

PotashPages

March/April 2012

Jansen Potash Project Shaft Program Update

Inside this issue

- P.1** Jansen Shaft
- P.2** Port and Community
- P.3** Operations Complex
- P.4** Melville and Spring Safety Tips

The Jansen project shaft program is progressing. Excavation has progressed on the two collars, with the production collar having reached its ultimate depth of 45 m and the service shaft collar having just passed 40 m.

The balance of the pre-sink activities is also well under way, the foundation piling program has been completed for the collar and hoist house foundations, and the first sinking hoist house foundation was completed in late March.

The shaft sinking equipment is in fabrication, sinking hoists and winches are all on schedule, and are currently being assembled in Ontario; the first final assemblies will start arriving at the Jansen project site in late March.

The two sinking headframes are approximately 75% manufactured, and the first shipments should be arriving on the site in early April.

The Herrenknecht equipment is almost completed in their fabrication facility in Schwanaue, Germany, and the first Shaft Boring Roadheader (SBR) will ship in early April, while the second is almost assembled in advance of a field performance test scheduled for early May.

Starting in late spring/early summer, all of these components will start coming together, and the shaft program will have a skyline again, akin to the freeze hole drilling program, as the hoist houses and sinking headframes are assembled and erected and the balance of the equipment arrives and is commissioned.

The service shaft should see shaft sinking operations commence in September of this year, with the production shaft about six weeks behind that.





Artist renderings of the port facilities

Port Update

The BHP Billiton potash port project is located at the Port of Vancouver in Vancouver, Washington, USA. The site selected for development of the Port facility brings with it a number of design and environmental considerations.

The location of the port facility on the north shore of the Columbia River has influenced the environmental permitting and construction planning for the bulk potash handling facility. The project team is in the process of securing multiple environmental approvals from two local governments, three state agencies and three federal agencies. The majority of these permits are triggered by construction activities that will occur in the near shore area of the Columbia River. The Columbia River provides habitat to 17 threatened and endangered species and the presence of these species has resulted in a variety of measures designed to avoid or minimize any potential impacts to these species or their habitat, including:

- restricting all in-water work to a designated in-water work window (Nov – Feb)
- using bubble curtains during in-water impact pile driving activities
- implementing a marine mammal monitoring plan

- implementing a hydro-acoustic monitoring plan
- monitoring of turbidity during upland stone column installation

The site was previously home to an operating aluminum smelter. A variety of remediation projects have occurred at the site and it has been granted clean closure for industrial uses from the Washington State Department of Ecology. However, the site includes a number of capped areas where contaminated material was left in place. These areas have restrictive covenants in place which require an extra level of approval for any construction activities. The Port project infrastructure has been designed to avoid these areas to the maximum extent practicable. A Phase I Environmental Site Assessment has been completed at the site and a Phase II Environmental Site Assessment to further characterize the baseline conditions at the site is currently underway. Other baseline studies underway include surface water, air, and noise.

The Port project team is working through a process to achieve LEED certification for the project. The Leadership in Energy and Environmental Design (LEED) certification process provides a benchmark for the design, construction, and operation of high performance green buildings. More information on LEED can be found at www.usgbc.org.

Local Supply Chain

BHP Billiton recognizes the overall value of a reliable local supply chain and is committed to working with the Saskatchewan supply community and our project contractors to support industries that can grow, prosper and contribute to the local economy and the mining industry. Large mining projects bring many opportunities for the suppliers of goods and services and we aim to optimize local industry participation in our projects.

Richard Burelle, Senior Advisor of Supplier Relations, is overseeing the development of an Industry Participation Strategy (IPS) to support this corporate commitment. The IPS aims to optimize local, regional and Saskatchewan supplier participation through the procurement process. Work is currently underway to obtain a thorough understanding of the capacity and capabilities within the supply community and to create a resource to support project contractors.

SNC-Lavalin is the Engineering, Procurement and Construction Management contractor on the surface portion of the Jansen project and interested suppliers may register at <https://gps.snclavalin.com>, SNC-Lavalin’s Global Procurement System. While registration is the first step, there are many qualifying steps for final selection of the most suited suppliers.

We are excited to build on the successes already achieved by local suppliers. For more information, Richard can be reached at +1 888 599 BHPB (2472) or dspxexternalaffairs@bhpbilliton.com.





Courage Bear, Desiree Kematch and Derek Rope from our Aboriginal Engagement team.

Aboriginal Engagement

BHP Billiton has established a passionate team that is driven to deliver the world's benchmark in Aboriginal Engagement and earn an unparalleled reputation for working with Aboriginal peoples. Our approach is to engage early and directly with Aboriginal communities in a respectful dialogue that endures throughout our project life-cycle. We are working to establish long-lasting relationships that build business, human resource and community capacity.

The team recently completed an internal North American benchmarking trip to Farmington, New Mexico for Best Practice with our colleagues from the Navajo Coal Mine and EKATI Diamond Mine. We are excited to build on the lessons learned from the benchmarking exercise as we embark on this journey together to build a world class potash business in Saskatchewan.

Any inquiries regarding Aboriginal Engagement can be directed to toll free: +1 888 599 BHPB (2472) or e-mail dspeexternalaffairs@bhpbilliton.com.

Jansen Operations Complex

by Eli Bintner (BHP Billiton) and Frank Bojkovsky (SNC-Lavalin)

The Operations Complex will be situated at the south-west boundary of BHP Billiton's Jansen Project site, and will serve as the central access point for personnel entering the Jansen mine and underground tunnel system. A total 23,850 square meters of floor space over two levels will accommodate approximately 1,000 employees with a combined mine, maintenance and mill dry facility, and other functions consisting of site access control, security, medical, mine rescue, administrative, maintenance and engineering office areas, a centralized state of the art control room, 5,000 square metres of maintenance shops and a centralized warehouse. Because of the building's functional complexity, every employee will be utilizing one or more of the facilities within the Operations Complex on a daily basis.

The philosophies of Prevention through Design will focus on the facility to achieve high performance in human and environmental health, and to set high standards in the areas of water reduction, energy efficiency, and indoor environmental quality. Since energy efficiency is one of the greatest environmental impacts over the life of the building, strategies to reduce energy consumption are a primary concern during the design stage. Compact design of the building envelope, high insulation values, and triple pane windows are just a few examples of the passive strategies which can significantly increase energy efficiency. Heating will be provided by high efficiency, condensing hot water boilers with in-floor radiant heat used

throughout the building to provide superior comfort for personnel. Heating and cooling systems are being designed to include the option of adding geothermal heating and cooling. The geothermal system would utilize the existing mine shaft freeze holes as a potential source/sink. All interior spaces, including areas where significant heat is generated, such as electrical and control rooms, will be provided with economizing air handlers able to provide free cooling. Areas requiring continuous exhaust will be outfitted with air-to-air heat recovery units. A solar wall will provide pre-heated ventilation air to offices during the winter months to further reduce energy consumption. The building will be outfitted with low flow plumbing fixtures throughout. A water heat recovery system for shower and laundry drains will be used for preheating the potable water. Shower water will also be collected, treated, and stored for use in toilet flushing, irrigation, and wash bays. Construction materials with high post-consumer content will also be incorporated into the design where practical.

In response to human ergonomic and operational requirements, a centralized control room for underground and surface facilities will be designed to include fully adjustable control stations, and a large screen display wall. Office areas will boast ample day lighting and high ceilings with direct exterior views. Employees will be able to access a roof patio and green roof from the building's main lunch area. Once completed, the BHP Billiton Jansen Mine Operations Complex will be an excellent example of a sustainable facility focused on the long-term health of occupants. The target for completion of construction for the Operations Complex is the second half of 2014.



Artist rendering of the Jansen Operations Complex

Melville Update

Exploration work at Melville includes exploration drilling and 3D seismic.

The Phase I core drilling program started in July 2011 and is being carried out with two drill rigs, Akita 15 and Nabors 24, with scheduled completion in July 2012. There are about 90 personnel currently managing and involved in the drilling, all of whom have been accommodated within a site-based drill camp.

Due to the large size of the Melville project the 3D seismic has been carried out in two phases. Phase I Melville SE survey was conducted during winter 2010-2011. BHP Billiton commenced Phase II Melville Central 3D in October 2011 and completion is scheduled for 2012. The number of personnel involved with seismic has varied between 70 and 150 depending on the level of activity. All seismic personnel have been accommodated within hotels in Yorkton.

The coming months will include ongoing core drilling and clean-up activities associated with the 3D seismic survey. Although drilling activities are to continue over the coming months, BHP Billiton will work closely with the local Reeves to ensure no breach of road bans during Spring break-up. BHP Billiton would like to thank the local communities for their ongoing support during this exploration phase.



Drill rigs at Melville

Spring Gardening Safety Tips

For those with a green thumb, it's that time of year again. Gardening, like any other physical activity involves muscular exertion. It can be strenuous on backs and legs from bending, kneeling and carrying items. Here are a few tips to make this season a bit easier on you:

1. Warm up – do light movements, stretching or walking to loosen muscles and increase your flexibility.
2. Avoid prolonged bent over posture – get down close to the task by sitting or kneeling or using a gardening bench.
3. Do not push yourself over your physical limits – begin with smaller jobs and work to larger ones as you become more conditioned. Know your body and when it is telling you to back off.
4. Remember proper lifting techniques – if the load is too heavy don't overexert yourself, get help from somebody else to share the load!
5. Wear proper clothing and shoes – dress in layers and don't forget the sunscreen. Sandals may be tempting, but when you are working, wear closed toed shoes to avoid unnecessary pain, possibly injury or discomfort.
6. Use long-handled tools – this will give you leverage and save you from bending.
7. Switch hands frequently when doing prolonged raking etc. – this will distribute the activity more evenly through both sides of the body.
8. Take frequent breaks – this will reduce the likelihood of strains and sprains.
9. Stay hydrated – this means water; save the other beverages for admiring your work once it is done!
10. Keep the activity fun – don't stress about getting it done quickly, enjoy your time outdoors and with your family making your yard look great for the summer!

BHP Billiton Canada Inc.
130 3rd Avenue South, Saskatoon SK S7K 1L3

Phone 1-888-599-BHPB (2472)
Email dspexternalaffairs@bhpbilliton.com
Web www.bhpbilliton.com

BHP Billiton is the world's largest diversified natural resources company. We have some 41,000 employees working in more than 100 operations in 25 countries. BHP Billiton occupies industry leader or near industry leader positions in major commodity businesses, including aluminum, energy coal and metallurgical coal, copper, manganese, iron ore, uranium, nickel, silver and titanium minerals, and has substantial interests in oil, gas, liquefied natural gas and diamonds. Since 1998 BHP Billiton has been operating Canada's first diamond mine; EKATI Diamond Mine. EKATI is located in the Northwest Territories and produces approximately four million carats of rough diamonds annually, representing approximately three per cent of current world rough diamond supply by weight and six per cent by value.

Potash Pages is a quarterly publication printed on recycled paper.