# HEEMSKIRK Quarterly Report



For the period ending 30 September 2016 (unaudited)

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commissioning
and first
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Moberly are
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Q3 2017

#### **Heemskirk Consolidated Limited**

ASX: HSK ABN 18 106 720 138

#### Shares on issue:

562,635,912

#### **Unquoted securities:**

Options: 3,152,430

Employee shares: 1,461,808

Partly paid (to 1c, 24c unpaid): 100,000 Partly paid (to 1c, 49c unpaid): 1,500,000

#### Share price range during quarter:

2.5c to 8.0c

# For further information, please contact:

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# **KEY POINTS**

- The Moberly High Grade Silica Project in British Columbia is now 35% physically complete
- Mine haul road construction has been completed
- The steel fabrication and build of the load-out facility has also been completed
- Mining and hauling of silica has commenced
- Industry reports improved frac sand demand and pricing
- Construction completion, commissioning and first production at Moberly are now expected in Q3 2017

#### SUMMARY

During the September quarter, progress was made in building the Company's Stage One 300,000 tonnes per annum Moberly plant and ancillary infrastructure in British Columbia, Canada.

The mine haul road construction and procurement of mine site equipment were both completed during the quarter. Equipment has started to arrive on site and installation has commenced. The load-out structure steel fabrication build has been completed and steel fabrication for the main building is underway.

The mining and hauling of silica from the mine site to the plant commenced during the quarter, as planned, to take advantage of the milder weather.

The Company and the engineer contractor have undertaken a detailed review of the Moberly Project equipment and construction drawings. This review identified a range of refinements and modification recommendations in respect of equipment selection and options. As a result of these recommendations, a schedule review was then undertaken with the construction contractor.

During the quarter, the Company drew down a further US\$5m of its US\$25m Stage One debt facility from Taurus Funds Management (TFM). In line with this, 1.576m options exercisable on or before 15 July 2020 at A\$0.0878 were issued to TFM.



# Market Insight

In our last Quarterly Report, we carried a range of industry reports that pointed to a favourable turnaround in North American frac sand demand and pricing over the next few years.

One of those sources was from the US-based investment and merchant banking group Tudor Pickering Holt (TPH), and in their latest report TPH says it is "increasingly convinced" that US drillers are going to use more sand in the hydraulic fracturing process. It says that sand use per well rose from 3 million pounds in 2013 to 5 million pounds in 2014 to 8 million pounds last year. TPH expects annual sand use in horizontal wells to climb to more than 11 million pounds per well as the market returns.

Global financial services group Credit Suisse recently added to this encouraging tone when it said that it expects overall sand demand in 2018 to eclipse demand levels of 2014 which was the previous highest annual demand period. Credit Suisse went on to say: "We expect (North American) sand growth industry-wide next year of 43%, followed by 27% in 2018." If we apply Credit Suisse's three industry drivers of increased sand per well, the prevalence of regional sand and the next-frontier of last-mile logistics, then Heemskirk's Moberly Project is well positioned, and forecast first production of Q3 2017 is well timed.

The Thomson Reuters news service reported earlier this quarter that one of the world's largest providers of equipment used in hydraulic fracking, Halliburton Co., says that demand for its equipment is returning despite the fewer number of rigs at work, as high-intensity shale drilling has soaked up the available capacity. The Reuters report says producers "are now drilling longer horizontal wells with multiple fracking stages, and deploying more horsepower and proppants (sand) to cover larger areas. This high-intensity drilling is boosting demand for fracking equipment."

JP Morgan Chase's oil services analyst says "all of the numbers (for use of frac sand) are going up and they're going up dramatically" while the oil services analyst at Nomura Securities states simply that "people are uber uber bullish on sand. I get it. I understand where all the euphoria is coming from."

In a welcome sign for Heemskirk and Canada's re-emerging oil and gas industry, key provincial governments have announced drilling incentive programs. Alberta is introducing an Enhanced Hydrocarbon Recovery Program with a focus on horizontal oil or shale gas plays in untapped areas of the province while the government of British Columbia has



implemented a C\$120m tax break for companies with a focus on the north-eastern section of the province. Canada's resource extraction industries are said to contribute about 20% of Canada's GDP.

# Moberly Project - Construction Update

Key activities during the quarter included:

- Completion of mine haul road construction. The roadway has also been widened to accommodate two-way truck traffic and new runaway lanes;
- · Completion of the steel fabrication and build of the load-out facility;
- Completion of equipment procurement;
- · Installation of equipment commenced;
- Steel fabrication of the main building continues;
- Approval of the BC Hydro Power Smart program, and power lines have been installed across the TransCanada Highway onto the Moberly plant site;
- Onsite rail has been completed (up to the 25m boundary) with Canadian Pacific Railway; and
- The Project at the end of the quarter was 35% physically complete.

On commencement of the equipment procurement process and as a result of a review of construction drawings, refinements and modification recommendations were identified in respect of equipment selection and detail in the Issued for Construction (IFC) design package. Morrison Hershfield, the current construction engineer, has completed Design Change Requests to revise and enhance structural design, and revised sketches to clarify and provide additional information for sub-trades to continue construction.

This revision has brought about a modest change in capital estimate from US\$26.6m. As a result of the locked-in forward currency hedging contracts the Company has in place at a rate of US\$/C\$ of 1.37, the revised capital estimate is US\$26.9m. Following this refinement, construction completion is now anticipated during Q3 2017 and first production is also expected during Q3 2017.



# Site progress photos



Dryer installation at the Moberly plant site



An aerial view of the Moberly plant site



Mine haul road completed during the quarter



Mining of silica sand at mine site has commenced



Moberly mine site and haul road



# Company Safety

There were no lost time injuries (LTI) and there was one medically treated injury (MTI) during the quarter. The Group LTI and MTI frequency rates are now at 15 and 31 respectively, compared to the end of the previous quarter where the MTI and LTI frequency rates were both 27.

# **Group Overheads**

Group overheads for the September quarter were A\$0.848m, compared to a budget of A\$0.97m.

# **Operations**

## Canada (100% owned)

During the quarter, the business operated an administrative office in Calgary, Alberta and at the Moberly plant site in British Columbia.

### **Production**

No industrial minerals were produced during the quarter. Production has been placed on hold to enable construction of the Moberly Project. During the quarter, 549Mt of S-12 (golf bunker sand) was sold from inventory.

### **Exploration**

No exploration activity was undertaken at the Canadian operations during the quarter.

#### Key Investments

During the quarter, the Company disposed of 0.835m shares in Almonty Industries, a TSX-listed tungsten producer, for net proceeds of A\$0.298m. The shares were received as part payment for the sale of Heemskirk's Los Santos Tungsten Mine to Almonty in April 2011. At 30 September 2016, the Company held 2.925m Almonty shares at a market value of C\$0.790m (A\$0.787m).



# Corporate

# Cash and cash equivalents:

Cash and cash equivalents: A\$13.3m.

#### Other financial information and assets:

- At the end of the quarter, the Company held A\$0.894m in equity investments including 2.925m shares in Almonty Industries (TSXV:AII) at C\$0.27 per share.
- Also during the quarter, the Company drew down US\$5m of the US\$25m debt facility. To date, the Company has drawn down US\$10m.
- On 10 August 2016, Heemskirk announced the issuing of 1,576,215 options under the Debt Facility Agreement with Taurus Funds Management. The options are exercisable on or before 15 July 2020 at A\$0.0878. The issuing of these options follows an identical arrangement of issuing options on 3 May 2016 under the Debt Facility Agreement.

#### Interest bearing liabilities:

- Taurus Funds Management Debt Facility: US\$10.4m
- Finance leases for equipment: A\$0.96m.

# The Moberly Project

The Moberly Industrial Minerals Project is located near the town of Golden, in south-eastern British Columbia, about 260 kms west of Calgary, Canada. It is a high-quality silica project, with a granted mine lease and a freehold plant site.

The Moberly Project is scheduled to produce high-quality American Petroleum Institute (API) standard specification proppant (Mount Moberly White™).

With a 37.5 million tonnes JORC-compliant Measured and Indicated Mineral Resource at 70% high-purity silica or frac sand content, the Stage One Moberly Project has a nameplate production output capacity of 300,000 tonnes per annum.

The Moberly Project has a mine life well beyond the current 20-year mine plan, with a strong product demand. It is a simple, scaleable project – with the attraction of import replacement supply for Western Canadian petroleum industry customers.



An engineering scoping document has been commissioned to evaluate expansion opportunities. This study will include a review of logistics both to and from the mine site, plant expansion at Moberly and other opportunities.

The Moberly silica operation has mined and processed high purity silica sand for a diverse number of industrial applications since 1983. Our SILWITE® products have a purity ranging from 99.15% to 99.55% SiO<sub>2</sub>, well exceeding the requirements for silica sand raw material in flint grade glass, ceramic and foundry grades. Our products have extremely low iron oxide content and therefore in these applications will not interfere with the colour of the ultimate end product.

#### What is frac sand?

Frac sand is a highly-valued and in-demand crush-resistant sand of specific particle size that is used by the oil and gas industry in the hydraulic fracturing process. It also has applications for other silica-based industrial minerals projects.

The term "frac sand" refers to industrial mineral sands that are used during the process of hydraulic fracturing, a method for extracting underground natural gas from shale gas formations. Frac sand is a "proppant" - a material used to help open the underground cracks from which natural gas is harvested during hydraulic fracturing. Proppants are introduced under pressure into a shale gas well, along with water and industrial fluids, to stimulate gas production.

North American frac sand production is dominated by supply from the mid-west of the United States of America and Texas. Moberly's new Canadian supply base will provide a long-term mine life contribution to the Canadian national and regional economies.