Acceptable Methods of Depreciation and Amortisation (Amendments to IAS 16 and IAS 38)	The IASB has clarified that the use of revenue-based methods to calculate the depreciation of an asset is not appropriate because revenue generated by an activity that includes the use of an asset generally reflects factors other than the consumption of the economic benefits embodied in the asset.  The IASB also clarified that revenue is generally presumed to be an inappropriate basis for measuring the consumption of the economic benefits embodied in an intangible asset. This presumption, however, can be rebutted in certain limited circumstances.		
AASB 15 Revenue from Contracts with Customers	IFRS 15 establishes principles for reporting useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers.  IFRS 15 supersedes: (a) IAS 11 Construction Contracts (b) IAS 18 Revenue (c) IFRIC 13 Customer Loyalty Programmes (d) IFRIC 15 Agreements for the Construction of Real Estate (e) IFRIC 18 Transfers of Assets from Customers (f) SIC-31 Revenue—Barter Transactions Involving Advertising Services  The core principle of IFRS 15 is that an entity recognises revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity recognises revenue in accordance with that core principle by applying the following steps: (a) Step 1: Identify the contract(s) with a customer (b) Step 2: Identify the performance obligations in the contract (c) Step 3: Determine the transaction price (d) Step 4: Allocate the transaction price to the performance obligations in the contract	(ii)	1-Oct-18

(i) *The adoption of this new standard, amendment or interpretation is not expected have a material impact on the Company's financial statements.*

(ii) *The Company has not yet determined the extent of the impact, if any.*

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### **(c) Basis of consolidation**

The consolidated financial statements comprise the financial statements of Heemskirk Consolidated Limited and its subsidiaries as at 30 September 2015.

Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee, and
- the ability to use its Power over the investee to affect its returns

When the Group has less than a majority of the voting or similar rights to an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee:

- the contractual arrangement with the other vote holders of the investee
- rights arising from other contractual arrangements
- the Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary.

Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Accounting policies of subsidiaries are consistent with the Group. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

### **(d) Foreign currency translation**

#### *Functional and presentation currency*

The functional currency of each of the Company's entities is measured using the currency of the primary economic environment in which that entity operates. The consolidated financial statements are presented in Australian dollars, which is the parent entity's functional and presentation currency.

#### *Transactions and balances*

Foreign currency transactions are translated into functional currency using the exchange rates prevailing at the date of the transaction. Foreign currency monetary items are translated at the year-end exchange rate. Non-monetary items measured at historical cost continue to be carried at the exchange rate at the date of the transaction. Non-monetary items measured at fair value are reported at the exchange rate at the date when fair values were determined.

Exchange differences arising on the translation of monetary items are recognised in the statement of comprehensive income, except where deferred in equity as a qualifying cashflow or net investment hedge until disposal at which time they are recognised in the statement of comprehensive income. Exchange variations resulting from the translation of subsidiaries functional currency are recognised in the foreign currency translation reserve in equity.

In accordance with the requirements of the accounting standards, foreign currency translation gains/(losses) remain deferred in equity until the disposal of the foreign operation, at which point they are recognised in the statement of comprehensive income.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### **(e) Impairment of assets**

The carrying amounts of all assets are reviewed yearly to determine whether there is an indication of impairment.

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. Recoverable amount is the higher of an asset's fair value less costs of disposal to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets (cash-generating units - CGUs).

### **(f) Revenue recognition**

Revenue is recognised and measured at the fair value of the consideration received or receivable to the extent it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured. The following specific recognition criteria must also be met before revenue is recognised:

#### *Sale of goods*

Revenue is recognised when the significant risks and rewards of ownership of the goods have passed to the buyer and the costs incurred or to be incurred in respect of the transaction can be measured reliably. Risks and rewards of ownership are considered passed to the buyer at the time of delivery of the goods to the customer.

#### *Interest income*

Revenue is recognised as interest accrues using the effective interest method. Revenue is recognised when the Company's right to receive payment is established.

#### *Dividends*

Revenue is recognised when the Company's right to receive the payment is established.

### **(g) Goods and services tax (GST)**

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the balance sheet are shown inclusive of GST.

Cashflows are presented in the statement of cash flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cashflows.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the balance sheet.

### **(h) Income tax**

#### *Current tax*

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities based on the current period's taxable income. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the balance sheet date.

#### *Deferred tax*

Deferred income tax is provided on all temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### (h) Income tax (continued)

Deferred income tax liabilities are recognised for all taxable temporary differences except:

- when the deferred income tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and that, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; or
- when the taxable temporary difference is associated with investments in subsidiaries, associates or interests in joint ventures, and the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax

- when the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; or
- when the deductible temporary difference is associated with investments in subsidiaries, associates or interests in joint ventures, in which case a deferred tax asset is only recognised to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilised.

The carrying amount of deferred income tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Unrecognised deferred income tax assets are reassessed at each balance sheet date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date.

Income taxes relating to items recognised directly in equity are recognised in equity and not in profit or loss.

Deferred tax assets and deferred tax liabilities are offset only if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred tax assets and liabilities relate to the same taxable entity and the same taxation authority.

### (i) Exploration, evaluation and feasibility expenditure

Exploration and evaluation expenditure related to areas of interest is capitalised and carried forward to the extent that:

- Rights to the tenure of the area of interest are current; and
  - (a) Costs are expected to be recouped through successful development and exploitation of the area of interest or alternatively by sale; or
  - (b) Where activities in the area of interest have not yet reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, active and significant operations in, or in relation to, the area are continuing.

Such expenditure consists of an accumulation of acquisition costs and direct net exploration and evaluation costs incurred by or on behalf of the Company, together with an appropriate portion of directly related overhead expenditure.

Feasibility expenditure represents costs related to the preparation and completion of a feasibility study to enable a development decision to be made in relation to an area of interest.



## NOTES TO THE FINANCIAL STATEMENTS

### FOR THE YEAR ENDED 30 SEPTEMBER 2015

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At the commencement of production, all past exploration, evaluation and feasibility expenditure in respect of an area of interest is transferred to mine development where it is amortised over the life of the area of interest to which they relate.

When an area of interest is abandoned or the directors decide it is not commercial, any accumulated costs in respect of that area are written off in the year the decision is made. Each area of interest is reviewed at the end of each reporting period and accumulated costs written off to the extent they are not expected to be recoverable in the future.

#### **(j) Mine development**

Mine development represents the expenditure incurred in preparing mines for production, and includes stripping and waste removal costs net of revenue recognised before commissioning date. Such expenditure comprises net direct costs and an appropriate allocation of directly related overhead costs.

All expenditure incurred prior to commencement of production from the development property is carried forward to the extent to which it is probable associated future economic benefits will flow to the Company.

When further development expenditure is incurred in respect of the mine property after commencement of production, such expenditure is carried forward as part of the cost of mine property only when future economic benefits are probable, otherwise the expenditure is classified as part of the cost of production and expensed as incurred. Such capitalised development expenditure is added to the total carrying value of mine development being amortised.

The net carrying values of mine development expenditure carried forward are reviewed yearly by directors to determine whether there is any indication of impairment. The carrying value of mine development will be amortised in full by the completion of the mine.

The Company defers mining costs incurred during the production stage of its operations, initially as part of determining the cost of mine development and then to inventories. Deferred mining costs for a mine are amortised over the life of the mine against inventories on a unit-of-production basis taking in to consideration the total remaining cost of developing the mine over its life. The life of mine is based on economically recoverable reserves of each mine. The deferred mining costs in inventories are released to the statement of comprehensive income as an amortisation expense.

The life of mine is a function of an individual mine's design, therefore changes to that design will generally result in changes to the amortisation rate. Changes in other technical or economic parameters that impact reserves will also have an impact on the life of mine even if they do not affect the mine's design. Changes to the life of mine are accounted for prospectively.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### **Note 2: Significant accounting judgements, estimates and assumptions**

In applying the Company's accounting policies management continually evaluates judgements, estimates and assumptions based on experience and other factors, including expectations of future events that may have an impact on the Company. All judgements, estimates and assumptions made are believed to be reasonable based on the most current set of circumstances available to management. Actual results may differ from the judgements, estimates and assumptions. Significant judgements, estimates and assumptions made by management in the preparation of these financial statements are outlined below:

#### **(a) Determination of mineral resources and ore reserves**

The determination of reserves impacts the accounting for asset carrying values, depreciation and amortisation rates, deferred stripping costs and provisions for restoration. The Company estimates its mineral resources and ore reserves in accordance with the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2004 (the "JORC code"). The information on mineral resources and ore reserves was prepared by or under the supervision of Competent Persons as defined in the JORC code. The amounts presented are based on the mineral resources and ore reserves determined under the JORC code.

There are numerous uncertainties inherent in estimating mineral resources and ore reserves and assumptions that are valid at the time of estimation may change significantly when new information becomes available.

Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of reserves and may, ultimately, result in the reserves being restated.

#### **(b) Recovery of deferred tax assets**

Deferred tax assets are recognised for deductible temporary differences and losses when management considers that it is probable that future taxable profits will be available to utilise those temporary differences.

#### **(c) Mine development costs**

##### *Funding arrangements and Project development*

On 15 July 2015, the Company entered into a USD40.0 million Secured Debt Facility Agreement to fund the construction of the Project. The financing facility is provided by Taurus Funds Management and will be available to draw down in two tranches. USD25.0 million will be available in tranche 1 to complete the 300,000 tpa construction and production development project (phase one) and USD15.0 million will be available in tranche 2 to complete an expansion of the project (phase two) to a 600,000 tpa production level, once phase one has been successfully completed.

The Company is currently working through completing standard conditions precedent to first drawdown of the facility and finalisation of construction contract to commence full build.

##### *Value considerations*

Notwithstanding the shortfall of market capitalisation to net assets at 30 September 2015, it is the Directors view that significant value exists in the Moberly frac sand project and the recoverable amount of this project is expected to significantly exceed its carrying amount. Further analysis through the period of funding considerations has not identified any matter that indicates to the Directors that there is a deterioration in the expected value of this project. Further the Directors remain confident that the fundamentals underpinning the development of this project remain strong.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### **Note 2: Significant accounting judgements, estimates and assumptions (continued)**

#### **(c) Mine development costs (continued)**

Capitalised costs in relation to this project amount to CAD6.796 million at 30 September 2015. The total cost estimated to complete the development is CAD30 million. This takes into account contingencies and the CAD exchange rates versus the USD. The majority of the capital estimate is a fixed price contract to complete the processing facility. In the directors' judgement, a reasonably possible change in the assumptions used to determine recoverable amount would not lead to the carrying value of the Project exceeding its recoverable amount. For details of the impairment assessment process undertaken refer to Note 13(b).

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 3: Revenue and Expenses

	2015 \$'000	2014 \$'000
<b>(a) Total Revenue</b>		
Sale of goods	117	337
Dividends received	-	126
Interest received	107	242
<b>Total revenue</b>	<b>224</b>	<b>705</b>
<b>(b) Cost of sales</b>		
Sale of goods	52	1,146
<b>Total cost of sales <sup>(1)</sup></b>	<b>52</b>	<b>1,146</b>
<b>(c) Employee benefits expense</b>		
Superannuation expense	60	86
Share based payment expense	16	9
Salaries <sup>(1),(2)</sup>	2,119	1,187
<b>Total employee benefits expense</b>	<b>2,195</b>	<b>1,282</b>

(1) Canada overheads are recognised in their respective expense categories in 2015 as there was no production during the year.

(2) Includes salaries from Canada operations, recognised in cost of sales in 2014.

### Note 4: Income tax

	2015 \$'000	2014 \$'000
<b>(a) Income tax expense comprises:</b>		
<i>Current income tax</i>		
Current income tax expense (benefit)	(970)	660
Under (over) provision from previous years	(31)	(18)
Tax expense (benefit) related to an increase (decrease) in unrecognised tax benefits	956	-
	(45)	642
<i>Deferred tax expense</i>		
Relating to origination and reversal of temporary differences	(328)	71
Under/(over) provision from previous years	3	73
Tax expense (benefit) related to an increase (decrease) in unrecognised tax benefits	319	-
	(6)	144
<b>Income tax expense reported in the statement of comprehensive income</b>	<b>(51)</b>	<b>786</b>
<i>Income tax expense/(benefit) attributable to:</i>		
Continuing operations	(51)	(2)
Discontinued operations	-	788
<b>Income tax expense (benefit) reported in the statement of comprehensive income</b>	<b>(51)</b>	<b>786</b>

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 4: Income tax (continued)

#### (b) Reconciliation of Prima Facie Income Tax Expense to Income Tax Expense per the Income Statement

	2015 \$'000	2014 \$'000
Accounting loss from continuing operations	(5,295)	(5,372)
Accounting profit from discontinued operations	-	3,779
<b>Accounting loss before tax</b>	<b>(5,295)</b>	<b>(1,593)</b>
At the Company's statutory income tax rate of 30% (2014: 30%)	(1,589)	(478)
<i>Tax effect of amounts which are not deductible (taxable) in calculating taxable income:</i>		
Impact of different foreign tax rates	144	(102)
Other expenses	404	43
Over provided for in prior years	(30)	(45)
Derecognition of current and prior year temporary tax differences	175	475
Derecognition of current and prior year current tax losses	875	1,037
Discontinued operations capital tax on asset disposal	-	(249)
Discontinued operations other tax expenses including prior year overs/unders	-	102
Foreign exchange (gains)/losses and other translation adjustments	(30)	3
<b>Income tax expense reported in the statement of comprehensive income</b>	<b>(51)</b>	<b>786</b>

#### (c) Recognised deferred tax assets and liabilities

	2015 \$'000	2015 \$'000	2014 \$'000	2014 \$'000
	Current income tax	Deferred income tax	Current income tax	Deferred income tax
Opening balance	(783)	(2)	(141)	(133)
Charged to income	45	6	(640)	(144)
Charged to equity	-	(43)	-	50
Other payments/tax losses not recognised	783	(17)	(2)	225
<b>Closing balance</b>	<b>45</b>	<b>(56)</b>	<b>(783)</b>	<b>(2)</b>
<b>Tax expense (benefit) in statement of comprehensive income</b>		<b>(51)</b>		<b>786</b>

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 4: Income tax (continued)

#### (d) Tax Losses

The Company has an unrecognised deferred tax benefit relating to capital and income tax losses of \$13.997 million (2014: \$12.701 million). The Company recognises the benefit of tax losses only to the extent of anticipated future taxable income or gains in relevant jurisdictions. The gross amount of tax losses carried forward that have not been tax effected expire as follows:

	Australia A\$'000	Canada A\$'000	Total A\$'000
<b>Year of expiry</b>			
<i>Income tax losses</i>			
Not later than twenty years	-	12,403	12,403
Unlimited	34,366	-	34,366
	<u>34,366</u>	<u>12,403</u>	<u>46,769</u>
<i>Capital tax losses</i>			
Unlimited	1,956	-	1,956
	<u>1,956</u>	<u>-</u>	<u>1,956</u>
Gross amount of tax losses not recognised	<u>36,322</u>	<u>12,403</u>	<u>48,725</u>
<b>Tax effect of total losses not recognised</b>	<b>10,897</b>	<b>3,101</b>	<b>13,997</b>

#### (e) Tax Consolidation

Heemskirk Consolidated Limited and its 100% owned Australian resident subsidiaries formed a tax consolidated group with effect from 27 July 2005. Heemskirk Consolidated Limited is the head entity of the tax consolidated group. Members of the tax consolidated group have entered into a tax sharing agreement that provides for the allocation of income tax liabilities between the entities should the head entity default on its tax payment obligations. No amounts have been recognised in the financial statements in respect of this agreement on the basis that the possibility of default is remote.

##### *Nature of the tax funding agreement*

Members of the tax consolidated group have entered into a tax funding agreement. Under the funding agreement the funding of tax within the group is based on accounting profit, which is not an acceptable method of allocation under AASB Interpretation 1052.10. The tax funding agreement requires payments to/from the head entity to be recognised via an inter-entity receivable (payable) which is at call. To the extent that there is a difference between the amount charged under the tax funding agreement and the allocation under AASB Interpretation 1052, the head entity accounts for these as equity transactions with the subsidiaries.

The amounts receivable or payable under the tax funding agreement are due upon receipt of the funding advice from the head entity, which is issued as soon as practicable after the end of each financial year. The head entity may also require payment of interim funding amounts to assist with its obligations to pay tax instalments.



# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 5: Discontinued Operations

#### Lethbridge

On 21 January 2014, the Company announced that a Sale Agreement was executed for the sale of its operating mineral products plant in Lethbridge, Canada and barite mineral claims in the United States with Marquis Alliance Energy. The sale was approved by shareholders on 20 March 2014 and completed on 31 March 2014. The gain on sale after tax of Lethbridge was CAD \$2.641 million (\$2.607 million).

	Note	2014 \$'000
Profit after income tax from Lethbridge	(a)	384
Gain on sale after income tax from Lethbridge	(b)	2,607
Total profit after income tax from Lethbridge		2,991
<b>Net gain after income tax from discontinued operations</b>		<b>2,991</b>
<i>Earnings per share (EPS) on net gain after income tax from discontinued operations:</i>		
Basic earnings per share (cents)		1.94
Diluted earnings per share (cents)		1.87

#### (a) Profit from discontinued operations

	2014 \$'000
Revenue	16,467
Cost of sales	(14,093)
<b>Gross Profit</b>	<b>2,374</b>
Depreciation and amortisation expense	(73)
Finance income/(expenses)	2
Other expenses	(225)
Impairment losses	(134)
Corporate charges <sup>(1)</sup>	(1,273)
<b>Profit before income tax</b>	<b>671</b>
Income tax (expense)	(287)
<b>Profit after income tax</b>	<b>384</b>

(1) Corporate charges is the portion of Calgary overhead costs allocated to Lethbridge.

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

## Note 5: Discontinued Operations (continued)

### (b) Gain on sale of discontinued operations

	Note	2014 \$'000
Consideration received <sup>(1)</sup>		10,291
Earnings adjustment <sup>(2)</sup>		(495)
Net consideration receivable		9,796
Carrying amount of net assets sold	(i)	(5,944)
Transaction costs		(715)
Foreign currency translation reserve recycling		(29)
<b>Gain on sale before income tax from Lethbridge</b>		<b>3,108</b>
Income tax expense		(501)
<b>Gain on sale after income tax from Lethbridge</b>		<b>2,607</b>

(1) Consideration comprises CAD8.440 million (\$8.356 million) for the net assets excluding inventories plus CAD2.052 million (\$2.103million) for inventories. "Inventories" sold represent the final raw materials and finished goods held at the time of sale completion including spare parts, as at 31 March 2014.

(2) The purchaser was entitled to Lethbridge earnings after tax from 1 February to 31 March 2014.

### (i) Carrying amount of net assets sold

	2014 \$'000
Inventories	2,290
Property, plant & equipment	3,597
Mine development	147
Interest bearing liabilities	(17)
Employee liabilities	(73)
<b>Net Assets</b>	<b>5,944</b>

### (c) Cash flows from discontinued operations

	2014 \$'000
Net cash flows from operating activities	2,382
Net cash flows used in investing activities	9,344
Net cash flows from/(used in) financing activities	(11,743)
<b>Net cash provided by discontinued operations</b>	<b>(17)</b>

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 6: Earnings Per Share

	2015 \$'000	2014 \$'000
<b>(a) Earnings used in calculating EPS</b>		
<i>The following reflects the income used in the basic earnings per share computations:</i>		
<i>Basic EPS</i>		
Net profit/(loss) from continuing operations	(5,244)	(5,370)
Net profit/(loss) from discontinued operations	-	2,991
<b>Net profit/(loss)</b>	<b>(5,244)</b>	<b>(2,379)</b>
<i>Diluted EPS</i>		
Net profit/(loss) (from basic EPS) from continuing operations	(5,244)	(5,370)
Tax effect interest on unsecured convertible notes - liability	98	203
<b>Diluted Net profit/(loss) from continuing operations <sup>(1)</sup></b>	<b>(5,146)</b>	<b>(5,167)</b>
(1) Diluted Net profit/(loss) from discontinued operations is the same as basic net profit/(loss) from discontinued operations.		
	2015 No. of shares	2014 No. of shares
<b>(b) Weighted average number of shares</b>		
Weighted average number of ordinary shares for basic earnings per share	168,492	154,472
<i>Effect of dilution:</i>		
Converted debt securities <sup>(1)</sup>	-	5,667
Reserved shares <sup>(1)</sup>	-	105
<b>Weighted average number of ordinary shares for the effect of dilution</b>	<b>168,492</b>	<b>160,244</b>
	2015 ¢	2014 ¢
<b>(c) EPS (cents per share)</b>		
Basic EPS from continuing operations	(3.11)	(3.48)
Basic EPS from discontinued operations	-	1.94
Diluted EPS from continuing operations	(3.11)	(3.48)
Diluted EPS from discontinued operations	-	1.87
(1) Because diluted earnings per share is increased when taking the unsecured convertible notes and reserved shares into account, these are anti-dilutive and as such are excluded from the calculation of diluted earnings per share.		

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 7: Cash & Cash Equivalents

	2015 \$'000	2014 \$'000
Cash at bank and in hand <sup>(1)</sup>	5,974	8,466
Short term deposit	-	3,635
<b>Total cash and cash equivalents as per the statement of cash flows</b>	<b>5,974</b>	<b>12,101</b>

(1) Cash at bank earns interest at floating rates based on daily bank deposit rates. The carrying amounts of cash and cash equivalents represents fair value.

Cash and cash equivalents comprise cash at bank and in hand and short-term deposits with a maturity of three months or less.

### Note 8: Trade and Other Receivables

	2015 \$'000	2014 \$'000
<b>Current</b>		
Trade receivables	3	19
Goods and services tax	81	34
Other debtors <sup>(1)</sup>	179	335
<b>Total Trade and Other Receivables</b>	<b>263</b>	<b>388</b>

(1) Other debtors includes employee loan receivable and a provision for impairment loss. Refer to Note 22(d) for details.

These financial assets are initially measured at fair value plus transaction costs that are directly attributable to the acquisition of financial asset. After initial recognition, these assets are measured at amortised cost, using the effective interest method. Gains and losses are recognised in profit or loss when these assets are derecognised or impaired, as well as through the amortisation process.

Refer to Note 18(c) for the Company's material credit risk exposure.

### Note 9: Inventories

	2015 \$'000	2014 \$'000
<b>Current</b>		
Raw materials and stores - at cost	1,395	1,342
Finished goods - at net realisable value	3	55
<b>Total inventories at cost and net realisable value</b>	<b>1,398</b>	<b>1,397</b>

Inventories are measured at the lower of cost and net realisable value. The cost of manufactured products includes direct materials, direct labour and an appropriate portion of variable and fixed overheads. Overheads are applied on the basis of normal operating capacity. Costs are assigned on the basis of weighted average costs. The costs of mining stocks include direct materials, direct labour, transportation costs and variable and fixed overhead costs relating to mining activities.

Materials and supplies are valued at the lower of cost and net realisable value. Any provision for obsolescence is determined by reference to specific stock items identified. A regular and ongoing review is undertaken to establish the extent of surplus items and a provision is made for any potential loss on their disposal.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 9: Inventories (continued)

Inventories recognised as an expense for continuing operations for the year ended 30 September 2015 totalled \$0.052 million (2014: \$0.272 million) for the Company. This expense has been included in the cost of sales from continuing operations line item as a cost of inventories.

Inventory write-downs recognised as an expense totalled \$nil (2014: \$nil).

### Note 10: Other financial assets

	2015 \$'000	2014 \$'000
<b>Current</b>		
Listed equity investments <sup>(1)</sup>	3,402	4,144
Term deposits	-	82
	<b>3,402</b>	<b>4,226</b>

(1) Listed equity investments are categorised as Level 1 in the fair value hierarchy. Fair value of this approach is determined by reference to quoted market bid prices at the close of business on the balance sheet date. Realised gains or losses are included in the statement of comprehensive income. The Company recognises unrealised gains and losses of equity investments in the statement of comprehensive income under the "fair value through profit and loss" approach.

### Note 11: Deferred Borrowing Costs

	2015 \$'000	2014 \$'000
<b>Non-current</b>		
Deferred Borrowing Costs	1,974	-
	<b>1,974</b>	<b>-</b>

Deferred borrowing costs represent the initial capitalised costs of establishing the Secured Debt Facility for the Moberly Frac Sand Project.

#### *Secured Debt Facility*

On 15 July 2015, the Company entered into a USD40.0 million Secured Debt Facility Agreement to fund the construction of the Moberly Frac Sand Project. At balance date, the Company is continuing to work through conditions precedent prior to first drawdown of the facility. The financing facility is provided by Taurus Funds Management and will be available to draw down in two tranches. USD25.0 million will be available in tranche 1 to complete the 300,000 tpa construction and production development project (phase one) and USD15.0 million will be available in tranche 2 to complete an expansion of the project (phase two) to a 600,000 tpa production level, once phase one has been successfully completed.

The financing facility bears interest at 10% per annum, an arrangement fee of 2% of the facility amount, a commitment fee of 2% per annum on undrawn amounts at each phase, an issue of 25.219 million options and 2% Free on Train Gross Revenue Royalty, ex Plant Price. The facility maturity date is 31 December 2018, with a 12 month extension option.

Deferred borrowing costs capitalised represent the 2% arrangement fee totalling USD0.800 million (AUD \$1.077 million) which was paid via an issue of 10.773 million HSK fully paid ordinary shares, legal and advisory fees paid of AUD \$0.414 million and the fair value of 12.609 million options which vested on date of signing. The strike price of the options is \$0.0878, a 25% premium to the 10 day VWAP prior to the date of signing the agreement. A further 12.609 million options are expected to vest pro rata for amounts drawn. No amounts have been drawn under the facility as at 30 September 2015. These Deferred borrowing costs will be recognised against proceeds drawn under the facility.

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 12: Property, plant and equipment

	Freehold Land \$'000	Buildings \$'000	Plant & Equipment \$'000	Other <sup>(1)</sup> \$'000	Total \$'000
<b>Year ended 30 September 2015</b>					
At 1 October 2014, net of accumulated depreciation	406	544	989	48	1,987
Additions	7	-	2,487	181	2,675
Disposals at written-down value	-	-	(37)	(1)	(38)
Depreciation charge for the year	-	(39)	(206)	(66)	(311)
Foreign currency increase / (decrease)	15	20	31	1	67
<b>At 30 September 2015, net of accumulated depreciation</b>	<b>428</b>	<b>525</b>	<b>3,264</b>	<b>163</b>	<b>4,380</b>
<b>At 30 September 2015</b>					
Cost or fair value	428	800	4,904	469	6,601
Accumulated depreciation	-	(275)	(1,640)	(306)	(2,221)
<b>Net carrying amount</b>	<b>428</b>	<b>525</b>	<b>3,264</b>	<b>163</b>	<b>4,380</b>
<b>Year ended 30 September 2014</b>					
At 1 October 2013, net of accumulated depreciation	2,777	1,045	2,481	209	6,512
Additions	14	-	125	35	174
Disposals at written-down value	-	-	(1)	(5)	(6)
Revaluation	(401)	-	-	-	(401)
Depreciation charge for the year	-	(60)	(282)	(66)	(408)
Disposals in discontinued operations	(1,863)	(407)	(1,210)	(117)	(3,597)
Foreign currency increase / (decrease)	(121)	(34)	(124)	(8)	(287)
<b>At 30 September 2014, net of accumulated depreciation</b>	<b>406</b>	<b>544</b>	<b>989</b>	<b>48</b>	<b>1,987</b>
<b>At 30 September 2014</b>					
Cost or fair value	406	770	2,461	435	4,073
Accumulated depreciation	-	(226)	(1,472)	(388)	(2,085)
<b>Net carrying amount</b>	<b>406</b>	<b>545</b>	<b>989</b>	<b>48</b>	<b>1,987</b>

(1) Other equipment with a carrying amount of \$0.074 million (2014: nil) are pledged as securities for interest bearing liabilities as disclosed in Note 15.

#### *Property, plant and equipment, buildings and other*

Each class of property, plant and equipment, buildings and other is measured at cost less, where applicable, any accumulated depreciation and impairment losses.

The carrying values are reviewed for impairment annually, with recoverable amount being estimated when events or changes in circumstances indicate that the carrying value may be impaired. The recoverable amount is assessed on the basis of the expected net cashflows that will be received from the assets employed and subsequent disposal. The expected net cashflows have been discounted to their present values in determining recoverable amounts.

An asset's carrying amount is immediately written down to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.



## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### **Note 12: Property, plant and equipment (continued)**

#### *Freehold land*

Following initial recognition at cost, freehold land is carried at a revalued amount. Fair value is the price that could be received to sell an asset or paid to transfer a liability in an ordinary transaction between market participants at the measurement date.

It is the policy of the Company to have an independent valuation every 3 to 5 years, with annual appraisals being made by the directors. The last independent valuation was performed on 9 May 2011. The valuation method used in determining fair value is the direct comparison approach. Fair value determined using this approach is compared against market transactions of similar parcels of land and then adjusted for characteristics specific to the site being valued. Freehold land is categorised as level 3 in the fair value hierarchy as adjustments made to the price per acre are unobservable. The price per acre has been determined as CAD0.005 million. A change in this value would have a corresponding impact on fair value.

Any revaluation increment is credited to the asset revaluation reserve included in the equity section of the balance sheet, except to the extent that it reverses a revaluation decrease of the same asset previously recognised in the statement of comprehensive income, in which case the increase is recognised in the statement of comprehensive income.

Any revaluation decrease is recognised in the statement of comprehensive income, except that a decrease offsetting a previous revaluation increase for the same asset is debited directly to the asset revaluation reserve to the extent of the credit balance existing in the revaluation reserve for that asset.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the statement of comprehensive income. When revalued assets are sold, amounts included in the revaluation reserve relating to that asset are transferred to statement of comprehensive income.

#### *Depreciation*

Items of property, plant and equipment, including buildings but excluding freehold land, are depreciated/amortised over their estimated useful lives.

The Company uses the unit-of-production basis when depreciating mine specific assets which results in a depreciation/amortisation charge proportional to the depletion of the anticipated remaining life of mine production. Each item's economic life has due regard to both its physical life limitations and to present assessments of economically recoverable reserves of the mine property at which it is located.

The remainder of assets but excluding freehold land, is depreciated on a straight line basis over their useful lives of 3 - 20 years, commencing from the time the asset is held ready for use. Leasehold improvements are depreciated over the shorter of either the unexpired period of the lease or the estimated useful lives of the improvements.

The assets' residual values and useful lives are reviewed and adjusted if appropriate, at each balance sheet date.

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

## Note 13: Exploration, evaluation and mine development

### (a) Reconciliation of carrying amounts at the beginning and end of the period

	Exploration and Evaluation \$'000	Mine Development \$'000	Total \$'000
<b>Year ended 30 September 2015</b>			
At 1 October 2014, net of accumulated amortisation	5,188	242	5,430
Additions	-	1,764	1,764
Transfer to Mine Development	(5,258)	5,258	-
Amortisation charge for the year	-	(20)	(20)
Foreign currency increase/(decrease)	70	217	287
<b>At 30 September 2015, net of accumulated amortisation</b>	<b>-</b>	<b>7,461</b>	<b>7,461</b>
<b>At 30 September 2015</b>			
Cost or fair value	-	7,631	7,631
Accumulated amortisation	-	(170)	(170)
<b>Net carrying amount</b>	<b>-</b>	<b>7,461</b>	<b>7,461</b>
<b>Year ended 30 September 2014</b>			
At 1 October 2013, net of accumulated amortisation	4,628	539	5,167
Additions	530	11	541
Impairment	-	(98)	(98)
Amortisation charge for the year	-	(64)	(64)
Disposal in discontinued operations	(16)	(131)	(147)
Foreign currency increase/(decrease)	46	(15)	30
<b>At 30 September 2014, net of accumulated amortisation</b>	<b>5,188</b>	<b>242</b>	<b>5,430</b>
<b>At 30 September 2014</b>			
Cost or fair value	5,188	386	5,574
Accumulated amortisation	-	(144)	(144)
<b>Net carrying amount</b>	<b>5,188</b>	<b>242</b>	<b>5,430</b>

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### Note 13: Exploration, evaluation and mine development (continued)

#### (b) Impairment

In accordance with the Group's accounting policies and processes, the Group performs its impairment testing annually at 30 September. Cash generating units ("CGUs") are reviewed at each reporting period to determine whether there is an indication of impairment or impairment reversal. Where an indicator of impairment or impairment reversal exists, a formal estimate of the recoverable amount is made.

During the year the Group performed a detailed impairment assessment of the Mining Canada Cash Generating Unit ('CGU'). This was triggered by the Consolidated Entity's market capitalisation remaining below its net assets value. Pursuant to the detailed assessment, no impairment adjustment was required at 30 September 2015.

##### *(i) Methodology*

An impairment is recognised when the carrying amount exceeds the recoverable amount. The recoverable amount of each CGU has been estimated using its fair value less costs of disposal ("Fair Value") basis. The costs of disposal have been estimated by management based on prevailing market conditions.

The assessment of Fair Value was performed using an internal valuation, based on discounted cash flows of a twenty year operating life, estimated production levels, revenue and production costs and a real post tax discount rate of 9.67 percent.

##### *Key assumptions:*

*(i) Revenues* - Frac sand revenue price received is based on the price expected in current market based on product specifications, plant location and customer type and feedback on pricing.

*(ii) Production, operating and capital costs* - Production rate is based on a nameplate production output capacity of 300,000 metric tonnes over an operating life of 20 years. Operating costs were based on the engineering specifications of the plant flow sheet and estimates of labour and energy costs. Capital costs to complete the development of the Project is approximately CAD30 million. This takes into account contingencies and the CAD exchange rates versus the USD.

*(iii) Discount rate* - The 9.67 percent discount rate was adopted to reflect the rate that would be applied by a market participant in considering the value of the CGU. Assuming nil terminal value and an operating life of 20 years the breakeven discount rate for the project, at which recoverable amount is equal to carrying amount, is 18.2%.

Significant judgements and assumptions are required in making estimates of Fair Value. This is particularly so in the assessment of long life assets. It should be noted that the CGU Fair Values are subject to variability in key assumptions including, but not limited to, oil prices, currency exchange rates, discount rates, production profiles and operating and capital costs. A change in one or more of the assumptions used to estimate Fair Value could result in a change in a CGU's Fair Value.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 14: Trade and other payables

	2015 \$'000	2014 \$'000
<b>Current</b>		
Trade payables	227	182
Sundry creditors and accrued expenses	730	525
<b>Total Trade and Other Payables</b>	<b>957</b>	<b>707</b>

Trade payables and other payables are carried at amortised cost. They represent liabilities for goods and services provided to the Company prior to the end of the financial year that are unpaid and arise when the Company becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are non-interest bearing, unsecured and are normally settled on 30 to 45 day terms.

### Note 15: Interest bearing loans and borrowings

	Note	2015 \$'000	2014 \$'000
<b>Current</b>			
<i>Secured Liabilities</i>			
Obligations under finance leases and hire purchase contracts		19	-
<i>Unsecured Liabilities</i>			
Convertible notes - unsecured	(a)	-	2,776
		<b>19</b>	<b>2,776</b>
<b>Non-current</b>			
<i>Secured Liabilities</i>			
Obligations under finance leases and hire purchase contracts		65	-
		<b>65</b>	<b>-</b>

Refer to Note 19(b) for details on finance leases.

All loans and borrowings are initially recognised at the fair value of the consideration received less directly attributable transaction costs. The fair value of unsecured Convertible notes is determined on issuance using a market rate for an equivalent non-convertible bond and this is carried as a long-term liability on the amortised cost basis until extinguished. The remainder of the proceeds is allocated to the conversion option that is recognised and included in shareholders' equity, net of transaction costs. The carrying amount of the conversion option is not remeasured in subsequent years.

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the effective interest method. Fees paid on the establishment of loan facilities that are yield related are included as part of the carrying amount of the loans and borrowings.

Borrowings are classified as current liabilities unless the Company has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

Borrowing costs are recognised as an expense when incurred, except when they are included in the costs of qualifying assets.

#### (a) Convertible notes - unsecured

On 31 March 2011, the Company issued 1,889,000 unsecured convertible notes with an issue price of \$2.00. On 30 March 2015, all 1,889,000 convertible notes were converted into 3 ordinary shares in the Company (a total of 5,667,000 shares) and \$1.45 cash (a total of \$2.739 million). The convertible notes attracted interest at a rate of 10.25% per annum.

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

## Note 16: Contributed Equity

	Note	2015 \$'000	2014 \$'000
Fully paid ordinary shares	(a)	86,356	79,757
Reserved shares	(b)	(539)	(592)
Class A \$0.25 ordinary shares (paid to \$0.01)	(c)	1	1
Class B \$0.50 ordinary shares (paid to \$0.01)	(d)	15	15
Convertible notes - unsecured <sup>(1)</sup>		2,003	2,003
		<b>87,836</b>	<b>81,184</b>

Issued ordinary share capital is classified as equity and is recognised at the fair value of the consideration received by the Company. Any transaction costs arising on the issue of ordinary shares and the associated tax are recognised directly in equity as a reduction of the share proceeds received.

(1) The unsecured convertible notes issued contained both an equity and a debt component. The balance of \$2.003 million (2014: \$2.003 million) represents the component of the notes recognised directly in equity. Refer to Note 15(a) for details on the debt

### (a) Fully paid ordinary shares

	<i>Shares thousands</i>	<i>\$'000</i>
<b>Year ended 30 September 2014</b>		
At 1 October 2013	154,105	79,842
Reserved shares quoted - vested shares in employee share plan trust	334	(85)
<b>At 30 September 2014</b>	<b>154,439</b>	<b>79,757</b>
<b>Year ended 30 September 2015</b>		
At 1 October 2014	154,439	79,757
Convertible notes converted	5,667	-
Loan arrangement fee, paid in shares	10,773	1,077
Private placement to sophisticated investors	13,259	1,326
Options exercised by Taurus Funds Management	8,750	768
1 for 5 Rights Issue	38,599	3,861
Reserved shares quoted - vested shares in employee share plan trust	110	(53)
Capital raising costs	-	(380)
<b>As at 30 September 2015</b>	<b>231,597</b>	<b>86,356</b>

#### *Unissued shares*

There are 3.859 million options that have vested and are exercisable at 30 September 2015.

#### *Voting and other rights*

At meetings of members each ordinary share is entitled to one vote when a poll is called, otherwise each shareholder has one vote on a show of hands.

Ordinary shares participate in dividends and the proceeds on winding up of the parent entity in proportion to the number of shares held.

When managing capital, the Board's objective is to ensure the Company continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders. The Board also aims to maintain a capital structure that ensures the lowest cost of capital available to the entity.

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

## Note 16: Contributed Equity(continued)

### (b) Reserved shares

	<i>Shares thousands</i>	<i>\$ '000</i>
<b>Year ended 30 September 2014</b>		
At 1 October 2013	2,089	(677)
Reserved shares quoted - vested shares in employee share plan trust	(334)	85
<b>At 30 September 2014</b>	<b>1,755</b>	<b>(592)</b>
At 1 October 2014	1,755	(592)
Reserved shares quoted - vested shares in employee share plan trust	(110)	53
<b>At 30 September 2015</b>	<b>1,645</b>	<b>(539)</b>

The Company's own equity instruments are reacquired for later use in employee share-based payment arrangements and are deducted from equity. No gain or loss is recognised in the statement of comprehensive income on purchase, sale, issue or cancellation of the Company's own equity instruments.

#### *Vesting*

The employee shares issued are under the terms described in Note 17(b).

#### *Voting and other rights*

Employee shares:

- participate in dividends on the same basis as holders of ordinary shares and the proceeds on winding up of the parent entity in proportion to the number of shares held;
- carry the right to participate in new issues of securities to holders of ordinary shares on the same basis as holders of ordinary shares; and

### (c) Class A \$0.25 ordinary shares

	<i>Shares thousands</i>	<i>\$'000</i>
<b>Partly paid</b>		
At 1 October 2014	100	1
<b>At 30 September 2015</b>	<b>100</b>	<b>1</b>

### (d) Class B \$0.50 ordinary shares

<b>Partly paid</b>		
At 1 October 2014	1,500	15
<b>At 30 September 2015</b>	<b>1,500</b>	<b>15</b>

#### *Issue terms*

Each partly paid share was issued at 1 cent and at 30 September 2015 has an unpaid amount of:

- (i) for Class A partly paid shares - 24 cents; and
- (ii) for Class B partly paid shares - 49 cents.

### (e) Dividends Paid and Proposed

No dividends were declared or paid during both the 2015 and 2014 financial years. The amount of franking credits available for subsequent financial years at 30 September 2015 is \$0.866 million (2014: \$0.866 million).

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 17: Share Based Payments

	2015 \$'000	2014 \$'000
<b>(a) Recognised share-based payments</b>		
Employee Share Plan Expense	16	9
Shares and options issued under the terms of the Taurus Secured Debt Facility <sup>(1)</sup>	1,655	-
<b>Total expense arising from share-based payment transactions<sup>(2)</sup></b>	<b>1,671</b>	<b>9</b>

(1) Fair Value expense recognised in Deferred Borrowing Costs. See Note 11 for more details.

(2) Total costs recognised in the Share Based Payment Reserve in Equity.

### (b) Types of share-based payment

#### *Employee Share Plan ("ESP")*

Shares may be granted to employees, with more than 12 months' service, to align interests with those of share holders to increase the value of the Company's shares. Under the terms of grant, the share price was set by reference to the 5 day VWAP after the release of the Company's annual financial results. The shares were issued as restricted securities. There are no ongoing performance hurdles governing vesting other than the continued employment of the employee. Subject to that continuing employment, the shares issued vest automatically on the anniversary of the issue date at the rate of 25% each year.

If an employee ceases employment prior to the vesting of the shares, the unvested shares are forfeited unless cessation of employment is due to death. In the event of a change of control, the vesting period dates may be brought forward to the date of the change of control and awards will vest subject to performance over this shortened period.

#### *Employee Share Loans ("ESL")*

Under the ESP an interest free loan is made to the employee to fund the acquisition of shares in the Company. 70% of dividends are required to be applied to the loan reduction and the loan balance must be paid out from share sale proceeds. If the share sale proceeds are less than the value of the loan, the employee pays the balance of the loan. If the loan balance is not retired, the employee is unable to receive any benefit from the shares. If an employee leaves prior to vesting of shares then the shares are forfeited and the loan is cancelled.

#### *Shares and Options issued under the terms of the Taurus Secured Debt Facility ("the Facility")*

##### *(i) Shares*

On 15 July 2015, under the terms of the Facility, the Company issued 10.772 million shares as consideration for the Loan arrangement fee of \$1.077 million (USD0.800 million). The fair value of the loan arrangement fee is the consideration settled.

##### *(ii) Options*

On 15 July 2015, under the terms of the Facility, the Company issued 25.219 million options to Taurus Funds Management. Of the 25.219 million options issued, 12.609 million options vested on the date of signing of which 8.750 million options were exercised on 24 July 2015. The remaining 12.609 million options will vest pro rata for amounts drawn. The strike price of the options is \$0.0878, a 25% premium to the 10 day VWAP prior to the date of signing the agreement.

Each option entitles the holder to acquire one ordinary share, each fully paid in the capital of the Company and will not be quoted on the Australian Securities Exchange or any other stock exchange without the approval of the Option Holder. The options have an expiry date of 5 years from 15 July 2015. An Option is exercisable by the Option Holder giving written notice to the Company accompanied by payment of the exercise price for each Option, directly to the Lender as a prepayment or repayment by the Company to the extent required under the Loan Agreement, unless otherwise agreed by the Option Holder.



# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

## Note 17: Share Based Payments (continued)

Shares will be issued following valid exercise of the Options will be issued and allotted within 10 Business Days of the exercise date provided all documents and payments have been received and will rank equally with all other Shares on issue.

There are no participating rights or entitlements inherent in the Options and the holder will not be entitled to participate in new issues of capital offered to the shareholders during the currency of the Options. However, the Company will ensure that the record date will be at least 10 Business Days after the Company has notified the Option Holder of the issue so that the holder may exercise its Options held at that time before the date for determining entitlements to participate in any such issues.

In the event of any reorganisation of the issued capital of the Company, the the rights of the option holder will be changed to the extent necessary to comply with the applicable ASX Listing Rules in force at the time of the reorganisation.

If prior to the expiry date of the Options, the Company makes a pro rata bonus issue of shares and an Option is not exercised before the record date to determine entitlements to that bonus issue, the number of Shares to be issued on exercise of the Option is the number of Shares that would have otherwise been issued upon exercise of the Option, plus the number of Shares which would have been issued to the Option Holder if the Option has been exercised before the record date for the bonus issue, with all new Shares so issued ranking equally in all respects with the other Shares on issue.

### (c) Summary of shares and options granted

The following table illustrates the number (No.) and weighted average issue prices (WAIP) of, and movements in, shares, rights and options issued during the year:

	2015 <i>No.</i>	2015 <i>WAIP</i>	2014 <i>No.</i>	2014 <i>WAIP</i>
<b>Employee Share Plan - Shares</b>				
Outstanding at the beginning of the year	778,989	0.17	1,189,442	0.17
Granted during the year	99,876	0.07	-	-
Expired during the year	(308,849)	-	(345,196)	-
Sold as employee exercise during the year	(30,000)	-	(65,257)	-
<b>Shares outstanding at the end of the year</b>	<b>540,016</b>	<b>0.12</b>	<b>778,989</b>	<b>0.17</b>

	2015 <i>No.</i>	2015 <i>WAIP</i>	2014 <i>No.</i>	2014 <i>WAIP</i>
<b>Employee Share Plan - Rights</b>				
Outstanding at the beginning of the year	1,184,554	0.01	955,080	0.05
Granted during the year	366,794	0.02	704,116	0.01
Expired during the year	(301,238)	0.01	(474,642)	-
<b>Rights outstanding at the end of the year <sup>(1)</sup></b>	<b>1,250,110</b>	<b>0.02</b>	<b>1,184,554</b>	<b>0.01</b>

(1) The weighted average of the remaining contractual life of ESP shares granted is 2.1 (2014: 1.5) years.

	2015 <i>No.</i>	2015 <i>WAIP</i>	2014 <i>No.</i>	2014 <i>WAIP</i>
<b>Options</b>				
Outstanding at the beginning of the year	-	-	-	-
Granted during the year	25,219,435	0.09	-	-
Exercised during the year	(8,750,000)	0.09	-	-
<b>Options outstanding at the end of the year <sup>(1)</sup></b>	<b>16,469,435</b>	<b>0.09</b>	<b>-</b>	<b>-</b>

(1) Of the 16.469 million options outstanding, 3.859 million have vested and is exercisable. The remaining 12.609 million options are expected to vest pro rata for amounts drawn on the Facility. Refer to Note 11 for details of the Facility.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 17: Share Based Payments (continued)

#### (c) Weighted average fair value

The provision of the non-recourse loan has required that the ESP shares issued be treated as if the issue was a grant of options on the relevant date.

#### (e) Fair Value pricing model

##### *Employee Share Plan*

The fair value of the equity-settled ESP shares issued is estimated as at the date of grant using a Binomial Model taking into account the terms and conditions upon which the shares were issued. The model takes into account the historic share price volatilities and implied dividend yields.

The following table lists the key assumptions to the model used for the year ended 30 September:

	2015	2014
Forecast dividend yield (%)	0.00	0.00
Expected volatility (%)	77.00	69.00
Risk-free interest rate (%)	1.98	3.71
Expected life (years)	4.00	4.00
Employee exit rate (%)	53.00	57.00
Exercise multiple (times)	1.00	1.00
Issue price (\$)	0.10	0.07
Weighted average share price at measurement date (\$)	0.04	0.01

Forecast dividend has been based on dividend history over the previous 3 years. The rate assumed is an expected average over the four-year period and is based on market yields generally found in resource-based operating companies. This may not necessarily be an outcome as the Company has not announced a stated dividend policy. The expected volatility was determined using an historical sample of 80 week-end Company share prices. The resulting expected volatility therefore reflects the assumption that the historical volatility is indicative of future trends, which may also not necessarily be the actual outcome. The expected life of the option is equivalent to the maximum period when all shares will vest. Accordingly there is no discount for vesting shares during the term. As the shares have been issued, and not subject to further election to exercise the exercise multiple has been taken as a 1:1 (2014: 1:1) relationship.

##### *Options issued under the terms of the Facility*

The fair value of the equity-settled ESP shares issued is estimated as at the date of grant using a Black Scholes option-pricing model taking into account the terms and conditions upon which the options were granted. The options granted during the year ended 30 September 2015 were valued using the following average assumptions:

	2015
Forecast dividend yield (%)	Nil
Expected volatility (%)	77.00
Risk-free interest rate (%)	1.98
Expected life of options (years)	5.00
Options exercise price (\$)	0.09
Weighted average share price at measurement date (\$)	0.07

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 18: Financial Risk Management Objectives and Policies

The Company's principal financial instruments comprise equity investments and cash deposits.

The main purpose of these financial instruments is to provide cash flow and funding for the Company's operations. The Company has various other financial assets and liabilities such as trade receivables and trade payables, which arise directly from its operations. The Company also enters into derivative transactions when required. The purpose is to manage the currency and commodity risk arising from the Company's operations and its source of finance.

The main risks arising from the Company's financial instruments are cash flow interest rate risk, foreign currency risk, credit risk, liquidity risk and price risk.

#### Risk Exposures and Responses

##### (a) Interest rate risk

The Company's exposure to the risk of changes in market interest rates relates primarily to the cash at bank and in hand with a floating interest rate.

At balance date, the Company had the following mix of financial assets exposed to interest rate risk:

	2015 \$'000	2014 \$'000
Cash and cash equivalents	5,974	12,101
	<b>5,974</b>	<b>12,101</b>

The Company's policy is to manage its finance costs using a mix of fixed and variable rate debt.

At 30 September 2015, if interest rates had increased/(decreased) by 100 basis points, with all other variables held constant, post tax profit and equity would have been affected by \$0.042 million/(\$0.042 million), (2014: \$0.085 million/(\$0.085 million)).

##### (b) Foreign currency risk

The Company undertakes transactions denominated in foreign currencies, hence exposures to exchange rate fluctuations arise. The majority of the Company's revenues and costs are denominated in AUD and CAD dollars.

The Company's balance sheet can be affected by movements in the AUD/CAD and CAD/USD exchange rates.

Approximately 5% (2014: nil%) of costs are denominated in currencies other than the functional currency of the individual entities.

Measuring the exposure to foreign exchange risk is achieved by regularly monitoring and performing sensitivity analysis on the Company's financial position.

At 30 September 2015, the carrying amounts of the Company's CAD and USD financial assets are as follows:

	Canadian dollars		US dollars	
	2015 \$'000	2014 \$'000	2015 \$'000	2014 \$'000
Cash and cash equivalents	680	6,896	-	45
Equity investments	3,163	3,886	-	-
	<b>3,843</b>	<b>10,782</b>	<b>-</b>	<b>45</b>

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

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### **Note 18: Financial Risk Management Objectives and Policies (continued)**

#### **(b) Foreign currency risk (continued)**

At 30 September 2015, if the Canadian and United States Dollars had increased/(decreased) by 100 basis points, with all other variables held constant, post tax profit and equity would have been affected by \$0.026 million/(\$0.026 million), (2014: (\$0.075 million)/\$0.075 million).

Management believe the balance date risk exposures are representative of the risk exposure inherent in the financial statements.

#### **(c) Credit risk**

Credit risk arises from the financial assets of the Company, which comprise cash and cash equivalents, trade and other receivables. The Company's exposure to credit risk arises from the potential default of the counter party, with a maximum exposure equal to the carrying amount of these instruments.

The Company trades only with recognised, creditworthy third parties, and such collateral is not requested nor is it the Company's policy to securitise its trade and other receivables.

It is the Company's policy that all customers who wish to trade on credit terms are subject to verification procedures including an assessment of their independent credit rating, financial position, past experience and industry reputation.

Receivables are monitored on an ongoing basis with the result that the Company's exposure to bad debts is not significant. There was a \$nil impairment for 2015 and \$0.011 million for 2014 (refer to Note 8).

The majority of the Company's receivables are due from customers in Canada, however, as a result of the Company's credit policy, this credit risk is believed to be minimal.

At 30 September 2015, no trade or other receivables were past due.

#### **(d) Liquidity risk**

Liquidity risk arises from the financial liabilities of the Company and the Company's subsequent ability to meet its obligations to repay its financial liabilities as and when they fall due.

The liquidity position of the Company is managed to ensure sufficient liquid funds are available to meet the Company's financial commitments in a timely and cost-effective manner. The Company's objective is to maintain a balance between continuity and flexibility through the use of bank overdrafts and equity investments.

The Company manages its liquidity risk by monitoring the total cash inflows and outflows by producing monthly cash flow forecasts forward for a minimum of twelve months.

The following maturity analysis reflects all contractually fixed pay-offs, repayments and interest resulting from recognised financial liabilities and recognised financial guarantees as at balance date. The timing of cash flows for liabilities is based on the contractual terms of the underlying contract. Where the counterparty has a choice of when the amount is paid, the liability is allocated to the earliest period in which the Company is required to pay. When the Company is committed to make amounts available in instalments, each instalment is allocated in the earliest period in which the Company is required to pay. For financial guarantee contracts, the maximum amount of the guarantee is allocated to the earliest period in which the guarantee can be called.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 18: Financial Risk Management Objectives and Policies (continued)

#### (d) Liquidity risk (continued)

The risk implied from the values shown in the table below, reflects a balanced view of cash inflows and outflows of non-derivative financial instruments. Trade payables and other financial liabilities mainly originate from the financing of assets used in the Company's ongoing operations such as mine development, property plant and equipment and investments in working capital (e.g. inventories and receivables).

The following table reflects all contractually fixed repayments and interest resulting from recognised financial liabilities at reporting date:

	Within 1 year \$'000	1-5 years \$'000	Total \$'000
<b>2015</b>			
Trade and other payables	957	-	957
Interest loans and borrowings	19	65	84
	<b>976</b>	<b>65</b>	<b>1,041</b>
<b>2014</b>			
Trade and other payables	707	-	707
Interest loans and borrowings <sup>(1)</sup>	2,990	-	2,990
	<b>3,698</b>	<b>-</b>	<b>3,698</b>

(1) Excludes unsecured convertible notes equity component of \$1.039 million.

#### (f) Price risk

Price risk arises from the investments in equity securities. The policy of the Company is to maintain exposure to equity price movements. All of the investments are publicly traded either on the ASX or other global exchanges.

At 30 September 2015, if prices of equity investments had increased/(decreased) by 10%, with all other variables held constant, post tax profit and equity would have been affected by \$0.238 million/(\$0.238 million), (2014: \$0.290 million/(\$0.290 million)).

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 19: Commitments and Contingencies

Leases of plant and equipment under which the Company or its controlled entities assume substantially all the risks and benefits incidental to ownership are classified as finance leases. Other leases are classified as operating leases.

	2015 \$'000	2014 \$'000
<b>(a) Operating Leases</b>		
<i>Operating leases payable:</i>		
Within one year	213	154
After one year but not more than five years	558	23
After more than five years	-	-
<b>Total minimum lease payments</b>	<b>771</b>	<b>177</b>

The operating leases comprise property leases and various equipment leases. These leases are non-cancellable with three to five year terms, with rent payable in advance. Payments made under operating leases are expensed on a straight-line basis over the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased asset.

#### *Property leases*

Rental provisions within the Australian property lease agreement require the minimum lease payments shall be increased by 3.75% per annum.

Rental provisions within the Canadian property lease agreement require the minimum lease payments shall be increased by 5% per annum. An option exists to renew the Canadian lease at the end of the five-year term for an additional term of five years.

	2015 <i>Minimum lease payments</i> \$'000	2015 <i>Present value of lease payments</i> \$'000	2014 <i>Minimum lease payments</i> \$'000	2014 <i>Present value of lease payments</i> \$'000
<b>(b) Finance leases</b>				
<i>Minimum finance leases payable:</i>				
Within one year	25	25	-	-
After one year but not more than five years	26	24	-	-
Total minimum lease payments	51	49	-	-
Less amounts representing finance charges	(2)	-	-	-
<b>Present value of minimum lease payments</b>	<b>49</b>	<b>49</b>	<b>-</b>	<b>-</b>

Finance leases are capitalised, with a lease asset and a lease liability equal to the fair value of the leased asset or, if lower, at the present value of the minimum lease payments determined at the inception of the lease. Lease payments are apportioned between the finance charges and reduction of the lease liability. The finance charge component within the lease payments is expensed. Capitalised leased assets are depreciated over the shorter of the estimated useful life of the asset and the lease term if there is no reasonable certainty that the Company or its controlled entities will obtain ownership by the end of the lease term.

### (c) Capital expenditure commitments

The Company had \$nil (2014: \$nil) contractual obligations at balance date.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 20: Auditors Remuneration

	2015 \$	2014 \$
The auditor of Heemskirk Consolidated Limited is Ernst & Young.		
<i>Amounts received or due and receivable by Ernst &amp; Young (Australia) for:</i>		
Audit or review of the financial report of the entity and any other entity in the consolidated group	124,200	113,600
Other assurance services associated with the funding of the Moberly Project	18,000	-
<i>Amounts received or due and receivable by Ernst &amp; Young (Canada) for:</i>		
Audit or review of the financial report of the entity and any other entity in the consolidated group	30,000	63,450
	<b>172,200</b>	<b>177,050</b>

### Note 21: Segment Information

Management has determined the operating segments based on reports reviewed by executive management (Chief Operating Decision Maker) for making strategic decisions. The executive management team comprises the Board of directors and executive general managers. The executive management team monitors the business based on product and geographic factors and have identified three reportable segments.

Corporate charges are allocated to the Canada segment on a proportional basis linked to management time spent.

#### *Canada*

This segment covers operations 100% owned by the Company concerned with the mining and processing of Industrial Mineral Products, including the development of the Moberly Frac Sand Project.

#### *Portfolio*

This segment covers the investment in listed and unlisted Resource Equities.

#### *Corporate*

This segment covers all other corporate activities.

#### (a) Segment Results and Segment Assets

The measurement of segment results is in line with the basis of information presented to management for internal management reporting purposes. The performance of each segment is measured on the net profit or loss after tax.

Segment accounting policies are the same as those applied across the group with the exception of gains/losses on investments which are treated as segment revenue.

Non-current assets for Canada are disclosed in Notes 11, 12 and 13.



## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 21: Segment Information (continued)

Segment information provided to the executive management team for the year ended 30 September 2015 is as follows:

30 September 2015	Note	Canada \$'000	Portfolio \$'000	Corporate \$'000	Consolidated \$'000
<b>Total segment revenue</b>	(a)	120	(567)	151	(296)
<b>Segment Operating EBITDA <sup>(1)</sup></b>		<b>(1,818)</b>	<b>(567)</b>	<b>(2,308)</b>	<b>(4,693)</b>
Depreciation & amortisation		(307)	-	(24)	(331)
Finance costs		(129)	-	(156)	(285)
Corporate charges		(1,059)	-	1,059	-
Profit/(Loss) on asset disposals		45	-	(9)	36
Other indirects		-	-	(22)	(22)
<b>Profit/(loss) before tax</b>		<b>(3,268)</b>	<b>(567)</b>	<b>(1,460)</b>	<b>(5,295)</b>
Income tax expense		51	-	-	51
<b>Segment profit/(loss) after tax</b>	(b)	<b>(3,217)</b>	<b>(567)</b>	<b>(1,460)</b>	<b>(5,244)</b>
Total Assets		15,755	3,402	5,938	25,095
Total Liabilities <sup>(2)</sup>		(13,109)	-	11,679	(1,430)
30 September 2014		Canada \$'000	Portfolio \$'000	Corporate \$'000	Consolidated \$'000
<b>Total segment revenue</b>	(a)	16,707	(2,024)	531	15,214
<b>Segment Operating EBITDA <sup>(1)</sup></b>		<b>196</b>	<b>(2,040)</b>	<b>(1,796)</b>	<b>(3,640)</b>
Depreciation & amortisation		(431)	-	(42)	(473)
Finance costs		(132)	-	(322)	(454)
Corporate charges		(579)	-	579	-
Profit/(Loss) on asset disposals		3,146	-	(29)	3,117
Other indirects		(132)	-	(11)	(143)
<b>Profit/(loss) before tax</b>		<b>2,068</b>	<b>(2,040)</b>	<b>(1,621)</b>	<b>(1,593)</b>
Income tax expense		(786)	-	-	(786)
<b>Segment profit/(loss) after tax</b>	(b)	<b>1,282</b>	<b>(2,040)</b>	<b>(1,621)</b>	<b>(2,379)</b>
Total Assets		10,077	4,144	11,564	25,785
Total Liabilities <sup>(2)</sup>		(4,654)	-	31	(4,623)

(1) Operating EBITDA is earnings before interest expense, income tax, depreciation, amortisation charges and other indirect expenses.

(2) Total Liabilities includes intercompany (payable) receivable between Canada and Corporate of \$12.318 million (2014: \$3.436 million).

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

## Note 21: Segment Information (continued)

	Note	2015 \$'000	2014 \$'000
<b>(a) Segment revenue reconciliation to statement of comprehensive income:</b>			
Canada	(i)	122	337
Corporate	(ii)	102	241
Portfolio	(iii)	-	126
<b>Total Revenue from continuing operations per statement of comprehensive income</b>		<b>224</b>	<b>704</b>
<b>(i) Canada</b>			
Canada Revenue included in revenue from continuing operations		122	337
Other income		-	128
Canada Revenue included in revenue from discontinued operations		-	16,467
Other income/(expense)		(2)	(225)
<b>Total Segment Revenue - Canada</b>		<b>120</b>	<b>16,707</b>
<b>(ii) Corporate</b>			
Interest received		102	241
Corporate Revenue included in revenue from continuing operations		102	241
Other income		49	289
<b>Total Segment Revenue - Corporate</b>		<b>151</b>	<b>530</b>
<b>(iii) Portfolio</b>			
Dividends received		-	126
Portfolio Revenue included in revenue from continuing operations		-	126
Net gains/(losses) on equity investments		(567)	(2,150)
<b>Total Segment Revenue - Portfolio</b>		<b>(567)</b>	<b>(2,024)</b>
<b>Total Segment Revenue</b>		<b>(296)</b>	<b>15,213</b>
<b>(b) Segment net operating profit after tax reconciliation to the statement of comprehensive income</b>			
Segment profit/(loss) after tax		(5,244)	(2,379)
<i>Profit/(loss) after tax per statement of comprehensive income</i>		<b>(5,244)</b>	<b>(2,379)</b>

Further information relating to discontinued operations can be found in Note 5.

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

## Note 22: Related Party Disclosure

### (a) Subsidiaries

The consolidated financial statements include the financial statements of Heemskirk Consolidated Limited ("ultimate parent") and the subsidiaries listed in the following table.

	Country of incorporation	% Equity Interest		Investment (\$'000)	
		2015	2014	2015	2014
Heemskirk Technical Services Pty Ltd	Australia	100	100	-	-
HSK Staff Share Plan Pty Ltd	Australia	100	100	-	-
Heemskirk Canada Holdings Ltd	Canada	100	100	428	428
Heemskirk Canada Ltd	Canada	100	100	5,525	5,322
HCA Mountain Minerals (Lethbridge) Ltd	Canada	100	100	-	-
HCA Mountain Minerals (Moberly) Ltd	Canada	100	100	-	-
HCA Mountain Minerals (Nevada) Ltd	USA	100	100	-	-

### (b) Remuneration of key management personnel

	2015 \$'000	2014 \$'000
Short-term employee benefits	1,005	1,401
Post-employment benefits	52	121
Share-based payment	7	-
Termination benefits	-	200
<b>Total remuneration</b>	<b>1,064</b>	<b>1,722</b>

### (d) Other transactions with directors

On 28 July 2010 Heemskirk announced that it had been decided to terminate the Founders' Plan and settlement terms were agreed (Refer to Remuneration Report page 28). The outcome of the settlement has no net effect on shareholders' equity and no net after tax cash outflows by the Company. The reasonableness of this settlement was confirmed by an independent expert. The action had the full support of the Founders and the then Heemskirk Board.

In conjunction with the Founder's Plan settlement, loan facilities were made available to the Founders to assist with discharging any Australian taxation liability as a result of the settlement. The draw down by the Managing Director of the facility as at 30 September 2015 is \$0.345 million (2014: \$0.311 million). This facility is interest-bearing at market rates and repayable by cash or a predetermined number of pledged Company shares at a value of 50 cents per share plus termination payments. Any shortfall in repayments after the value of the loan facility has been reduced by cash, the pledged Company shares and termination payments will be waived or forgiven and treated as an expense. In the unlikely event of a termination for cause, the Company has recognised in the accounts a potential short fall in relation to the Managing Director of \$0.196 million as at 30 September 2015 (2014: \$0.130 million).

# NOTES TO THE FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 23: Cash Flow Statement Reconciliation

	2015 \$'000	2014 \$'000
<b>(a) Reconciliation of net profit after tax to net cash flows from operations</b>		
Net (loss) after income tax	(5,244)	(2,379)
<i>Non-cash items</i>		
Depreciation, amortisation and impairments	354	616
Foreign exchange losses/(gains)	(105)	(274)
Employee benefits taken as equity	16	9
Non cash expenses (revenue)	102	(66)
Net fair value change on equity investments	519	1,928
<i>Items presented as investing or financing activities</i>		
Net (gains)/losses on equity investments	48	94
Net (profit)/loss on disposal of fixed assets	7	(2,607)
<i>Changes in assets and liabilities:</i>		
(Increase)/decrease in trade debtors	16	3,598
(Increase)/decrease in other assets	102	(4)
(Increase)/decrease in inventories	(1)	2,247
Increase/(decrease) in trade creditors	(129)	(6,492)
(Increase)/decrease in other receivables	108	63
Increase/(decrease) in accruals and provisions	26	(224)
Increase/(decrease) in income taxes payable	(783)	642
(Increase)/decrease in deferred tax assets	5	131
Increase/(decrease) in deferred taxes payable	5	(237)
<b>Net cash from/(used in) operating activities</b>	<b>(4,954)</b>	<b>(2,955)</b>

### (b) Disclosure of financing facilities

There were no financing facilities available at 30 September 2015.

### (c) Non cash financing and investing activities

Refer to Note 17.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2015

### Note 24: Parent Entity information

	2015 \$'000	2014 \$'000
<b>(a) Income statement</b>		
Profit/(loss) after income tax	(4,673)	(2,222)
<b>Total comprehensive income/(loss) for the year</b>	<b>(4,673)</b>	<b>(2,222)</b>
<b>(b) Balance sheet</b>		
Current assets	8,899	15,784
Non-current assets	16,136	9,348
<b>Total assets</b>	<b>25,035</b>	<b>25,132</b>
Current liabilities	485	3,157
Non-current liabilities	2	-
<b>Total liabilities</b>	<b>487</b>	<b>3,157</b>
<b>Net assets</b>	<b>24,548</b>	<b>21,975</b>
Contributed equity	88,972	82,320
Share based payment reserve	828	236
Retained earnings/(losses)	(65,252)	(60,579)
<b>Total Equity</b>	<b>24,548</b>	<b>21,977</b>
<b>(c) Guarantees</b>		

The Parent has guaranteed the obligations of HCA Mountain Minerals (Moberly) Ltd under the facility agreement with Taurus Funds Management. Refer to Note 11 for further details of the facility.

### Note 25: Events after Balance Sheet Date

There are no matters or circumstances which have arisen since 30 September 2015 that have significantly affected or may significantly affect the operations of the Company, the results of those operations or the state of affairs of the Company in subsequent financial years.

## DIRECTORS' DECLARATION

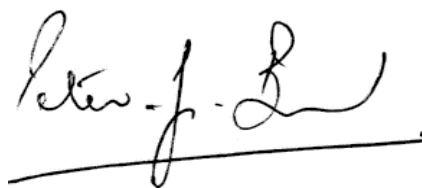
In accordance with a resolution of the directors of Heemskirk Consolidated Limited, we state that:

- 1 In the opinion of the directors:
  - (a) the financial statements, notes and the additional disclosures included in the directors' report designated as audited, of the consolidated entity are in accordance with the *Corporations Act 2001*, including:
    - (i) giving a true and fair view of the consolidated entity's financial position as at 30 September 2015 and of its performance for the year ended on that date; and
    - (ii) complying with Accounting Standards and Corporations Regulations 2001; and
  - (b) the financial statements and notes also comply with International Financial Reporting Standards as disclosed in Note 1(b).
  - (c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.
- 2 This declaration has been made after receiving the declarations required to be made to the directors in accordance with section 295A of the *Corporations Act 2001* for the financial year ending 30 September 2015.

On behalf of the Board



Garry Cameron  
*Non-Executive Chairman*  
Melbourne, 25 November 2015



Peter Bird  
*Managing Director*  
Melbourne, 25 November 2015

# INDEPENDENT AUDITOR'S REPORT



Ernst & Young  
8 Exhibition Street  
Melbourne VIC 3000 Australia  
GPO Box 67 Melbourne VIC 3001

Tel: +61 3 9288 8000  
Fax: +61 3 8650 7777  
ey.com/au

## Independent auditor's report to the members of Heemskirk Consolidated Limited

### Report on the financial report

We have audited the accompanying financial report of Heemskirk Consolidated Limited, which comprises the consolidated balance sheet as at 30 September 2015, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration of the consolidated entity comprising the company and the entities it controlled at the year's end or from time to time during the financial year.

### *Directors' responsibility for the financial report*

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal controls as the directors determine are necessary to enable the preparation of the financial report that is free from material misstatement, whether due to fraud or error. In Note 1(b), the directors also state, in accordance with Accounting Standard AASB 101 *Presentation of Financial Statements*, that the financial statements comply with *International Financial Reporting Standards*.

### *Auditor's responsibility*

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. Those standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance about whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Independence*

In conducting our audit we have complied with the independence requirements of the *Corporations Act 2001*. We have given to the directors of the company a written Auditor's Independence Declaration, a copy of which is included in the directors' report.

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### **Opinion**

In our opinion:

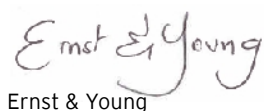
- a. the financial report of Heemskirk Consolidated Limited is in accordance with the *Corporations Act 2001*, including:
  - i giving a true and fair view of the consolidated entity's financial position as at 30 September 2015 and of its performance for the year ended on that date; and
  - ii complying with Australian Accounting Standards and the *Corporations Regulations 2001*; and
- b. the financial report also complies with *International Financial Reporting Standards* as disclosed in Note 1(b).

### **Report on the remuneration report**

We have audited the Remuneration Report included in the directors' report for the year ended 30 September 2015. The directors of the company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

### **Opinion**

In our opinion, the Remuneration Report of Heemskirk Consolidated Limited for the year ended 30 September 2015, complies with section 300A of the *Corporations Act 2001*.



Ernst & Young

Ernst & Young



Michael Collins  
Partner  
Melbourne  
25 November 2015

## ADDITIONAL SHAREHOLDER INFORMATION

Additional information required by the Australian Stock Exchange Listing Rules not elsewhere disclosed in the report. The shareholder information set out below was applicable as at 18 December 2015.

### CORPORATE GOVERNANCE STATEMENT

A copy of Heemskirk's 2015 Corporate Governance Statement and ASX Appendix 4G (Key to Disclosure of Corporate Governance Principles and Recommendations) which sets out the Company's compliance with the Corporate Governance Principles and Recommendations (3rd edition, March 2014) issued by the ASX Corporate Governance Council and other ancillary corporate governance related documents can be found at the following URL on the Company's Internet website: [http://www.heemskirk.com/pages/view/corporate\\_governance](http://www.heemskirk.com/pages/view/corporate_governance)

### REGISTER OF SUBSTANTIAL HOLDERS

There are two substantial shareholders in the Company. First Samuel Limited holds 56,686,034 ordinary shares and Taurus SM Holdings Pty Limited holds 51,561,885 ordinary shares.

### DISTRIBUTION OF ORDINARY SHAREHOLDERS AND SHAREHOLDINGS

Number of Shares Held	Number of Holders	Number of Ordinary Shares	Percentage of Issued Capital
1-1,000	168	31,210	0.013
1,001 – 5,000	197	611,376	0.264
5,001 – 10,000	143	1,151,030	0.497
10,001 – 100,000	417	16,704,735	7.213
100,001 and over	164	213,099,720	92.013
<b>Total</b>	<b>1,089</b>	<b>231,598,071</b>	<b>100.00</b>

There are 573 holdings with less than a marketable parcel of ordinary shares.

### UNQUOTED ORDINARY SHARES

There are 1,645,262 unquoted ordinary shares issued by the Company under the Employee Staff Share Plan and held by the Trustee, HSK Staff Share Plan Pty Ltd. 300,800 of these shares are held on behalf of three staff who are currently participating in the Plan.

## ADDITIONAL SHAREHOLDER INFORMATION

### TWENTY LARGEST ORDINARY SHAREHOLDERS

Name	Number of Ordinary Shares Held	Percentage of Issued Shares
1 J P MORGAN NOMINEES AUSTRALIA LIMITED	98,054,423	42.338
2 NATIONAL NOMINEES LIMITED	14,024,874	6.056
3 BOND STREET CUSTODIANS LIMITED <TAURUS RES LTD PARTNER A/C>	9,639,272	4.162
4 CITICORP NOMINEES PTY LIMITED	9,106,770	3.932
5 MMS1 PTY LTD <SHALL & HALL P/SHIP A/C>	6,564,849	2.835
6 MELLETT SUPER PTY LTD <MELLETT A FUND A/C>	5,332,000	2.302
7 HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED-GSCO ECA	3,286,676	1.419
8 MASFEN SECURITIES LIMITED	3,183,756	1.375
9 TAMBO TRADING PTY LTD <TREYARNON A/C>	2,813,136	1.215
10 FW HOLST & CO PTY LTD <FH A/C>	2,021,922	0.873
11 MR PETER JOHN BIRD <THE TREYARNON FAMILY A/C>	1,963,532	0.848
12 MR MARK THOMAS FLOOK & MRS PHILIPPA MARY FLOOK <FLOOK FAMILY S/F A/C>	1,888,501	0.815
13 MR JAMIE PHEROUS <BLACK DUCK HOLDINGS A/C>	1,830,000	0.790
14 MR WILLIAM DAVID FRANK BIRD & MRS SALLY JANE BIRD <WILLIAM DAVID FRANK S/F A/C>	1,800,000	0.777
15 MR SIMON PAUL DEVLIN & MRS MOIRA ANNE DEVLIN <THE DEV SUPERFUND A/C>	1,590,000	0.687
16 MR DEREK CARTER & MRS CARLSA CARTER <SALAMANCA SUPER FUND A/C>	1,351,386	0.584
17 MR RAPHAEL WILLIAM WAI-MING YAN	1,261,776	0.545
18 TAMBO TRADING PTY LTD <BIRD FAMILY SUPER FUND A/C>	1,202,990	0.519
19 DATABRIDGE PTY LTD	1,100,000	0.475
20 YAVERN CREEK HOLDINGS PTY LTD	1,094,400	0.473
<b>TOTAL for Top 20</b>	<b>169,110,263</b>	<b>73.019</b>

## ADDITIONAL SHAREHOLDER INFORMATION

### DISTRIBUTION OF PARTLY PAID SHAREHOLDERS AND SHAREHOLDINGS

Name	Ordinary Partly Paid 25 cent shares	Percentage of shares	Ordinary Partly Paid 50 cent shares	Percentage of shares
B & H KAY HOLDINGS PTY LTD <KAY FAMILY A/C>	–	–	1,000,000	66.67
IMPEGI PTY LTD	100,000	100.00	500,000	33.33
<b>Total</b>	<b>100,000</b>	<b>100.00</b>	<b>1,500,000</b>	<b>100.00</b>

The above shares are partly paid to one cent and remain in escrow until fully paid. These are the only partly paid shares on issue in the Company and they are not quoted.

### VOTING RIGHTS

Voting rights are governed by the Constitution of the Company. In respect of each ordinary fully paid share, each shareholder present in person or by proxy at a meeting shall have:

- (a) on a show of hands, one vote; and
- (b) on a poll:
  - (i) one vote for every fully paid ordinary share held; or
  - (ii) for each share which is not fully paid, a fraction of a vote equivalent to the proportion which the amount paid up, but not credited as paid up, on that share

bears to the total of the amounts paid and payable (excluding amounts credited) on that share.

Employee shares have the same voting rights as ordinary shares. The vote must be directed through the Trustee in writing.

### ON MARKET SHARE BUY-BACK

The Company did not renew the on market buy-back of ordinary shares which was in place and released a final share buy-back notice on 6 July 2015.



Complete Footings at Moberly Plant Site.

# CORPORATE DIRECTORY

## Registered & Principal Office

Heemskirk Consolidated Limited

ABN 18 106 720 138

Level 17

303 Collins Street

Melbourne Victoria 3000 Australia

T: +61 3 9614 0666

F: +61 3 9614 4466

e hsk@heemskirk.com

www.heemskirk.com

## Directors

Garry Cameron

(Non-Executive Chairman)

Peter Bird

(Managing Director)

John Taylor

(Non-Executive Director)

## Company Secretary

Andrew Metcalfe

## Stock Exchange

Australian Stock Exchange (ASX)

Level 4, North Tower, Rialto

525 Collins Street

Melbourne Victoria 3000 Australia

ASX Share Code: HSK

## Share Registry

Boardroom Pty Limited

Grosvenor Place

Level 12

225 George Street

Sydney NSW 2000 Australia

T: 1300 737 760 (within Australia)

T: + 61 2 9290 9600 (outside Australia)

## Auditor

Ernst & Young

8 Exhibition Street

Melbourne Victoria 3000 Australia

## Principal Legal Adviser

Grillo Higgins Lawyers

Level 20

31 Queen Street

Melbourne Victoria 3000 Australia

## International Office

Heemskirk Canada

Suite 204

1212 - 1st Street SE.

Calgary Alberta T2G 2H8

Canada

T: +1 (403) 261 3999

F: +1 (403) 264 2959

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ABN 18 106 720 138

Level 17, 303 Collins Street  
Melbourne Victoria 3000 Australia

T: +61 3 9614 0666

F: +61 3 9614 4466

E: [hsk@heemskirk.com](mailto:hsk@heemskirk.com)

[www.heemskirk.com](http://www.heemskirk.com)

