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VOLUME 1 - PROJECT DESCRIPTION

Whale Tail Pit Project
Meadowbank Division

REPORT

Report Number: 1541520

AGNICO EAGLE

Golder Associates

EXECUTIVE SUMMARY

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is proposing to develop Whale Tail Pit (Project), a satellite deposit located on the Amaruq Exploration property. Agnico Eagle is proposing to continue mine operations and milling at the Meadowbank Mine and gain approval to extend Meadowbank Mine to include development of resources from Whale Tail Pit. Concurrent with the reconsideration of the Project Certificate by the NIRB, Agnico Eagle is seeking an amendment to the Meadowbank Mine Type A Water Licence (No. 2AM-MEA1525) to include mining of Whale Tail Pit and the construction and operations of associated infrastructure from the Nunavut Water Board (NWB).

The Amaruq property is a 408 square kilometre (km^2) site located on Inuit Owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut. The deposit will be mined as an open pit (i.e., Whale Tail Pit), and ore will be hauled by truck to the approved infrastructure at Meadowbank Mine for milling.

The Project facilities will consist of a personnel camp (i.e., Main Camp), power plant, heli-pad, maintenance shop, tank farm, a waste rock storage facility (WRSF), an ore stockpiling facility, an attenuation pond, a water and sewage collection and treatment system, haul roads, access roads, water management infrastructure (e.g., collection ponds, channels, dikes, dams, and culverts), and the Whale Tail Pit. As a result of development, Agnico Eagle is also proposing to expand the width of the existing exploration access road to a haul road to accommodate increased traffic rates and haul trucks. No new infrastructure is required at the existing Meadowbank Mine to support the development of the Project.

An initial amount of approximately 8.3 million tonnes (Mt) of ore will be mined from one open pit (i.e., Whale Tail Pit) and processed over a three to four year mine life. Ore from Whale Tail Pit will be segregated by grade then crushed on-site after which it will be transported to Meadowbank Mine for milling. The mill rate will be approximately 9,000 to 12,000 tonnes per day.

Agnico Eagle proposes to process the Whale Tail ore and dispose of the tailings slurry at the existing Meadowbank Mine tailing storage facility (TSF), which is authorized under the current Project Certificate and Type A Water Licence. The mine operation will generate approximately 8.3 Mt of tailings, 46.7 Mt of mine waste rock, and 5.8 Mt of overburden soil, with very limited organic material. Tailings produced from processing of Whale Tail ore will be accommodated within the existing footprint of the TSF. More specifically, tailings will be stored within the current footprint of the south cell TSF and by building an internal structure in the north cell TSF. Neither the footprint of the facility nor the chemical nature of the tailings and process water are expected to significantly change from current operations. Whale Tail tailings will require the same long-term environmental control mechanisms as are currently approved for Meadowbank.

Approximately 2.5 Mt of waste rock will be used for construction activities such as roads, pads, and water management facilities (i.e., dike, berm, rip rap, etc.). The remaining waste rock and overburden material will be hauled to the Whale Tail WRSF, which is located northwest of the Whale Tail Pit. A second, temporary overburden storage pad for staging purposes is located west of the Whale Tail Lake. Waste rock and overburden will be co-disposed together in one of the two piles constituting the storage facility.

The Project will be supported using the existing transportation requirements, relying on marine transportation for most supplies, aircraft for supplies and transportation of employees, and the gold dore produced at the Meadowbank Mill. The Meadowbank All Weather Access Road (AWAR) will continue to provide supplies

transported from the existing Baker Lake marshalling facilities to the Meadowbank Mine. The current operational components include marshalling facilities in Baker Lake and the 110 km AWAR between Baker Lake and Meadowbank Mine. Agnico Eagle is proposing to upgrade the previously permitted Amaruq exploration access road to a haul road to support the development of Whale Tail Pit and to enable hauling needed between the Whale Tail Pit and the Meadowbank Mill. No changes are proposed for the Meadowbank AWAR to Baker Lake.

Construction of the Whale Tail Pit site will begin as soon as approval and permits are received (anticipated for early 2018) and ultimately have full production in 2019. The operational phase will span three to four years, from Year 1 (2019) to Year 4 (2022). Mining activities are currently expected to end in Year 3 (2021) and ore processing is expected to end during Year 4 (2022). Closure will occur from Year 4 (2022) to Year 11 (2029) after the completion of mining and will include removal of the non-essential site infrastructure and flooding of the mined-out open pit, as well as reestablishment of the natural Whale Tail Lake water level. By extending the life of mine at Meadowbank, Agnico Eagle will progressively close portions of Meadowbank Mine while operating.

The main objectives pertaining to water management are to limit and/or stop the flow of surface water runoff in the pit and to limit the impact on the local environment. In developing the water management plan, the following principles were followed:

- keep the different water types separated as much as possible;
- control and minimize contact water through diversion and containment;
- minimize fresh water consumption by recycling and reusing the contact and process water wherever feasible; and
- meet discharge criteria before any site contact water is released to the downstream environment.

Water management infrastructure includes contact water collection ponds, freshwater collection ponds, diversion channels, retention dikes, dams, culverts, water treatment plant for effluent, potable water treatment plant, sewage treatment plant, and a discharge diffuser. All contact water on-site will be directed to an attenuation pond. Contact water will be treated and then released to Mammoth Lake through a discharge diffuser.

To allow the mining of the Whale Tail Pit, Whale Tail Lake will be partly dewatered once the Whale Tail Dike is constructed. Following the completion of mining, the open pit will be filled with natural runoff and water pumped from Whale Tail Lake (South Basin) into Whale Tail Pit. The north and south basins of Whale Tail Lake are expected to reach the same elevation within eight years (2029). The Whale Tail Dike and the Mammoth Dike will be breached when the water quality monitoring results meet discharge criteria as per NWB Type A Licence conditions to allow water to return to the natural flow patterns downstream.

The Project was designed to minimize the areas of surface disturbance, stabilize disturbed land surfaces against erosion, and return the land to a post-mining land use to re-establish traditional pursuits and wildlife habitat. This will mainly be achieved by rapidly dewatering during the open water season, mining the pit as efficiently as possible, and then refilling as early as possible during closure. Post-closure environmental monitoring will continue until it has been verified that reclamation has successfully met closure and reclamation objectives.

Baseline programs have been completed for the Project and have included data collection for the physical environment (e.g., terrain and soils, permafrost, geochemistry, noise, and surface water quantity and quality), biological environment (e.g., vegetation, terrestrial wildlife and birds, and fish and other aquatic organisms), and

the cultural environment (e.g., IQ, archaeology, and socio-economics) in support of the environmental assessment and Type A Water Licence Amendment Application. Agnico Eagle has completed an environmental assessment to identify and assess potential environmental and social effects resulting from the Project. It is anticipated that the Final Environmental Impact Statement (FEIS) Amendment and Type A Water Licence Amendment will be submitted to the NWB and NIRB in June 2016, at the time of the NPC conformity determination decision. The results of the environmental assessment found that with mitigation, the Whale tail Pit, Whale Tail haul road, and the extension of the Meadowbank Mine, will not cause long-term significant negative effects as a result of proposed construction, operations, and closure.

Agnico Eagle has developed monitoring and management programs required to mitigate, monitor, and report on its environmental performance against the regulatory requirements contained within its Meadowbank operating authorizations, permits, licenses, and leases consistent with the legal requirements of applicable Acts and Regulations in Nunavut. Existing Meadowbank Mine management and monitoring plans have been updated or addendums have been added to reflect the Project and will be submitted as part of the FEIS and Water Licence Amendments in June 2016. The performance of the management plans will be monitored periodically and the results communicated. Independent subject matter experts or consultants may be engaged to review performance where necessary. The accuracy of the environmental impact predictions and the effectiveness of the mitigation measures will be verified through monitoring and annual reporting. If unusual or unforeseen adverse environmental impacts are noticed, corrective action will be put in place. Through the adaptive management process, the existing mitigation measures will be adjusted or new mitigation measures implemented if necessary. External reporting will be completed, as required.

A key goal of Agnico Eagle's public consultation and engagement program has been to ensure the Company obtains a "social licence to operate", by securing the support of a majority of residents from potentially impacted local communities. Since operations of Meadowbank Mine began, Agnico Eagle has continued public consultation by annually meeting with the community and local stakeholders within the Kivalliq Region, regulatory agencies and local employees routinely which has allowed a better general understanding of the rights, interests, values, aspirations, and concerns of the potentially affected stakeholders, with particular reference to the local community of interest, Baker Lake. Through this continued consultation Agnico Eagle has developed an operational culture that recognizes and respects these relevant interests in the planning and executing processes. Agnico Eagle has consulted with local stakeholders and regulators regarding the current Amaruq exploration activities and the proposed Whale Tail Pit, as an extension to the Meadowbank Mine.

Consultation and regulatory engagement discussions were also considered as part of the alternatives assessment. The alternatives that shaped the overall Project includes the Project Go/No-Go decision, deposit, mining method, and production rate, processed ore containment and tailing storage, overburden and waste rock disposal, water management, transportation access and quarry development, and infrastructure support.

Agnico Eagle is a senior mining company with a proven reputation for sustainability and economic success in Nunavut. Its' success is based on grass roots exploration and recognizing the potential in the areas it explores. Agnico Eagle is committed to creating value for their shareholders by operating in a safe, socially, and environmentally responsible manner while contributing to the prosperity of their employees, their families, and the communities in which they operate. These commitments based on Agnico Eagle's Sustainable Development Policy, are published in the Annual Sustainable Development Report, and are reported annually to the Kivalliq Inuit Association, NWB, and NIRB.

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ᐊᒃᓂᑯᒃ ᐋᒍ ᐅᔭᕋᓐᓂᐊᖅᑐᓕᕆᔨᒃᑯᑦ - ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ (ᐊᒃᓂᑯᒃᑯᑦ) ᑐᒃᓯᕋᐅᓯᐅᕈᒪᔪᑦ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᖅ (ᐱᓕᕆᐊᖅ), ᐃᓚᒌᔭᐅᔪᖅ ᐱᑕᓕᒃ ᐃᓂᐅᔫᑦᑐᖅ ᐊᒪᕈᖅ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐱᒌᔭᐅᔫᑦ. ᐊᒃᓂᑯᒃᑯᑦ ᑲᔪᓯᔪᒪᔪᑦ ᐅᔭᕋᓐᓂᐊᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓯᖃᓪᓕᑎᕆᓂᕐᒧᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ ᐊᒻᒪᓗ ᓈᒻᒪᒋᔭᐅᓂᕐᒧᑦ ᑐᒃᓯᕋᖅᑐᑦ ᐅᐃᒍᒋᐊᕐᓗᒍ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ ᐅᔭᕋᓐᓂᐊᕐᓂᖅ ᐃᓚᐅᑎᓪᓗᒍ ᐱᕙᓪᓕᐊᔭᐅᓂᖓ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᖅ. ᐃᓚᒌᔭᐅᖕᒥᔪᖅ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᒋᒃᑳᓂᕐᓂᕐᒧᑦ ᐱᓕᕆᐊᕐᒧᑦ ᓇᓗᓇᐃᑯᑕᖅ NIRB-ᑯᓐᓂᑦ, ᐊᒃᓂᑯᒃᑯᑦ ᕿᓂᖅᑐᑦ ᐋᕿᒋᐊᖅᓯᓂᕐᒧᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ Type A ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯᒥᒃ (ᓈᓴᐅᑎ 2AM-MEA1525) ᐃᓚᐅᑎᓪᓗᒋᑦ ᐅᔭᕋᓐᓂᐊᕐᓂᖅ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ ᐊᒻᒪᓗ ᓴᓇᔭᐅᓂᖓᓄᑦ ᐊᐅᓚᖅᑎᓐᓂᖓᓄᓪᓗ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᓄᑦ ᐱᖁᑎᓄᑦ ᓄᓇᕗᒻᒥ ᐃᒪᓕᕆᔨᒃᑯᓐᓂᑦ (NWB).

ᐊᒪᕈᖅ ᐱᒋᔭᐅᔪᖅ 408 ᑭᐸᓈᕆᒃᑐᑦ ᑭᓛᒥᑕᐅᔪᑦ (km^2) ᐃᓂᐅᔫᑦ ᐃᓄᐃᑦ ᓇᖏᓂᕆᔭᖕᒐᓐᓂᑦ 150 ᑭᓛᒥᑕᓪᓗᐊᑦ ᐅᐊᓐᓇᖕᒐᓂᑦ ᖃᒪᓂᑦᑐᐊᕐᒥᑦ ᐅᖕᒐᓯᒃᑎᕆᔪᖅ ᐊᒻᒪᓗ 50 ᑭᓛᒥᑕ ᐅᐊᓐᓇᖅᐸᓯᖕᒐᓂᑦ ᐱᖕᒐᓐᓇᖅᐸᓯᖕᒐᓂᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ ᑭᕙᓪᓕᕐᒥᑦ ᐅᖕᒐᓯᒃᑎᕆᔪᖅ. ᐅᔭᕋᓐᓂᐊᖅᑕᐅᓂᐊᖅᑐᑦ ᐅᒃᑯᐃᖕᒐᔫᒥᓐᓂᐊᖅᑐᖅ (ᓲᕐᓗ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᖅ), ᐊᒻᒪᓗ ᐅᔭᖅᑲᐃᑦ ᐊᒡᔭᖅᑕᐅᓗᑎᒃ ᓄᓇᒃᑰᕈᑎᒃᑯᑦ ᓈᒻᒪᖏᔭᐅᔪᒧᑦ ᐃᓪᓗᕐᔪᐊᕐᒧᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ ᓯᖃᓪᓕᑎᖅᑕᐅᓂᐊᕐᓗᑎᒃ.

ᐱᓕᕆᐊᖅ ᐱᖁᑎᖏᓐᓂᑦ ᐃᓚᐅᓂᐊᖅᑐᑦ ᐱᓕᕆᔨᓄᑦ ᓄᓇᓕᐊᕆᖅ (ᓲᕐᓗ, ᓄᓇᓕᐊᕆᕆᔭᐅᓂᐊᖅᑐᖅ), ᐆᒪᖅᑯᑎ, ᖁᓕᒦᓕᖕᒧᑦ ᒥᑦᑕᕐᕕᒃ, ᓯᖁᒥᑦᑐᖃᖅᐸᑦ ᐋᕿᒃᓯᐃᕝᕕᒃ, ᐅᖅᓯᐊᓗᓴᓯᕝᕕᒃ, ᐅᔭᖅᑯᐃᑦ ᐊᒃᑖᖅᑕᐅᔪᓄᑦ ᑐᖅᑯᖅᓯᓯᒪᕝᕕᒃ (WRSF), ᐅᔭᕋᒃᑕᖅᑕᐅᔪᑦ ᑲᑎᖅᓯᐃᕙᓪᓕᐊᕝᕕᒃ, ᓴᙱᓗᐊᑭᖕᓃᖅᑎᑦᑎᕝᕕᒃ ᑕᓯᕋᔭᒃ, ᐃᒪᕐᒥᒃ ᐊᒻᒪᓗ ᖁᕐᕚᖕᒥᙱᖅᑐᓂᒃ ᑲᑎᖅᓱᐃᕝᕕᒃ ᐊᒻᒪᓗ ᐱᓕᕆᐊᖃᕐᓂᕐᒧᑦ ᐋᕿᐅᒪᔪᑦ, ᐅᓯᑲᑦᑕᖕᓂᕐᒧᑦ ᐊᑉᖁᑏᑦ, ᐊᑉᖁᑏᑦ, ᐃᒪᓕᕆᕝᕚᑦ (ᓲᕐᓗ, ᑲᑎᖅᓯᐃᓂᕐᒧᑦ ᑕᓯᕋᔭᒃ, ᓯᐸᓗᐃᑦ, ᐃᓗᑦᑐᖅᓯᒪᔪᑦ ᑕᒪᒃᑯᐊᕋᓗᐃᑦ), ᐊᒻᒪᓗ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᖅ. ᐱᔾᔪᑎᒋᐸᓗᒍ ᐱᕙᓪᓕᐊᓂᖅ, ᐊᒃᓂᑯᒃᑯᑦ ᑐᒃᓯᕋᐅᓯᐅᕐᒥᔪᑦ ᐊᖏᒡᓕᒋᐊᖅᑕᐅᑎᓐᓂᖓ ᓯᓕᖕᓂᖕᒐᑕ ᒫᓐᓇ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐊᑉᖁᑎᕆᔭᐅᔪᖅ ᐅᓯᑲᑦᑕᖕᓂᕐᒧᑦ ᐊᑉᖁᑎᙵᕐᓗᒍ ᐊᑐᖅᑕᐅᓂᐊᓕᕐᓂᖕᒐᓄᑦ ᐊᒥᓲᓂᖅᓴᓄᑦ ᐃᖏᕐᕋᔭᒃᑐᓄᑦ ᐊᒻᒪᓗ ᐅᓯᑲᑦᑕᖅᑐᓄᑦ ᓄᓇᒃᑰᕈᑎᓄᑦ. ᓄᑖᓂᒃ ᐱᖁᑎᑖᕆᐊᖃᕐᔫᖏᑦᑐᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ ᐱᕙᓪᓕᐊᓂᖅ ᐱᔾᔪᑎᒋᐸᓗᒍ.

8.3 ᒥᓕᔭᓐ ᑕᓐ-ᓂᒃ (Mt) ᐅᔭᕋᓐᓂᐊᕋᔭᖅᑐᑦ ᐅᒃᑯᐃᖕᒐᔪᒥᐅᓂᐊᖅᑐᖅ ᐃᓪᓗᑦᑐᖅᓯᒪᔪᒥᑦ (ᓲᕐᓗ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᖅ) ᐊᒻᒪᓗ ᐱᓕᕆᐊᖑᓗᑎᒃ ᐅᑭᐅᓄᑦ ᐱᖕᒐᓱᓂᑦ ᓯᑕᒪᓄᑦ ᐅᔭᕋᓐᓂᐊᕐᓂᐅᑉ ᐊᐅᓚᕐᓂᕆᔭᖕᒐᓂᑦ. ᐅᔭᕋᓐᓂᐊᖅᑕᐅᔪᑦ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ ᑲᑎᑕᐅᓂᐊᖅᑐᑦ ᖃᓄᐃᓐᓂᖅᓴᐅᓂᖏᑦ ᒪᓕᒡᓗᒋᑦ ᓯᖃᓪᓕᑎᖅᑕᐅᓕᕐᓗᑎᒡᓗ ᐃᓂᐅᔪᒥᑦ ᑭᖑᓂᐊᒍᑦ ᐊᒡᔭᖅᑕᐅᓕᕐᓗᑎᒃ ᐊᐳᖅᑎᓐᓈᖅᑐᒧᑦ ᓯᖃᓪᓕᑎᖅᑕᐅᓂᐊᕐᓗᑎᒃ. ᓯᖃᓪᓕᑎᕆᓂᖅ 9,000-ᓂᒃ 12,000-ᓄᑦ ᑕᓐ-ᖑᖃᑦᑕᕐᓂᐊᖅᑐᖅ ᐅᐸᓗᑕᒫᖅ.

ᐊᒃᓂᑯᒃᑯᑦ ᐱᓕᕆᐊᖃᕈᒪᔪᑦ Whale Tail-ᒥᑦ ᐅᔭᕋᓐᓂᐊᖅᑕᐅᔪᓂᒃ ᐊᒻᒪᓗ ᐃᒋᓪᓗᒋᑦ ᕿᒪᒃᑎᑦᑐᑦ ᑕᐃᒪᐅᔪᕐᒥᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ ᐅᔭᕋᓐᓂᐊᕐᕕᖕᒥᑦ ᕿᒪᒃᑎᑦᑐᓄᑦ ᑐᖅᑯᖅᓯᓯᒪᕝᕕᖕᒧᑦ (TSF), ᐱᔪᓐᓇᖅᑎᑕᐅᔪᖅ ᒪᓕᒃᓗᒍ ᒫᓐᓇᐅᔪᖅ ᐱᓕᕆᐊᕐᒧᑦ ᓇᓗᓇᐃᑯᑕᕐᒥᑦ ᐊᒻᒪᓗ Type A ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯᒥᑦ. ᐅᔭᕋᓐᓂᐊᕐᓂᕐᒧᑦ ᐊᐅᓚᕐᓂᐅᔪᖅ 8.3 Mt-ᓂᒃ ᕿᒪᒃᑎᑦᑐᓕᐅᕐᓂᐊᖅᑐᑦ, 46.7 Mt-ᓂᒃ ᐅᔭᕋᓐᓂᐊᖅᑕᐅᔪᓂᒃ ᐊᒃᑖᖅᑕᐅᔪᓂᒃ, ᐊᒻᒪᓗ 5.8 Mt-ᓂᒃ ᐅᖕᒐᑕᐅᑦᑎᔪᑦ ᐃᐸᔪᓂᒃ, ᐃᓚᖃᕐᓗᑎᑦ ᒥᕿᔪᒥᒃ ᓄᓇᒥᒃ ᐱᔪᓂᒃ. ᕿᒪᒃᑎᑦᑐᑦ ᐱᔪᑦ ᐱᓕᕆᐊᖑᓂᕐᒧᑦ Whale Tail-ᒥᑦ ᐅᔭᖅᑲᓂᒃ ᐃᓂᖃᖅᑎᑕᐅᓂᐊᖅᑐᑦ ᑕᐃᒪᐅᔪᕐᒥᒃ ᐋᕿᐅᒫᓐᓂᒃᑐᒥᑦ TSF-ᒥᑦ. ᐱᓗᐊᖅᑐᒥᑦ, ᕿᒪᒃᑎᑦᑐᑦ ᑐᖅᑯᖅᑕᐅᓂᐊᖅᑐᑦ ᒫᓐᓇᐅᔪᖅ ᐃᓂᓕᐅᖅᓯᒪᔪᕐᒥᑦ ᓂᕿᐊᓂᑦ TSF-ᒥᑦ ᐊᒻᒪᓗ ᓴᓇᓗᑎᒃ ᐃᓗᐊᓃᑦᑐᒥᒃ ᐅᐊᓐᓇᖕᒐᓂᑦ TSF-ᒥᑦ. ᐃᓂᓕᐅᖅᓯᒪᔪᖅ ᐅᕙᓘᓃᑦ ᐃᒡᓗᕐᔪᐊᖅ ᐊᒻᒪᓗ ᐅᓗᕆᐊᓇᖅᑐᖃᕐᓂᖅ ᕿᒪᒃᑎᑦᑐᓂᒃ ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᓂᕐᒥᑦ ᐃᒪᕐᒥᑦ ᓂᕆᐅᒋᔭᐅᖏᑦᑐᑦ ᐊᓯᐊᖑᕐᔪᐊᕐᓂᐊᕐᓂᖕᒐᓄᑦ ᒫᓐᓇᐅᔪᖅ ᐊᐅᓚᕐᓂᐅᔫᑉ. Whale Tail-ᒥᑦ ᕿᒪᒃᑎᑦᑐᑦ ᐊᔾᔨᖕᒐᓂᒃ ᐊᑯᓂᐅᔪᒥᒃ ᑕᑭᑎᒋᓂᖕᒐᓂᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᓂᒃ ᐊᑐᕐᓂᐊᖅᑐᖅ ᓈᒻᒪᒋᔭᐅᓯᒪᔪᓂᒃ ᐊᐳᖅᑎᓐᓈᖅᑐᒧᑦ.

2.5 Mt-ᓗᐊᑦ ᐊᒃᑖᖅᑕᐅᔪᑦ ᐅᔭᖅᑲᐃᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᓇᕙᓪᓕᐊᓂᕐᒧᑦ ᓲᕐᓗ ᐊᑉᖁᑎᓂᒃ, ᑐᙵᕕᖕᓂᑦ, ᐊᒻᒪᓗ ᐃᒪᕐᒧᑦ ᐊᐅᓚᑦᑎᕝᕕᖕᓂᑦ (ᓲᕐᓗ ᐃᓗᑦᑐᖅᓯᒪᔪᑦ, ᐊᕙᓗᐃᑦ, ᐊᓕᒃᑕᐃᓕᒻᔪᑏᑦ, ᑕᒪᒃᑯᐊᕋᓗᐃᑦ). ᐊᒥᐊᑯᖏᑦ ᐊᒃᑖᖅᑕᐅᔪᑦ ᐅᔭᖅᑲᐃᑦ ᐊᒻᒪᓗ ᐅᖕᒐᑕᐅᑦᑎᔪᑦ ᐊᒡᔭᖅᑕᐅᓂᐊᖅᑐᑦ Whale Tail WRSF-ᒧᑦ, ᐅᐊᓐᓇᖅᐸᓯᖕᒐᓂᑦ ᐱᖕᒐᓐᓇᖕᒐᓃᑦᑐᑦ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔫᑉ. ᑐᓪᓕᐅᔪᖅ, ᐅᖕᒐᑕᐅᑦᑎᔪᓄᑦ ᑐᖅᑯᖅᓯᓯᒪᕝᕕᐅᓚᐅᐱᓪᓚᒃᑐᒧᑦ ᑐᙵᕕᒃ ᓇᓃᓐᓂᖅᓴᐅᓕᕐᓂᕐᒧᑦ ᐱᖕᒐᓐᓇᖕᒐᓃᑦᑐᖅ Whale Tail ᑕᓯᐅᑉ. ᐊᒃᑖᖅᑕᐅᔪᑦ ᐅᔭᖅᑲᐃᑦ ᐊᒻᒪᓗ ᐅᖕᒐᑕᐅᑦᑎᔪᑦ ᐊᑕᐅᑦᑎᒃᑯᑦ ᐃᒋᑕᐅᓂᐊᖅᑐᑦ ᐃᓚᖕᒐᓐᓄᑦ ᒪᕐᕉᖕᓄᑦ ᑲᑎᖅᓱᖅᓯᒪᔪᓄᑦ ᑐᖅᑯᖅᓯᓯᒪᕝᕕᖕᓂᑦ.

ᐱᓕᕆᐊᖅ ᐊᑐᕐᓂᐊᖅᑐᖅ ᑕᐃᒪᐅᔪᒥᒃ ᐃᖏᕐᕋᔾᔪᓂᕐᒧᑦ ᐱᔭᕆᐊᖃᖅᑐᓂᒃ, ᐊᑐᕐᓗᑎᒃ ᐃᒪᒃᑯᑦ ᐊᖏᔪᖅᑐᐃᓂᕐᒥᒃ ᐱᕐᑯᑎᓗᒃᑖᖅᑲᔾᕐᓄᑦ, ᑎᖕᒥᓰᒃᑯᑦ ᐱᕐᑯᑎᓄᑦ ᐊᒻᒪᓗ ᐊᖏᔪᖅᑐᐃᓂᕐᒧᑦ ᐱᓕᕆᔫᓂᒃ, ᐊᒻᒪᓗ ᒎᓗᓂᒃ ᐱᔭᐅᔪᑦ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᓯᖃᓪᓕᑎᕆᕝᕙᖓᓂᑦ. ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐅᑭᐅᓗᒃᑖᖅ ᐊᑉᑯᑎ (AWAR) ᑲᔪᓯᓂᐊᖅᑐᖅ ᐊᑐᖅᑕᐅᓂᖓ ᐊᖏᔪᖅᑐᐃᓂᕐᒧᑦ ᐱᕐᑯᑎᓂᒃ ᖃᒪᓂᑦᑐᐊᕐᒥᑦ ᐅᓯᖏᔭᐃᕝᕙᖕᒥᑦ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐅᔭᕋᖕᓂᐊᕐᕙᖕᒧᑦ. ᒫᓇᐅᔪᖅ ᐊᐅᓛᕐᓂᕐᒧᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐃᓚᐅᔪᑦ ᐅᓯᖏᔭᐃᕙᒃ ᖃᒪᓂᑦᑐᐊᕐᒥᑦ ᐊᒻᒪᓗ 110 ᑭᓛᒥᑕ ᐊᑉᑯᑎ ᖃᒪᓂᑦᑐᐊᕐᒥᑦ ᐊᐳᖅᑎᓈᖅᑐᒧᑦ. ᐊᒃᓃᑯᒃᑯᑦ ᓄᑖᙳᖅᑎᕈᒪᔾᔪᖓᑦ ᐱᔪᖕᓇᖅᑎᑕᐅᔪᖅ ᐊᒪᕈᖅ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐊᑉᑯᑎ ᐊᖏᔪᖅᑐᐃᓂᕐᒧᑦ ᐊᑉᑯᑎᙳᕐᓗᒍ ᐱᕙᓪᓕᐊᔭᐅᓂᖓᓄᑦ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᖅ ᐊᒻᒪᓗ ᐊᖏᔪᖅᑐᐃᓂᕐᒧᑦ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᓯᖃᓪᓕᑎᕆᕝᕙᖕᒧᑦ. ᐊᓯᐊᖑᖅᓯᒪᔪᙱᑦᑐᑦ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐊᑉᑯᑎ ᖃᒪᓂᑦᑐᐊᕐᒧᑦ.

ᓴᓇᔭᐅᓂᖓ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ ᐃᓂᐅᔪᖅ ᐱᒋᐊᕋᔭᖅᑐᖅ ᓈᒻᒪᒋᔭᐅᑐᐊᖅᐸᑦ ᐊᒻᒪᓗ ᐳᒥᑦ ᐱᔭᐅᔪᑦ (ᓂᕆᐅᒋᔭᐅᔪᖅ 2018 ᐱᒋᐋᓂᖅᑎᓪᓗᒍ) ᐊᒻᒪᓗ ᐊᐅᓛᕐᓂᖃᓪᓚᑦᑖᓕᕐᓗᓂ 2019-ᒥᑦ. ᐊᐅᓛᕐᓂᐅᓂᐊᖅᑐᖅ ᐱᖓᓯᓂᑦ ᓯᑕᒪᓄᑦ ᐅᑭᐅᓄᑦ, ᐅᑭᐅᕐᒥᑦ 1 (2019) ᐅᑭᐅᕐᒧᑦ 4 (2022). ᐅᔭᕋᖕᓂᐊᖅᑐᓕᕆᓃᑦ ᒫᓇᐅᔪᖅ ᓂᕆᐅᒋᔭᐅᔪᑦ ᐃᓱᓕᓐᓂᐊᕐᓂᖓᓄᑦ ᐅᑭᐅᖅ 3 (2021-ᒥᑦ) ᐊᒻᒪᓗ ᐅᔭᕋᖕᓂᐊᖅᑕᐅᔪᓕᕆᓂᖅ ᓂᕆᐅᒋᔭᐅᔪᖅ ᐃᓱᓕᓐᓂᐊᕐᓂᖓᓄᑦ ᐅᑭᐅᖅ 4 (2022-ᒥᑦ). ᐅᒃᑯᐊᕐᓂᖅ ᐅᑭᐅᖅ 4 (2022-ᒥᑦ) ᐅᑭᐅᖅ 11 (2029-ᒧᑦ) ᐱᐊᓂᒃᐸᑦ ᐅᔭᕋᖕᓂᐊᕐᓂᖅ ᐊᒻᒪᓗ ᐃᓚᐅᓂᐊᖅᑐᖅ ᐲᔭᐃᓂᖅ ᐊᑐᙱᑦᑐᓂᒃ ᐃᓂᐅᔪᒥᑦ ᐱᕐᑰᑦ ᐊᒻᒪᓗ ᐃᒥᖅᑐᐃᓂᖅ ᐅᔭᕋᖕᓂᐊᖅᑕᐅᓯᒪᔪᓂᒃ ᐅᒃᑯᐃᖕᒐᔪᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᓂᑦ, ᐊᒻᒪᓗ ᐋᕿᒃᓯᒃᑲᓂᕐᓗᓂ ᓄᓇᒥᑦ ᐱᔪᓂᒃ Whale Tail ᑕᓯᕐᒥᑦ ᐃᒥᕐᓗᒍ ᓇᓈᓂᕆᔭᖕᓄᑦ. ᐅᐃᒍᕆᐊᖅᑕᐅᑎᓪᓗᒍ ᐊᐅᓛᕐᓂᖓ ᐅᔭᕋᖕᓂᐊᕐᓂᐅᑉ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐊᒃᓃᑯᒃᑯᑦ ᐅᒃᑯᐊᖅᓯᕙᓪᓕᐊᓂᖃᕐᓂᐊᖅᑐᑦ ᐃᓚᖓᓂᒃ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐅᔭᕋᖕᓂᐊᖅᑕᐅᔫᑉ ᐊᐅᓛᕐᓂᖕᒋᓐᓂᑦ.

ᐱᓕᕆᐊᖑᔪᒪᓗᐊᖅᑐᖅ ᐱᔾᔪᑎᖃᖅᑐᑦ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐅᑯᐊᖑᔪᑦ ᑭᒡᓕᖃᕐᓗᒋᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᓄᖅᑲᖅᑎᓪᓗᒍ ᑯᕕᓂᖓ ᐃᒪᐅᑉ ᑰᒃᑐᖅ ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ ᐊᒻᒪᓗ ᑭᒡᓕᖃᖅᑎᓪᓗᒍ ᐊᒃᑐᖅᓯᓂᐅᔪᖅ ᖃᓂᑦᑐᒥᒃ ᐊᕙᑎᒋᔭᖓᓂᑦ. ᐃᒪᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᕐᒥᒃ ᐸᕐᓇᐅᑎᓕᐅᕐᓗᓂ ᐅᑯᓂᙵᑦ ᒪᓕᒃᑕᐅᔭᕆᐊᖃᖅᑐᓂᑦ:

- ᐊᑦᔨᕖᖕᒋᓐᓂᖃᖅᑐᑦ ᐃᒪᐃᑦ ᖃᓄᐃᑦᑑᓂᖕᒋᑦ ᐊᕕᒃᓯᒪᑎᒋᐊᖕᒋᓇᕐᓗᒋᑦ;
- ᐊᐅᓚᓪᓗᒋᑦ ᒥᑭᓛᒃᑰᖅᑎᓪᓗᒋᓪᓗ ᐃᒪᖅ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᖅ ᓴᙱᑎᑦᑎᓂᒃᑯᑦ ᐊᒻᒪᓗ ᑐᖅᑯᖅᑕᐅᓯᒪᓂᒃᑯᑦ;
- ᒥᑭᓛᒃᑰᖅᑎᓪᓗᒋᑦ ᐃᒪᑦᑎᐊᕙᖕᒥᑦ ᐊᑐᕐᓂᖅ ᐊᑐᒃᑲᓂᖃᑦᑕᕐᓗᒋᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐊᒻᒪᓗ ᐃᒪᓕᕆᓗᓂ ᐊᔪᕐᓇᙱᑐᐊᕑᖓᑦ; ᐊᒻᒪᓗ
- ᑎᑭᐅᑎᓯᒪᓗᒋᑦ ᑯᕕᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐃᓂᐅᔪᒧᐊᖅᑐᖃᕐᓂᐊᓵᖅᑎᓪᓗᒍ ᐃᒪᕐᒥᑦ ᑰᒃᑐᒧᑦ.

ᐃᒪᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐱᕐᑯᑎᓂᑦ ᐃᓚᐅᔪᑦ ᐃᒪᖅ ᐊᑐᖅᑕᐅᔪᕐᒧᑦ ᑲᑎᑦᑎᓂᕐᒧᑦ ᑕᓯᕋᔭᐃᑦ, ᐃᒪᑦᑎᐊᕙᖕᒥᑦ ᑲᑎᑦᑎᓂᕐᒧᑦ ᑕᓯᕋᔭᐃᑦ, ᓴᖑᑎᑦᑎᓂᕐᒧᑦ ᓱᐸᓗᐃᑦ, ᐸᐸᑦᑎᓂᕐᒧᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᑦ, ᓱᐸᓗᑖᑦ, ᐃᒪᓕᕆᕝᕕᒃ ᐃᒋᑕᐅᔪᓂᒃ, ᓴᓗᒪᔪᒥᒃ ᐃᒪᓕᕆᔾᔪᑎ, ᖁᕐᕕᖕᒥᙳᖅᑐᓕᕆᕝᕕᒃ, ᐊᒻᒪᓗ ᑯᕙᔪᓂᒃ ᓴᖑᑎᑦᑎᔾᔪᑎ. ᐊᑐᖅᑕᐅᔪᓗᒃᑖᑦ ᐃᒪᐃᑦ ᐃᓂᐅᔪᒥᑦ ᓴᙱᓗᐊᖕᒋᕆᐊᖅᑎᑦᑎᕝᕙᖑᒧᐊᖅᑕᐅᓂᐊᖅᑐᑦ. ᐊᑐᖅᑕᐅᓂᑯ ᐃᒪᖅ ᐱᓕᕆᐊᖑᖃᑦᑕᕐᓂᐊᖅᑐᖅ ᐊᒻᒪᓗ ᐃᓕᔭᐅᓗᓂ Mammoth ᑕᓯᕐᒧᑦ ᑯᕙᔪᓂᒃ ᓴᖑᑎᑦᑎᔾᔪᑎᒃᑯᑦ.

ᐅᔭᕋᖕᓂᐊᖅᑎᑕᐅᔪᖕᓇᕐᓂᐊᕐᓗᓂ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ, Whale Tail ᑕᓯᖅ ᐃᓚᖕᒐᒍᑦ ᐃᒪᐃᔭᖅᑕᐅᓂᐊᖅᑐᖅ Whale Tail-ᒥᑦ ᑰᕝᕙᓕᐅᕌᓂᒃᐸᑕ. ᐅᔭᕋᖕᓂᐊᕌᓂᒃᐸᑕ, ᐅᒃᑯᐃᖕᒐᔪᖅ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ ᐃᓗᓕᖅᑐᖅᑕᐅᓂᐊᖅᑐᖅ ᐃᒪᕐᒥᒃ ᐊᒻᒪᓗ ᐃᒪᕐᒥᒃ ᑯᕙᖅᑕᐃᓗᑎᒃ Whale Tail ᑕᓯᕐᒥᑦ (ᓂᒋᐊᓂᑦ ᐃᒪᕐᒥᑦ) Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒧᑦ. ᐅᐊᖕᓇᖕᒐᓂᑦ ᐊᒻᒪᓗ ᓂᒋᐊᓂᑦ ᐃᒪᖕᒋᑦ Whale Tail ᑕᓯᕐᒥᑦ ᓂᕆᐅᒋᔭᐅᔪᑦ ᑎᑭᐅᑎᓂᐊᕐᓂᖕᒋᓐᓄᑦ ᐊᖕᒋᓂᕆᓚᐅᖅᑕᖕᒐᓚ ᓇᓈᓂᕆᓚᐅᖅᑕᖕᒐᓄᑦ 8 ᐅᑭᐅᑦ ᐃᓗᐊᓂᑦ (2029). Whale Tail-ᒥᑦ ᑰᕝᕙᒃ ᐊᒻᒪᓗ Mammoth-ᒥᑦ ᑰᒃᕙᒃ ᓄᖅᑲᖅᑎᑕᐅᓂᐊᖅᑐᑦ ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᖕᒐᓄᑦ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᖃᓄᐃᖕᒐᓂᐅᔪᑦ ᑎᑭᐅᑎᒃᐸᑕ ᑯᕕᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᒧᑦ ᒪᓕᒡᓗᒋᑦ NWB Type A ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯᖕᒐᓐᓄᑦ ᖃᓄᐃᖕᒐᔭᕆᐊᖃᕐᓂᐅᔪᓄᑦ ᐃᒪᕐᒥᒃ ᐅᑎᖅᑎᑦᑎᓂᕐᒧᑦ ᐃᖕᒥᓂᒃ ᑯᕕᓂᕐᒧᑦ ᐊᑐᖅᑐᓂᒃ ᑰᒡᓗᑎᒃ.

ᐱᓕᕆᐊᖅ ᖃᓄᐃᖕᒐᔪᓕᐊᖑᓚᐅᖅᑐᖅ ᒥᑭᓛᒃᑰᖅᑎᓂᕐᒧᑦ ᐃᓴᐃᓵᖅᑕᐅᔪᑦ ᐃᒪᕐᒧᑦ, ᓄᓇᐅᔪᖅ ᐊᒃᑐᖅᑕᐅᓗᐊᖅᑕᐃᓕᓂᕐᒧᑦ ᓯᕗᖅᐸᓕᐊᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᐅᑎᖅᑎᓪᓗᒍ ᓄᓇ ᐅᔭᕋᖕᓂᐊᕐᕕᐅᓂᐋᖅᑎᓪᓗᒋᑦ ᐅᑎᖅᑎᑦᑎᓂᕐᒧᑦ ᐱᖅᑯᓯᓕᓚᐅᖅᑕᖕᒐᓄᑦ ᐊᒻᒪᓗ ᓂᕐᔩᑦ ᐃᓂᒋᓚᐅᖅᑕᖕᒋᓐᓄᑦ. ᑕᒪᓇ ᑎᑭᐅᑎᔭᐅᓗᐊᕐᓂᐊᖅᑐᖅ ᐃᒪᐃᔭᐃᑫᓚᓴᕐᓗᓂ ᐊᐅᔾᔭᒃᑯᑦ, ᐅᔭᕋᖕᓂᐊᕐᕕᒋᓗᒍ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ ᐃᓗᐊᖅᑐᒃᑰᖕᒐᒋᐊᑦᑎᐊᕐᓗᒍ, ᐊᒻᒪᓗ ᐃᒥᖅᑐᒃᑲᓂᕆᐊᕐᓗᒍ ᐱᔪᖕᓇᖅᓯᒋᐊᑐᐊᖅᐸᑕ ᐅᑯᐊᖅᐸᓪᓕᐊᑎᓪᓗᒍ. ᐅᒃᑯᐊᖅᓯᒪᓕᖅᑎᓪᓗᒍ

ᐊᕙᑎᒥᒃ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᖅ ᑲᔪᓯᓂᐊᖅᑐᖅ ᑭᓯᐊᓂ ᓇᓗᓇᐃᖅᐸᑕ ᐅᑎᖅᑎᑎᕆᓂᖅ ᑎᑭᐅᑎᑦᑎᐊᕐᒪᑦ ᐅᒃᑯᐊᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐅᑎᖅᑎᑎᕆᓂᕐᒧᑦ ᐱᔭᕆᐅᔪᓄᑦ.

ᐱᓕᕆᐊᕐᒧᑦ ᑭᒡᓕᓕᐅᕆᓂᕐᒧᑦ ᑐᕌᖓᔪᑦ ᐱᐊᓂᒃᑕᐅᓚᐅᖅᑐᑦ ᐊᒻᒪᓗ ᐃᓚᐅᓚᐅᖅᑐᑦ ᓈᓴᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ ᑲᑎᖅᓯᐃᓂᖅ ᐊᕙᑎᒧᑦ (ᓵᕐᓗ ᓄᓇ ᐊᒻᒪᓗ ᐃᑉᐊᐃᑦ, ᖁᐊᖑᐃᓐᓇᐅᔭᖅᑐᖅ, ᓄᓇᓕᕆᓂᖅ, ᓂᐱᖃᕐᓂᖅ, ᐊᒻᒪᓗ ᐃᒪᐅᑉ ᖄᖓ ᖃᓄᑎᒋᐅᓂᖓᓄᑦ ᐊᒻᒪᓗ ᖃᓄᐃᓐᓂᕆᔾᖓᓄᑦ), ᐆᒪᓂᖃᕐᓂᖓ ᐊᕙᑎᐅᑉ (ᓵᕐᓗ ᐱᕈᖅᑐᐃᑦ, ᓂᕐᔪᒌᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᑦ, ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ ᐊᓯᖕᒋᓪᓗ ᐃᒪᕐᒥᐅᑕᐃᑦ), ᐊᒻᒪᓗ ᐱᖁᓯᒃᑯᑦ ᐊᕙᑎᐅᔪᖅ (ᓵᕐᓗ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ, ᐃᑦᑕᕐᓂᑕᓕᕆᓃᑦ, ᐊᒻᒪᓗ ᐃᓄᐃᑦ-ᐱᕈᖅᐸᓪᓕᐊᔪᑦ) ᐃᑲᔪᐃᓂᕐᒧᑦ ᐊᕙᑎᓕᕆᓂᕐᒥᒃ ᖃᐅᔨᓴᐃᓂᕐᒥᒃ ᐊᒻᒪᓗ Type A ᐃᒪᕐᒧᑦ ᓚᐃᓵᓐᓯᒥᒃ ᐋᕿᒋᐊᖅᓯᓂᕐᒧᑦ ᑐᒃᓯᕋᐅᑎ. ᐊᓪᓚᒃᑯᑦ ᐱᐊᓂᓚᐅᖅᑐᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᓴᐃᓂᕐᒥᒃ ᐃᓕᑕᖅᓯᓂᕐᒧᑦ ᐊᕙᑎᒥᒃ ᐊᒻᒪᓗ ᐃᓅᖃᑎᒌᖕᓂᐅᔪᓂᒃ ᖃᓄᐃᖕᒐᓕᖅᑎᑦᑎᓂᕐᓂᒃ ᐱᓕᕆᐊᕐᒥᑦ ᐱᔪᓂᒃ. ᓂᕆᐅᒋᔭᐅᔪᖅ ᑭᖑᓪᓕᖅᐸᖕ ᐊᕙᑎᒥᒃ ᐊᒃᑐᖅᓯᓂᕐᒧᑦ ᑎᑎᖅᑲᖅ (FEIS)-ᒥᒃ ᐋᕿᒋᐊᖅᓯᓂᖅ ᐊᒻᒪᓗ Type A ᐃᒪᕐᒧᑦ ᓚᐃᓵᓐᓯᒥᒃ ᐋᕿᒋᐊᖅᓯᓂᖅ ᑐᓂᐅᑕᐅᓂᐊᕐᓂᖓᓄᑦ NWB-ᑯᓐᓄᑦ ᐊᒻᒪᓗ NIRB-ᑯᓐᓄᑦ ᔩᓂ 2016-ᒥᑦ, NPC-ᑯᑦ ᒪᓕᖕᒪᖕᒌᑕ ᖃᐅᔨᓂᕐᒧᑦ ᐃᓱᒪᓕᐅᕆᑎᓪᓗᒋᑦ. ᖃᓄᐃᖕᒐᓂᐅᔪᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᓇᓂᓯᔪᑦ ᐊᖏᕐᓗᐊᖏᑦᑎᐊᖅᑎᑦᑎᓂᕐᒥᑦ, Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᖅ, Whale Tail ᐅᓯᑲᑦᑕᖕᓂᕐᒧᑦ ᐊᑉᑯᑎ, ᐊᒻᒪᓗ ᐅᐃᒍᒋᐊᖅᓯᓂᖅ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐅᔭᕋᖕᓂᐊᕐᓂᖅ, ᐊᑯᓂᐅᔪᒥᒃ ᑕᑭᑎᒋᓂᖓᓄᑦ ᐊᖏᔪᒥᒃ ᐱᐅᖏᑦᑐᒥᒃ ᖃᓄᐃᖓᓕᖅᑎᑦᑎᓂᖃᔾᔭᖏᓐᓂᖓᓄᑦ ᓴᓇᔭᐅᔪᒪᔪᓄᑦ, ᐊᐅᓚᑦᓂᐅᔪᓄᑦ, ᐊᒻᒪᓗ ᐅᒃᑯᐊᖅᐸᓪᓕᐊᓂᕐᒧᑦ.

ᐊᓪᓚᒃᑯᑦ ᐱᓕᕆᐊᖃᓚᐅᖅᑐᑦ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᑐᕌᖓᔪᓂᒃ ᐱᔭᕆᐊᖃᖅᑐᑦ ᐊᖏᕐᓗᐊᖏᑦᑎᐊᖅᑎᑦᑎᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᐅᓂᒃᑳᓕᐅᕆᓂᕐᒧᑦ ᐊᕙᑎᐅᑉ ᖃᓄᐃᓕᐅᕐᓂᖓᓄᑦ ᒪᓕᒐᓄᑦ ᐱᔭᐅᔭᕆᐊᖃᖅᑐᓄᑦ ᐃᓗᐊᓂᑦ ᐊᐳᖅᑎᓈᖅᑐᒧᑦ ᐊᐅᓛᖅᑎᑦᑎᓂᕐᒧᑦ ᐱᔫᓇᖅᑎᑕᐅᓂᖏᓐᓂᑦ, ᐳᒥᑦᓄᑦ, ᓚᐃᓴᓐᓯᓄᑦ, ᐊᒻᒪᓗ ᐊᑐᖅᑐᐊᕐᓂᕐᒧᑦ ᐊᔾᔨᖃᖅᑐᓂᒃ ᒪᓕᒐᑎᒍᑦ ᐱᔭᕆᐊᖃᕐᓂᐅᔪᓄᑦ ᐊᑐᖅᑕᐅᔪᓄᑦ ᐱᖁᔭᕐᓄᑦ ᐊᒻᒪᓗ ᒪᓕᒐᕋᓛᓄᑦ ᓄᓇᕗᒻᒥᑦ. ᑕᐃᒪᐅᔪᒥᑦ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐅᔭᕋᖕᐊᓂᕝᕕᖕᒥᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐸᕐᓇᐅᑏᑦ ᐅᑉᓗᒥᒨᓕᖅᑐᖅᑕᐅᓚᐅᖅᑐᑦ ᐅᕙᓗᓐᓃᑦ ᐃᓚᓕᐅᑎᓯᒪᔪᑦ ᑎᑎᖅᑲᐃᑦ ᐃᓚᔭᐅᓚᐅᖅᑐᑦ ᑕᑯᒃᓴᐅᑎᓐᓂᕐᒧᑦ ᐱᓕᕆᐊᖅ ᐊᒻᒪᓗ ᑐᓂᐅᑕᐅᓂᐊᖅᑐᑦ ᐃᓚᒋᔭᐅᓗᓂ FEIS-ᒧᑦ ᐊᒻᒪᓗ ᐃᒪᕐᒧᑦ ᓚᐃᓵᓐᓯᒧᑦ ᐋᕿᒋᐊᕈᑎᓄᑦ ᔩᓂ 2016-ᒥᑦ. ᖃᓄᐃᓕᐅᕐᓂᖓᑕ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑏᑦ ᖃᐅᔨᒋᐊᖅᑕᐅᖃᑦᑕᕐᓂᐊᖅᑐᑦ ᖃᑯᑎᒃᑰᖓᔪᒃᑯᑦ ᐊᒻᒪᓗ ᖃᓄᐃᖕᒐᓂᐅᔪᑦ ᐅᖃᐅᓯᐅᓗᑎᒃ. ᐃᖕᒪᒃᑰᖓᔪᓂᒃ ᐱᔾᔪᑕᐅᔪᓂᒃ ᐊᔪᙱᓐᓂᓖᑦ ᐅᕙᓘᓐᓃᑦ ᖃᐅᔨᒋᐊᕆᐅᖃᑦᑕᖅᑐᑦ ᐃᓚᐅᑎᑕᐅᑐᐃᓐᓇᓕᐊᖃᖅᑐᑦ ᕿᒥᕈᓂᕐᒧᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᓂᒃ ᐱᔭᓕᐊᖃᑦᖓᕆᑕ. ᓇᓚᐅᑦᑎᓂᖅ ᐊᕙᑎᒥᒃ ᐊᒃᑐᖅᓯᓂᕐᒧᑦ ᓇᓚᐅᑦᑖᖅᑕᐅᔪᑦ ᐊᒻᒪᓗ ᐊᐅᑎᖃᕐᓂᖕᒋᑦ ᐊᖏᕐᓗᐊᖏᑦᑎᐊᖅᑎᑦᑎᓂᕐᒨᖕᒐᔪᑦ ᓇᓗᓇᐃᖅᑕᐅᓂᐊᖅᑐᑦ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᒃᑯᑦ ᐊᒻᒪᓗ ᐊᕐᕋᒍᑕᓖᖅ ᐅᓂᑉᑳᓕᐅᕆᓂᒃᑯᑦ. ᐊᔾᔨᐅᖏᑦᑐᓂᒃ ᐅᕙᓘᓐᓃᑦ ᓂᕆᐅᒋᔭᐅᖏᑦᑐᓂᒃ ᐊᖏᔪᒥᒃ ᐊᕙᑎᒧᑦ ᐊᒃᑐᖅᓯᓂᐅᔪᓂᒃ ᖃᐅᔨᔭᐅᒃᐸᑕ, ᐋᕿᒋᐊᖅᓯᓂᕐᒧᑦ ᖃᓄᐃᓕᐅᕐᓂᕐᒥ ᐋᕿᒃᓯᓂᐊᖅᑐᑦ. ᐊᑐᓕᖅᑎᓐᓂᒃᑯᑦ ᐊᐅᓚᑦᑎᕙᓪᓕᐊᓂᒃᑯᑦ, ᑕᐃᒪᐅᔪᖅ ᐊᖏᕐᓗᐊᖏᑦᑎᐊᖅᑎᑦᑎᓂᕐᒨᖕᒐᔪᑦ ᐋᕿᒋᐊᖅᑕᐅᓂᐊᖅᑐᑦ ᐅᕙᓘᓐᓃᑦ ᓄᑖᒥᒃ ᐊᖏᕐᓗᐊᖏᑦᑎᐊᖅᑎᑦᑎᓂᕐᒨᖕᒐᔪᓂᒃ ᐊᑐᓕᖅᑎᑦᑎᓂᐊᖅᑐᑦ ᐱᔭᕆᐊᖃᖅᐸᑕ. ᓯᓚᑖᓂᑦ ᐅᓂᒃᑳᓕᐅᕆᓂᖅ ᐱᐊᓂᒃᑕᐅᓂᐊᖅᑐᖅ, ᐱᔭᕆᐊᖃᕐᓂᖓᑐᑦ.

ᐊᑐᓗᐊᖅᑐᖅ ᑐᕌᓚᐅᔪᖅ ᐊᓪᓚᒃᑯᑦ ᐃᓄᓗᒃᑖᓂᒃ ᐅᖃᖃᑦᑕᕐᓂᖓᓐᓄᑦ ᐊᒻᒪᓗ ᐃᓚᐅᖃᑕᐅᓂᖓᓐᓄᑦ ᑐᕌᖓᔪᖅ ᑕᐃᒪᐅᔪᖅ ᑲᒻᐸᓂᐅᔪᖅ ᐱᑎᓐᓂᕐᒧᑦ "ᐃᓄᓕᕆᓂᕐᒧᑦ ᓚᐃᓴᓐᓯ ᐊᐅᓚᖅᑎᑦᑎᓂᕐᒧᑦ", ᒥᐊᓂᕆᐸᓗᒍ ᐃᑲᔪᖅᑕᐅᓂᖏᓐᓄᑦ ᐊᒥᓲᓂᖅᓴᐃᑦ ᐃᓄᐃᑦ ᐊᒃᑐᖅᑕᐅᓯᒪᑐᐃᓐᓇᓕᐊᖃᖅᑐᓂᑦ ᓄᓇᓕᖕᓂᑦ. ᑕᐃᒪᙵᑦ ᐊᐅᓵᓕᒪᑦ ᐊᐳᖅᑎᓈᖅᑐᖅ ᐅᔭᕋᖕᓂᐊᖅᑐᓕᕆᔾᔪᑦ, ᐊᓪᓚᒃᑯᑦ ᐃᓄᓗᒃᑖᓂᒃ ᐅᖃᖃᑎᖃᖃᑦᑕᖅᓯᒪᔪᑦ ᐊᕐᕋᒍᑕᓖᒃᑯᑦ ᑲᑎᒪᑎᑦᑎᓂᒃᑯᑦ ᓄᓇᓕᖕᒥᐅᓂᒃ ᐊᒻᒪᓗ ᓄᓇᓕᖕᒥᑦ ᐱᖃᖃᑕᐅᔪᓂᒃ ᑭᕙᓪᓕᕐᒥᑦ, ᒪᓕᒐᓕᕆᓂᕐᒧᑦ ᑲᒪᔨᓂᒃ ᐊᒻᒪᓗ ᓄᓇᓕᖕᒥᑦ ᐱᓕᕆᔨᐅᔪᓂᒃ ᐱᐅᓂᖅᓯᒥᒃ ᑐᑭᓯᐊᓂᖃᓕᖅᑎᑎᔪᖅ ᐱᔾᔪᓇᐅᑎᖕᒋᓐᓂᒃ, ᐱᔪᒪᓂᖃᕐᓂᕆᔭᖕᒋᓐᓂᒃ, ᐃᒃᐱᒋᓂᕆᔭᖕᒋᓐᓂᒃ, ᐊᑐᕈᒪᓂᖃᕐᕕᒋᔭᖕᒋᓐᓂᒃ, ᐊᒻᒪᓗ ᐃᓱᒫᓘᑎᒋᔭᖕᒋᓐᓂᒃ ᐊᒃᑐᖅᑕᐅᓯᒪᑐᐃᓐᓇᓕᐊᖃᖅᑐᓂᒃ ᐱᖃᖃᑕᐅᔪᓂᒃ, ᐱᔾᔪᑎᖃᖅᖢᑎᒃ ᓄᓇᓕᖕᒥᑦ ᐱᔭᐅᔪᒪᔪᓂᒃ, ᖃᒪᓂᑦᑐᐊᕐᒥᑦ. ᐅᖃᖃᑎᖃᖃᑦᑕᕐᓂᑯᑦ ᐊᓪᓚᒃᑯᑦ ᐋᕿᒃᓯᓚᐅᖅᑐᑦ ᐊᐅᓚᓯᕐᓂᕐᒥᒃ ᐱᖁᔨᒃᑯᑦ ᐃᓕᑕᖅᓯᔪᒥᒃ ᐊᒻᒪᓗ ᐃᒃᐱᒋᔭᖅᑐᒥᒃ ᑕᒪᒃᑯᓂᙵᑦ ᐱᔭᐅᔪᒪᔪᓂᒃ ᐸᕐᓇᐃᓂᕐᒥᑦ ᐊᒻᒪᓗ ᐊᑐᕐᓂᕐᒧᑦ ᐱᕙᓪᓕᐊᓂᐅᔪᓂᒃ. ᐊᓪᓚᒃᑯᑦ ᐅᖃᖃᑎᖃᓚᐅᖅᑐᑦ ᓄᓇᓕᖕᒥᑦ ᐱᖃᖃᑕᐅᔪᓂᒃ ᐊᒻᒪᓗ ᒪᓕᒋᓕᕆᔨᐅᔪᓂᒃ ᒦᓐᓇᐅᔪᖅ ᐊᒪᕈᖅ-ᒥᑦ ᕿᓂᖅᓴᐃᓂᐅᔪᓂᒃ ᐊᒻᒪᓗ ᑐᒃᓯᕋᐅᑕᐅᔪᒥᒃ Whale Tail ᐃᓗᑦᑐᖅᓯᒪᔪᒥᑦ, ᐅᐃᒍᒋᐊᖅᓯᓂᐅᑉᓗᓂ ᐊᐳᖅᑎᓈᖅᑐᒥᑦ ᐅᔭᕋᖕᓂᐊᕐᕕᖕᒧᑦ.

ᐅᖃᖃᑎᖃᕐᓂᖅ ᐊᒻᒪᓗ ᒪᓕᒐᓕᕆᓂᕐᒧᑦ ᐃᓚᐅᖃᑕᐅᓂᕐᒧᑦ ᐅᖃᓪᓗᓇᒃᓴᕐᓂᑦ ᐃᓱᒪᒋᔭᐅᓚᐅᕐᒥᔪᑦ ᐃᓕᒋᔭᐅᓗᓂ ᐊᓯᖕᖠᖕᒐᒍᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ. ᐊᓯᖕᖠᖕᒐᒎᕐᓂᐅᔪᑦ ᐋᕿᒃᓯᔪᑦ ᑕᒪᐃᓐᓅᖕᒐᔪᒥᒃ ᐱᓕᕆᐊᕐᒥᑦ ᐃᓚᐅᔪᑦ ᐱᓕᕆᐊᖅ ᐱᒋᐊᕐᓕ/ᐊᔪᖅᑎᓪᓗᒍ-ᒥᒃ ᐃᓱᒪᓕᐅᕆᓂᖅ, ᐅᔭᖅᑲᐃᑦ, ᐅᔭᕋᖕᓂᐊᕐᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᑦ, ᐊᒻᒪᓗ ᐱᓕᐅᕆᕙᓪᓕᐊᕆᓂᕐᒧᑦ ᓈᓴᐅᑎ, ᐱᓕᕆᐊᖑᔪᑦ

ᐅᔭᕋᖕᓂᐊᖅᑕᐅᔪᓄᑦ ᑐᖅᑯᖅᑕᐅᓯᒪᓂᖏᑦ ᐊᒻᒪᓗ ᕿᒪᒃᑎᑦᑐᓄᑦ ᑐᖅᑯᖅᓯᓯᒪᕝᕕᒃ, ᐅᖓᑕᐅᑦᑎᔪᑦ ᐊᒻᒪᓗ ᐊᒃᑖᖅᑕᐅᔪᑦ ᐅᔭᖅᑲᐃᑦ ᐃᒋᑕᐅᔪᑦ, ᐃᒪᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᖅ, ᐃᖏᕐᕋᔭᖕᓂᕐᒧᑦ ᐱᔪᖕᓇᕐᓂᖅ ᐊᒻᒪᓗ ᐃᓗᑦᑐᖅᓯᒪᔪᓕᐅᕆᓂᖅ, ᐊᒻᒪᓗ ᐱᕐᑯᑎᒋᔭᐅᔪᓄᑦ ᐃᑲᔪᖅᑕᐅᓂᖅ.

ᐊᒡᓃᑯᒃᑯᑦ ᐊᖓᔪᒃᓖᖅᐸ̇ᖑᔪᑦ ᐅᔭᕋᖕᓂᐊᖅᑐᓕᕆᓂᕐᒧᑦ ᑲᒻᐸᓂᐅᔪᑦ ᖃᐅᔨᑎᑦᑎᓂᖃᖅᓱᑎᒃ ᐱᓕᕆᓂᑯᖏᓐᓂᒃ ᑲᔪᓯᓂᖃᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᐱᐊᓂᒍᖕᓇᕐᓂᕐᒥᒃ ᓄᓇᕗᒻᒥᑦ. ᐱᐊᓂᒃᓯᒪᓂᖓᑦ ᐊᑐᖅᑐᖅ ᕿᓂᖅᓴᐃᖃᑦᑕᖅᓯᒪᓂᕆᔭᖏᓐᓂᒃ ᐊᒻᒪᓗ ᐃᓕᑕᖅᓯᒪᓂᕐᒧᑦ ᐱᑕᖃᕈᖕᓇᕐᓂᖓᓂᒃ ᐃᓂᐅᔪᑦ ᕿᓂᖅᓴᐃᕝᕕᒋᔭᖏᑦ. ᐊᒡᓃᑯᒃᑯᑦ ᐱᓂᐊᕐᓂᖃᖅᑐᑦ ᓴᖅᑭᑦᑎᓗᑎᒃ ᐃᒃᐱᖕᓇᖅᑐᒥᒃ ᐱᖃᖃᑕᐅᔪᕐᑯᑎᖏᓐᓄᑦ ᐊᐅᐸᕐᓂᒃᑯᑦ ᐊᑦᑕᓇᖅᑐᖃᙱᑦᑐᒥᒃ, ᐃᓅᖃᑎᒌᖕᓂᒃᑯᑦ, ᐊᒻᒪᓗ ᐊᕙᑎᒥᒃ ᐱᔭᒃᓴᐅᑎᖃᕐᓂᕐᒨᖓᔪᒃᑯᑦ ᑐᓂᓯᓂᖃᕐᓗᑎᒡᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᖓᑦᑕ ᐱᓕᕆᔩᖏᓐᓄᑦ, ᖃᑕᙳᑎᖏᑦ, ᐊᒻᒪᓗ ᓄᓇᓖᑦ ᐊᐅᐸᕐᓂᖃᕐᕕᒋᔭᖏᓐᓂᒃ. ᑖᑉᑯᐊ ᐱᓂᐊᕐᓃᑦ ᐊᑐᖅᑐᑦ ᐊᒡᓃᑯᒃᑯᑦ ᓱᕐᑯᓯᐊᖏᓐᓂᕐᒧᑦ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᐊᑐᐊᓚᖓᓄᑦ, ᓴᖅᑭᑕᐅᔪᑦ ᐊᕐᕌᒍᑕᒫᖅ ᓱᕐᑯᓯᐊᖏᓐᓂᕐᒧᑦ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᐅᓂᑉᑳᖅ, ᐊᒻᒪᓗ ᐅᓂᑉᑳᓕᐊᖑᖃᑦᑕᖅᑐᑦ ᐊᕐᕌᒍᑕᒫᑦ ᑭᕙᓪᓕᕐᒥᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᐅᖃᑎᒋᒃᑯᓄᑦ, ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓄᑦ, ᐊᒻᒪᓗ ᐊᕙᑎᓕᕆᔨᒃᑯᓄᑦ.

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Appendix 1-E
Multiple Account Analysis

MEADOWBANK MINE – WHALE TAIL PIT FACT SHEET

Location

- Meadowbank Mine site located in the Kivalliq Region of Nunavut at approximately 70 km north of the community of Baker Lake.
- Amaruq property is located approximately 50 km northwest of the Meadowbank Mine site.

Life of Mine

- Meadowbank Mine began construction in 2008 and has been in commercial operation since 2009.
- Whale Tail Pit is a satellite deposit located on the Amaruq property to be mined over a three to four year period. It will take 2 years to construct the facilities necessary to support mining and once mining has concluded, Agnico Eagle proposes to actively reclaim the facilities over a 3 year period. Post-closure monitoring is planned until 2038.

Production

- Open pit mining will occur in only one pit, Whale Tail Pit.
- 8,279,144 Mt of ore will be mined.
- The total gold resource for the Whale Tail Pit will extend the Life of Mine of Meadowbank.

Processing

- Ore processing, handling, treatment, and disposal will continue at the Meadowbank Mill.
- Tailings will be stored in the existing approved tailings storage facility at Meadowbank Mine.

Transport

- Transportation to site (marine barging, airstrip, and transportation along the All Weather Access Road), housing, and handling will remain the same as authorized under the current Project Certificate for Meadowbank Mine.

Roads

- The Project is designed to operate as a satellite of the main Meadowbank facilities, and will be accessed by the existing 72 km exploration access road, which will be upgraded to accommodate haul trucks and increased traffic.
- Meadowbank All Weather Access Road will continue to be used.

Re- Supply

- Marine supply via open water seasonal shipping to Baker Lake and transported via Meadowbank All Weather Access Road and haul road to site.

Environment

- Baseline studies completed including terrestrial, atmospheric, freshwater, and cultural environments.

Socio-Economics

- Construction employment up to 500 person per year, during dewatering. Agnico Eagle capital investment estimated at approximately 233 M dollars.
- Operational employment on average up to 931 persons per year over three to four year period (rotational work basis with approximately 50% on site at any given point in time).

Traditional Use

- Inuit Qaujimajatuqangit information collected through series of workshops conducted in 2005, 2014, and 2016.
- Inuit Qaujimajatuqangit integrated into the environmental impact statement and provided input on development of mitigation and monitoring plans.

Closure and Reclamation

- Objective of closure is a physically and chemically stable project footprint for the long-term protection of the environment and people of Nunavut.
- Most closure activities will occur over a 3 year period with passive closure to be maintained until all water management infrastructure is breached/removed after which a period of post-closure will be observed to confirm physical and chemical stability.

LIST OF ACRONYMS AND UNITS OF MEASURE

Acronym	Definition
Agnico Eagle	Agnico Eagle Mines Limited – Meadowbank Division
ARD	Acid Rock Deposition
AWAR	All Weather Access Road
DFO	Fisheries and Oceans Canada
FEIS	Final Environmental Impact Statement
IIBA	Inuit Impact and Benefit Agreement
INAC	Indigenous and Northern Affairs Canada
IOL	Inuit Owned Land
KIA	Kivalliq Inuit Association
LOM	Life of Mine
MAA	Multiple Accounts Analysis
NIRB	Nunavut Impact Review Board
NLCA	Nunavut Land Claims Agreement
NPC	Nunavut Planning Commission
NTI	Nunavut Tunngavik Incorporated
NWB	Nunavut Water Board
NWNSRTA	*Nunavut Waters and Nunavut Surface Rights Tribunal Act*
Project	Whale Tail Pit and haul road
RMMS	Responsible Mining Management System
TSF	Tailings Storage Facility
TSM	Towards Sustainable Mining
VC	Valued Component
WRSF	Waste Rock Storage Facility

Unit of Measure	Definition
km	Kilometre
km^2	square kilometre
m	Metre
m^2	square metre
m^3/s	cubic metre per second
m^3	cubic metre
m^3/day	cubic metre per day
m^3/year	cubic metre per year
Mt	million tonne
t/day	tonne per day
V	Volt

1.0 REGULATORY REGIME AND PROJECT DESCRIPTION

1.1 Introduction

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is proposing to develop Whale Tail Pit, a satellite deposit located on the Amaruq property, to continue mine operations and milling at Meadowbank Mine. The Amaruq property is a 408 square kilometre (km^2) site located on Inuit Owned Land (IOL) approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut (Figure 1.1-1). The right to explore and extract minerals from the property was acquired by Agnico Eagle in April 2013 subject to a mineral exploration agreement with Nunavut Tunngavik Incorporated (NTI).

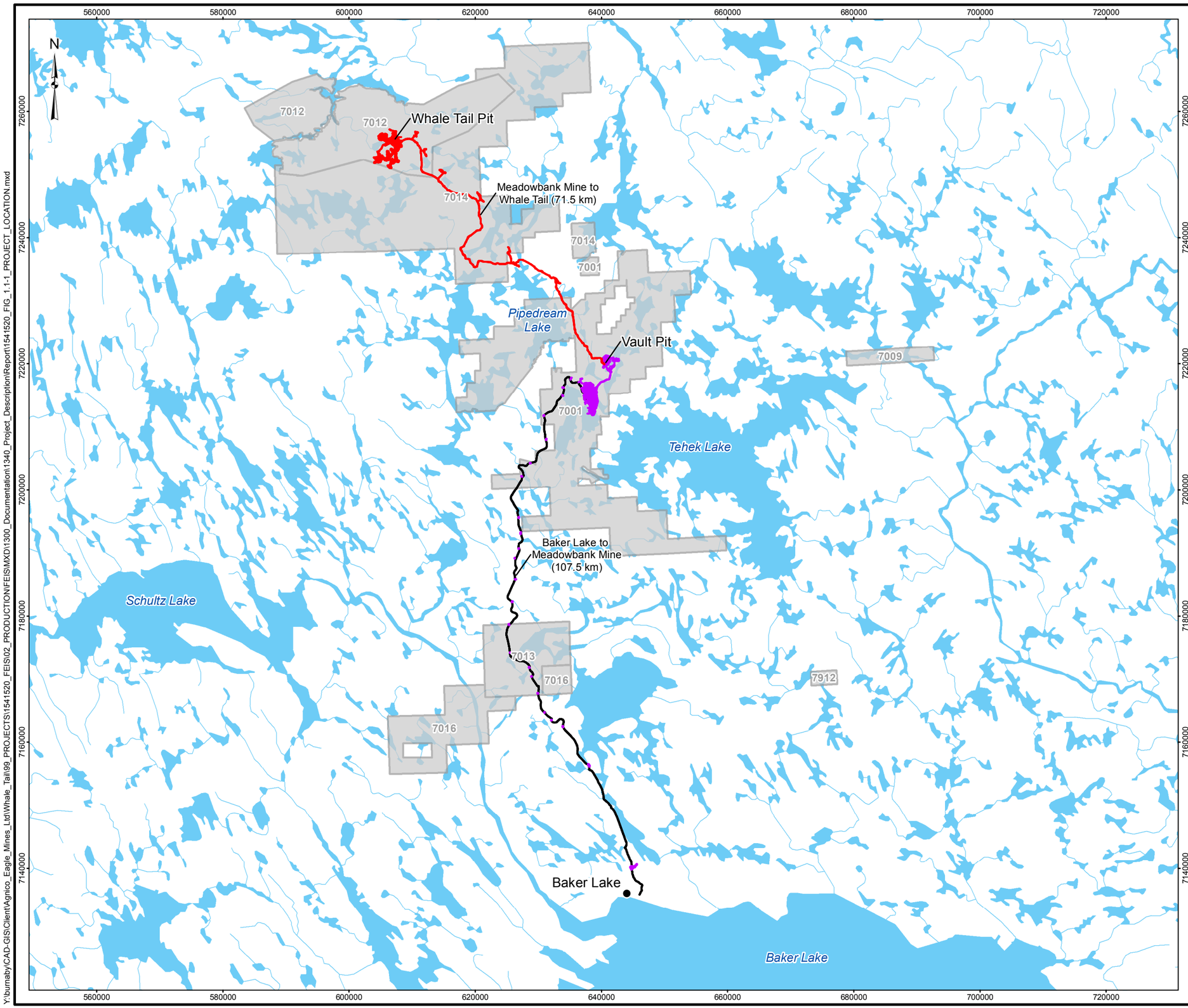
Meadowbank Mine is an approved mining operation and Agnico Eagle is looking to extend the life of the mine by constructing and operating Whale Tail Pit and haul road (referred to in this document as the Project). As an amendment to the existing operations at Meadowbank Mine, it is subject to an environmental review established by Article 12, Part 5 of the *Nunavut Land Claims Agreement* (NLCA). Baseline data have been collected in support of the Environmental Review to document existing conditions and to provide the foundation for a qualitative and quantitative assessment of project operations and the extension of the mine development, to be evaluated in the Final Environmental Impact Statement (FEIS) for the Project.

Agnico Eagle is seeking approval to extend Meadowbank Mine to include development of resources from Whale Tail Pit and requests the Nunavut Impact Review Board (NIRB) reconsider Agnico Eagle deems this submission as an amendment to the activities previously assessed and approved by NIRB.

Concurrent with the reconsideration of the Project Certificate by the NIRB, Agnico Eagle is seeking an amendment to the Meadowbank Mine Type A Water Licence (No. 2AM-MEA1525) to include mining of Whale Tail Pit and construction and operation of associated infrastructure from the Nunavut Water Board (NWB) (refer to Volume 2).

In support of the Project Certificate reconsideration and Type A Water Licence Amendment, Agnico Eagle has provided this stand-alone FEIS Amendment document to guide the review process, and reintroduce NIRB to the FEIS (Cumberland in 2005). The June 2016 submission includes a main volume, the project description, impact assessment, monitoring and mitigation plans, and Type A Water Licence Amendment package related to proposed Project development. Existing Meadowbank Mine management and monitoring plans have been updated or addendums have been added to reflect the Project and will be submitted as part of the FEIS and Water Licence Amendments in June 2016. The Project Description will not change for the June 2016 FEIS Amendment submission.

As the economics of the Meadowbank Mine have improved, Agnico Eagle's Meadowbank Mine Division's priority in recent years has been to optimize mine operations, specifically engineers have been considering the feasibility of expanding operations to extend the life of mine (LOM) at Meadowbank. Extending the life of a mine through development of additional ore deposits is a continuous process. Consistent with the Project Certificate Item 29, Agnico Eagle is herein "reporting to NIRB if and when [Agnico Eagle] develops plans for an expansion of the Meadowbank Gold Mine." Exploration is on-going with the objective of identifying additional deposits or ore bodies feasible for development, such as Whale Tail.



REFERENCE

1. HAUL ROAD OBTAINED FROM AGNICO EAGLE MINES LIMITED. 2015-10-14 FROM 6103-117-230-200_R0.dwg
2. CLAIM BOUNDARIES OBTAINED FROM AGNICO EAGLE MINES LIMITED.
3. WATERCOURSE AND WATERBODY DATA OBTAINED FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
4. INSET MAP DATA OBTAINED FROM ESRI.

DATUM: NAD 83 CSRS PROJECTION: UTM ZONE 14

12 0 12
KILOMETRES

PROJECT
AGNICO EAGLE

AGNICO EAGLE MINES LIMITED:
MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

TITLE

PROJECT LOCATION AND CLAIM BOUNDARIES

Golder Associates

PROJECT		1541520	FILE No.	
DESIGN	JR	24 Mar. 2016	SCALE AS SHOWN	REV. 0
GIS	CDB	24 Mar. 2016		
CHECK	JR	09 May 2016	**FIGURE 1.1-1**	
REVIEW	LY	09 May 2016		

Y:\burnaby\CAD-GIS\Client\Agnico_Eagle_Mines_Ltd\Whale_Tail\99_PROJECTS\1541520_FEIS\02_PRODUCTION\FEIS\MXD\1300_Documentation\1340_Project_Description\Report\1541520_FIG_1.1-1_PROJECT_LOCATION.mxd

1.1.1 Project Definition

The Meadowbank Mine represents construction, operations, maintenance, reclamation, closure, and monitoring of an open pit gold mine in the Kivalliq Region of Nunavut. Agnico Eagle constructed and has operated the Meadowbank Mine since 2009.

Table 1.1-1 summarizes the Project scoped defined in the FEIS (Cumberland 2005) comparative to revised scope associated with the development of the proposed Project.

Agnico Eagle understands that in accordance with Section 13.5.5. of the NLCA or Section 39(2) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA) the NWB is not precluded from issuing interim, short-term approvals for water uses related to [ ] developmental work for a proposal under development impact review.

One of Agnico Eagle goals is to keep Meadowbank staff employed without a stoppage pending approval and development of Whale Tail and or other Agnico Eagle projects under development in the Kivalliq Region.

Agnico Eagle has conducted environmental baseline studies in the Project area, the results of which have been integrated into the current Project design. As part of the original environmental review process, valued components (VCs) for Meadowbank Mine were identified in consultation with regulatory authorities and members of the local community.

The FEIS Amendment is consistent with the FEIS (Cumberland 2005), and Agnico Eagle has applied the same VC's to the current Project. They include air quality, noise, permafrost, vegetation, wildlife, birds and bird habitat, surface water quality, surface water quantity, fish and fish habitat, archaeology, traditional land use, and socio-economic VCs including employment, training, business opportunities, community wellness, infrastructure, and social services (refer to Volume 3, Section 3.2).

Agnico Eagle will continue to implement a project environmental management system consistent with operations at Meadowbank Mine. The system consists of four key elements: an integrated environmental management plan, a formal environmental awareness program, reporting and transparency with regulatory agencies and the Kivalliq Inuit Association (KIA), and an on-going environmental monitoring program. Refer to Volume 8 for detailed information on Agnico Eagle's mitigation and monitoring plans.

Agnico Eagle believes the scope of the Project defined in the FEIS (Cumberland 2005) has not changed significantly with the development of the Project.

Table 1.1-1: Definition of Scope

	FEIS (Cumberland 2005) (consistent with Section 2.0 of the NIRB Guidelines 2004)	Revised Scope – FEIS Amendment
Location/Land Tenure	[Meadowbank Mine] is located on Inuit Owned Land approximately 70 km north of Hamlet of Baker Lake.	The Amaruq property located approximately 150 km north of the Hamlet of Baker Lake and approximately 50 km northwest of the Meadowbank Mine. Project Development Area boundaries expanded.
Resource	The total gold resource at Meadowbank Mine was estimated to be 3.08 million ounces.	The total gold resource for the Whale Tail Pit will extend the LOM of Meadowbank for three to four years.
Life of Mine	This resource will be extracted during the roughly 9 to 10 year operational lifespan of the mine. Mine construction and pre-stripping is scheduled to begin in March 2005 and mine/processing in December 2006. Production will be split between open pit mining (87%) and underground mining (13%).	This resource will be extracted over approximately three to four year period. Construction and pre-stripping is scheduled to begin in 2018 and mining in October 2018 with mill feed expected to begin in third quarter of 2019. Dewatering is currently scheduled to occur between the first and third quarters of 2019. Infrastructure/activities at Meadowbank Mine that support the Project will be extended for another three years and will remain the same as authorized under the current Project Certificate.
Site Access	The [Meadowbank Mine] is designed as a “fly in/fly out” operation with an airstrip providing year round access to the site. A 92 km long winter haulage route from Baker Lake to the Project will provide seasonal access and re-supply, while permanent, on-site mine access roads will connect the open pit areas to site infrastructure. 110 km All Weather Access road from Baker Lake to Meadowbank for shipment of supplies; amended in 2009 to include access for ATVs and hunters. The site is not publically accessible beyond km 85.	Existing airstrip used during exploration phase will be reclaimed. The Project is designed to operate as a satellite of the main Meadowbank facilities, and will be accessed by the existing exploration access road, which will upgraded to accommodate haul trucks and increased traffic. Transportation to site (marine barging, airstrip, and transportation along the all-weather access road), housing and handling will remain the same as authorized under the current Project Certificate.
Laydown Facilities and Baker Lake Marshalling Area	All construction and operating supplies for the [Meadowbank Mine] will be transported on ocean freight systems to facilities constructed at the Hamlet of Baker Lake, which will include barge unloading facilities, laydown area, and tank area.	Existing Meadowbank facilities will be used. A small laydown area will be constructed on the Whale Tail Pit site.

Table 1.1-1: Definition of Scope (continued)

	FEIS (Cumberland 2005) (consistent with Section 2.0 of the NIRB Guidelines 2004)	Revised Scope – FEIS Amendment
On-site Facilities	On-site facilities will include a mill, power plant, maintenance facilities, tank farm, fuel storage, water treatment plant, sewage treatment plant, airstrip, and accommodation for 250 people.	Construction of on-site facilities on the Whale Tail Pit site: power plant, maintenance facilities, tank farm, water treatment plant, water management infrastructure, sewage treatment plant, heli-pad, and accommodation for 210 people at the main camp. Continued use of the existing Amaruq exploration camp on the property exploration activity. All milling will be done at Meadowbank Mine at a mill rate consistent or lower than the current mill rate (9,000 to 12,000 tonnes per day). Power generation for the Mill and camp at Meadowbank will remain the same as authorized under the current Project Certificate.
Mine Infrastructure	Open pit mining will occur in three separate areas and water retention dykes will be constructed from mined rock at two of these pits to allow for the mining of ore beneath shallow lakes. A low permeability vertical slurry wall will be constructed in the centre of the dykes to minimize seepage from surrounding lakes into the work area. Construction of the dykes will use floating silt curtains to minimize the release of suspended solids into surrounding lake waters.	Open pit mining for the Project is planned to occur in one area, Whale Tail Pit. Flow of surface water into the pit will be limited through construction of two dikes. Whale Tail Dike will be constructed to divide the pit area from the southern portion of Whale Tail Lake, and Mammoth Dike is required for dewatering the pit area and to limit the water flow from Mammoth Lake into the pit during important flood events. To limit the impact of dike construction, turbidity barriers will be installed. Only non-potentially acid generating (NPAG) material will be used for the construction of infrastructure. Water tight rockfill dikes with a geomembrane will be constructed. As needed, sodium bentonite will be mixed in place with aggregate or in a slurry to reduce the permeability of the product.

Table 1.1-1: Definition of Scope (continued)

	FEIS (Cumberland 2005) (consistent with Section 2.0 of the NIRB Guidelines 2004)	Revised Scope – FEIS Amendment
Ore Processing	Ore will be processed according to one of two options involving cyanide leaching, cyanide destruction, and refining dore bars. Details will be provided on the destruction of cyanide to rationalize the chosen option. The combined leach residue slurry will be treated with an air/SO_2 process to detoxify the free cyanide in the tailings stream.	Ore processing, handling, treatment, and disposal will continue at the Meadowbank Mill and tailings will be stored in the footprint of the existing approved tailings storage facility consistent with the current Project Certificate.
Waste Rock	Waste rock will be placed in tailings impoundments and waste rock storage piles. A classification system will be used to identify both PAG and metal leaching rock, and PAG mine rock will be stored in designated storage areas designed for long-term stability. Acidic run-off will be appropriately handled.	Waste rock and overburden generated at Whale Tail will be placed in the Whale Tail Waste Rock Storage Facility. Consistent with Meadowbank a classification system will be used to identify and safely store NPAG and PAG (metal leaching rock). PAG mine rock will be stored in the designated storage areas designed for long-term stability. Run-off will be appropriately handled.
Tailings	The treated tailings will either be disposed under a minimum cover in the Second Portage Lake impoundment area.	No tailings to be treated or disposed of on the Whale Tail Pit site. The existing tailings facility at Meadowbank Mine will continue to be used for tailings disposal. All tailings treatment and disposal will remain consistent with the current Project Certificate.
Freshwater	The freshwater supply for the mine and camp will be pumped from the Third Portage Lake.	The freshwater and potable water supply for the Whale Tail Camp will be pumped from Nemo Lake during most of construction and all of operations and treated at the on-site water treatment plant. Freshwater and potable water will be required from Whale Tail Lake, for construction and closure. Water supply for milling will continue to be sourced in the reclaim pond located near the Meadowbank Mill and freshwater will continue to be taken from Third Portage Lake as approved by the Nunavut Water Board.
Process Water	Mine process water will be primarily reclaimed from the tailings pond; treated sewage will be discharged to the tailings pond.	Mine process water reclamation will remain the same as authorized under the current Project Certificate.
Water Management	Site contact water will be collected in the Tailings Storage Facilities North Cell, the Vault Attenuation Pond or the Stormwater Management Pond. Non-contact water will be diverted from the site through a mix of	Water management infrastructure at Meadowbank Mine tailings facility will remain the same as authorized under the current Project Certificate. Construction of the Whale Tail Pit Attenuation Pond and related infrastructure.

Table 1.1-1: Definition of Scope (continued)

	FEIS (Cumberland 2005) (consistent with Section 2.0 of the NIRB Guidelines 2004)	Revised Scope – FEIS Amendment
	berms and ditches. Dewatered flows from Second Portage Lake will be pumped to Third Portage Lake to create Second Portage Pit while water from Vault Lake will be pumped to Wally Lake to create Vault Pit. Once the pits are operational, dewatering flow will be pumped to attenuation ponds.	Construction of a series of dewatering and diversion dikes for water management of Whale Tail Pit. At the Whale Tail Pit property, contact water will be directed to the Whale Tail Attenuation Pond. Site contact water will be discharged to the Whale Tail Attenuation Pond. Sewage at Whale Tail Pit will be treated using a treatment system similar to the system used at Meadowbank Mine. Treated sewage effluent will be discharged to the Whale Tail Attenuation Pond and discharged with other site contact water. Effluent from the Whale Tail Attenuation Pond will be treated and discharged to Mammoth Lake. Non-contact water will be diverted from site through channels and dikes. Dewatered flows from Whale Tail Lake (North Basin) will either be pumped to Whale Tail Lake (South Basin) or discharged to Mammoth Lake through a diffuser. Any water requiring treatment will be pumped to the water treatment plant prior to discharge through the diffuser in Mammoth Lake. Raising of the water level of Whale Tail Lake (South Basin) to discharge into Mammoth Lake through a southwest diversion channel. Refilling of Whale Tail Lake (North Basin).
Fuel and Hazardous Wastes	[no mention in the FEIS[a]]	A Bulk Fuel Storage Facility will be constructed on the Whale Tail Pit site. All hazardous waste will be hauled to Meadowbank and disposal will remain the same as authorized under the current Project Certificate. Use, transportation, handling and storage of fuel, hazardous materials, concrete, and aggregates will remain the same as authorized under the current Project Certificate.

Table 1.1-1: Definition of Scope (continued)

	FEIS (Cumberland 2005) (consistent with Section 2.0 of the NIRB Guidelines 2004)	Revised Scope – FEIS Amendment
Closure	Upon conclusion of activities, [Agnico Eagle] plans to fully decommission the mine by sealing the underground mine facilities, removing the mill and ancillary buildings, recontouring disturbed areas and reclaiming the vegetation.	Closure and reclamation activities at Meadowbank Mine will remain the same as authorized under the current Project Certificate. However, closure of the Meadowbank Mill, maintenance shop, powerhouse, and camp will be delayed by three years. The Whale Tail site will be closed and reclaimed in a manner consistent with the FEIS[a] and as recommended under the current Project Certificate. Water management at closure for Whale Tail Lake will require flooding of Whale Tail Pit, refilling of Whale Tail Lake (North Basin), breaching of Northeast, Mammoth, and Whale Tail dikes, and decommissioning of North, East, and South Whale Tail diversion channels. The open pit will be filled with natural runoff and water pumped from Whale Tail Lake (South Basin). Post-closure the Whale Tail Waste Rock Storage Facility dike will be breached.
Employment	Meadowbank's operational phase workforce requirement is approximately 370 at the Meadowbank Mine site itself.	The total work force employed by Agnico Eagle will increase during construction and operations of the Project. The current workforce located at Meadowbank Mine for the operational phase will remain similar for the Whale Tail Pit development and with employees stationed at Meadowbank camp for milling and at Whale Tail Pit for mining of the satellite pit.

[a] Cumberland (2005).

[ ] = used to denote when information is changed from the Cumberland 2005 FEIS; PAG = potentially acid generating.

1.1.2 The Proponent

The Amaruq property is owned and managed by Agnico Eagle Mines Limited (NYSE:AEM, TSX:AEM), a Canadian publicly traded mining company listed on the Toronto and New York Stock Exchange, trading symbol AEM, with head offices in Toronto, Ontario.

Agnico Eagle is a senior Canadian gold mining company that has produced precious metals since 1957. Its nine mines are located in Canada, Finland, and Mexico, with exploration and development activities in each of these regions, as well as in the United States. Agnico Eagle has been exploring for minerals in Canada since 1953 and has been active in the Kivalliq Region since 1990. Agnico Eagle owns and operates Meadowbank Mine, which is located 70 km directly north of Baker Lake and approximately 50 km southeast of the Amaruq property. In addition, Agnico Eagle owns mineral exploration and production rights to the Meliadine Gold Project, which is located approximately 25 km north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet.

Agnico Eagle is a senior mining company with a proven reputation for sustainability and economic success in Nunavut. Its' success is based on grass roots exploration and recognizing the potential in the areas it explores like the North. Key contacts within Agnico Eagle for the Project are provided in Table 1.1-2. A summary of Agnico Eagle past performance is provided in Appendix 1-A and is available on-line at: 2014 Audited Financial Statements.

Table 1.1-2: Agnico Eagle Key Contacts

Agnico Eagle – Meadowbank Division:	Agnico Eagles Mines Limited CP 87, 765 Chemin de la mine Goldex Val-d'Or (Qc) J9P 4N9 Ph. 819 -874-5980
General Manager:	Bertin Paradis, General Manager – Meadowbank Division Agnico Eagle Mines Limited 93, Arseneault, Suite 202 Val d'Or, QC, Canada, J9P 0E9 T: 819-759-3555 Ext. 6725 M: 819.355.9348 bertin.paradis@agnicoeagle.com
Manager of Regulatory Affairs:	Stephane Robert Baker Lake, Nunavut, Canada, X0C 0A0 Ph : 819-759-3555 (ext.5188) M : 819-763-0229 Email : stephane.robert@agnicoeagle.com
Environmental Manager:	Ryan Vanengen, Environment Superintendent – Permitting and Regulatory Affairs Baker Lake, Nunavut, Canada, X0C 0A0 M: 819-651-2974 Email: ryan.vanengen@agnicoeagle.com
Environmental Superintendent	Jamie Quesnel, Environment Superintendent – Nunavut Operations Baker Lake, Nunavut, Canada, X0C 0A0 Ph : 819-759-3555 (ext.6838) Email: Jamie.quesnel@agnicoeagle.com

Agnico Eagle has maintained strong relationships with the NIRB, NWB, and regulators on their projects, most notably with the recent approval by NIRB for the Vault expansion (Phaser Pit and BB Phaser Pit), Amaruq

exploration access road, the renewal of the Meadowbank Type A water license, and on the issuance of the Type A Water Licence for the Meliadine Gold Mine by the NWB (NWB 2016). Agnico Eagle's relationships are built on thorough monitoring, reporting, and presentation of information to the regulators and stakeholders, and are backed by successful and accomplished operations.

A list of consultants and contractors who provided assistance and support in preparation of the amendment Applications is provided in Table 1.1-3.

Table 1.1-3: List of Consultants and Contractors who Provided Assistance and Support in Preparation of the Amendment Applications

Consultant / Contractor
Golder Associates Ltd.
C. Portt and Associates
Azimuth Consulting Group
Dougan & Associates - Ecological Consulting & Design
Gebauer & Associates Ltd.
Knights Piésold Ltd.
Nunami-Stantec Limited
Nanuk Enterprises and Outcrop
SNC Lavalin Inc.

1.1.3 Sustainable Development and the Precautionary Principle

Agnico Eagle is committed to creating value for their shareholders by operating in a safe, socially, and environmentally responsible manner while contributing to the prosperity of their employees, their families, and the communities in which they operate. This is imbedded into the four fundamental values that make up the keystones of Agnico Eagle's Sustainable Development Policy: Operate Safely, Protect the Environment, and treat Employees and Communities with Respect. This commitment is reflected in Agnico Eagle's published Sustainable Development Policy (English, French, and Inuktitut), which includes environment and health and safety. In addition, Agnico Eagle monitors accountability to sustainable development by completing an Annual Sustainable Development Report, which is also available on the website (Agnico Eagle 2015).

The commitments made in this Sustainable Development Policy are extended to all of Agnico Eagle operations world-wide, and apply to the Meadowbank Mine and the Project. This policy states Agnico Eagle's commitment to protect the environment, public health and safety, and natural resources by conducting operations in an environmentally sound manner, while pursuing continuous improvement to environmental performance. Agnico Eagle subscribes to the principle of sustainable development in mining. Agnico Eagle makes it a key responsibility to limit negative environmental and social impacts, and to enhance positive impacts. The environmental policy of the company, as well as the health and safety policy, apply to all businesses for which Agnico Eagle has an operating responsibility (i.e., employees, contractors, subcontractors, and suppliers where possible).

Section 4.2 of the FEIS (Cumberland 2005) states:

> Achieving sustainable development requires continued and full consideration of the economic, environmental, and social impacts on the sustainability of both the project and the Baker Lake community. To promote the goal of sustainable development, support is needed for the local people to pursue sustainable livelihoods both in the traditional and wage economy.

To achieve sustainable development, Agnico Eagle's policies are guided by the *precautionary principle*. The company's compliance record and proven ability to quickly respond to on-site concerns demonstrates that environmental measures at Meadowbank Mine anticipate, prevent, and mitigate the causes of environmental degradation.

At Meadowbank Mine, one measure of commitment and actions towards sustainable development is assessed through Agnico Eagle's participation with other interested parties in a collaborative socio-economic committee (SEMC) that focuses on issues related to individual and community wellness. The Kivalliq SEMC Annual Reports are available from the NIRB website (NIRB 2010) and are considered in the socio-economic section of this FEIS Amendment (Volume 7, Section 7.4) and the Socio Economic Management Plan (Volume 8, Appendix 8-E.6).

As part of Agnico Eagle's overall commitment to continuous improvement, the company has steadily increased its presence on national, international, and industry-specific boards and organizations. These organizations help Agnico Eagle improve and measure performance by providing research and guidance on the latest industry standards and global best practices. For example, as a member of the Mining Association of Canada, Agnico Eagle fully endorses its Towards Sustainable Mining (TSM) Initiative. Towards Sustainable Mining provides a framework for companies to evaluate their management systems under six performance indicators: crisis management, energy/greenhouse gas emissions, tailings management, biodiversity conservation management, health and safety, aboriginal relations, and community outreach. Agnico Eagle underwent an external verification of its performance in meeting the MAC TSM criteria in 2015 and these external audits are to be repeated every three years in accordance with the TSM criteria. In between these external audits Agnico Eagle conducts annual self-assessment of its performance under TSM. The results of these self-assessments and external audits are reported publically on the MAC website. Agnico Eagle aims to achieve a Level A rating at all of its mines. Additional initiatives include: Carbon Disclosure Project, the Global Reporting Initiative and International Cyanide Management Code. For more information refer to Agnico Eagle's website at Sustainability Standards.

Agnico Eagle is determined to make a significant and positive difference in the communities where we operate and in the lives of our employees. This commitment is founded on Agnico Eagle's core values – to operate safely, protect the environment, and treat our employees and communities with respect (Agnico Eagle 2015a).

In all parts of the business, Agnico Eagle limits their environmental impact by using natural resources efficiently, by limiting pollution, and by reducing waste. Accountability for protecting the environment extends to every employee and contractor who works for Agnico Eagle. Everyone is expected to understand and act in accordance with the Environmental Policy, with various regulatory compliance requirements, and to report unacceptable practices to management, while they are at our sites.

In line with the Environmental Policy, Agnico Eagle's operations are required to meet and, where practical, exceed relevant laws, regulations, and standards. Agnico Eagle believes in using industry best practices to minimize their impact on the environment to the greatest practical extent possible. As part of Agnico Eagle's internal Environmental Management System (Responsible Mining Management System; RMMS), each operation is required to identify, analyze, and manage the environmental risks specific to its activities and to work in a

transparent manner with involved local stakeholders. Agnico Eagle has the resources (both human and economic) available to fully meet regulatory requirements at all of its mining operations. Agnico Eagle aims to minimize effects of their operations on the environment and maintain its viability and diversity.

PROTECT THE ENVIRONMENT

Agnico Eagle aims to minimize the effects of our operations on the environment and maintain its viability and its diversity. To achieve this we:

- *Minimize the generation of waste and ensure its proper disposal;*
- *Manage tailings, waste rock and overburden to ensure environmental protection;*
- *Implement measures to conserve natural resources such as energy and water;*
- *Implement measures to reduce emissions to air, water and land, and to minimize our footprint;*
- *Implement measures to reduce our greenhouse gas emissions and address climate change;*
- *Integrate biodiversity conservation and land use planning considerations through all stages of business and production activities;*
- *Rehabilitate sites to ensure physical and chemical stability and in consultation with the communities in a timely manner.*

Creating and maintaining a safe workplace is a shared responsibility of the company and each employee. Agnico Eagle's overriding goal is zero harm to all workers. Agnico Eagle endeavors towards this through a combination of safety standards, safe work practices and procedures, incident reporting and tracking, knowledge sharing across operations, and safety audits.

Each of Agnico Eagle's mine sites has an emergency response team – staffed with employees who volunteer for the assignment. Each employee receives extensive training and all the proper equipment they need to respond in an emergency situation.

1.1.4 Regional Context

The Project falls within the boundaries of the Keewatin Regional Land Use Plan (Nunavut Planning Commission; NPC 2000) administered by the NPC. The issues considered in the FEIS (Cumberland 2005) within a regional context remain unchanged as a result of the proposed Project. The regional physical, biological, and socio-economic environments of the central Kivalliq Region are summarized in Volume 2. Baseline reports are appended to the appropriate FEIS Amendment Volumes.

1.1.5 Regulatory Regime

FEIS

The Meadowbank Mine is subject to the environmental review and related licensing and permitting processes established by Part 5 of the NLCA.

All current, applicable, and active permits are the sole ownership and responsibility of Agnico Eagle - Meadowbank Division. A list of Permits and Authorizations can be found in Appendix 1-B. A record of compliance to the Project Certification is provided in Volume 2, Appendix 2-A. All of the permits were approved based on the FEIS environmental management plans and subsequent revisions (required by the NWB).

The regulatory organizations have not changed since the FEIS (Cumberland 2005). However, the administration and regulatory requirements (i.e., management, administration, or processes) of several regulatory authorities have been further defined or amended through legislation or regulations as outlined in subsection below.

For compliance and regulatory history related to the Type A Water Licence see Volume 2, Appendix 2-I.

Moving forward, Agnico Eagle will continue to work efficiently and cooperatively with the NIRB and all regulators to ensure the regulatory process proceeds as expeditiously as possible.

Water Licence

The proposed Whale Tail Pit, satellite deposit of the Meadowbank Mine, requires a Type A Water Licence amendment from the NWB. Agnico Eagle must also comply with requirements of additional authorities for land use planning, environmental assessment, Inuit water rights, and any other Federal, Territorial act, regulation or guideline applicable to the Project.

The Whale Tail Pit site is located on IOL. The lead authorizing agencies for the Project are the NIRB, NWB, KIA, and Indigenous and Northern Affairs Canada (INAC). The Project will require the authorization and consent for the development, construction, operations, and closure of the Whale Tail deposit and its related facilities. These approvals will be in the form of amended land use leases, production lease, and Inuit Impact and Benefit Agreement (IIBA), water compensation agreements, and other forms or approvals and authorizations. A full list of applicable acts, regulations, and guidelines that govern the Project are provided in Appendix 1-B.

1.1.5.1 Nunavut Planning Commission

All project proposals in the Keewatin Planning Region that require amendment to a licence or authorization from a land use authorizing agency must be re-assessed by the NPC for conformity with the Keewatin Regional Land Use Plan (NPC 2000). The Project is entirely within the Kivalliq (Keewatin) Region of Nunavut and therefore is subject to confirmation of conformity determination to the Keewatin Regional Land Use Plan. The authority of the NPC is provided under Article 11 of the NLCA and more recently clarified by the *Nunavut Planning and Project Assessment Act*.

Project related positive conformity determination include:

- winter road determination (NIRB 11 EN010) on March 9, 2011;
- exploration camp and associated activities (i.e., drilling) renewal on multiple permits on October 21, 2015; and
- exploration access road for multiple permits on July 17, 2015.

The Meadowbank Gold Mine Project was originally assessed by the NIRB from 2003 to 2006. The original application was screened by the NIRB in accordance with Article 12, Part 4 of the NLCA. On September 23, 2003 the NIRB recommended to the then-Minister of Indian Affairs and Northern Development that the project should be the subject of a review pursuant to s. 12.4.4(b). On December 3, 2003 the Minister referred the project to the NIRB for review pursuant to Article 12, Part 5 of the NLCA.

1.1.5.2 Nunavut Impact Review Board

The Meadowbank Mine was subject to the environmental review established by Article 12, Part 5 of the NLCA. In November 2006 the Minister of Indian and Northern Affairs Canada (now Indigenous and Northern Affairs Canada) approved the NIRB decision that the project proceed subject to terms and conditions. On 30 December 2006 the NIRB issued a Project Certificate for the development of Meadowbank Mine. The Project Certificate was issued to Meadowbank Mining Corporation (a wholly owned subsidiary of Cumberland Resources Ltd.). Agnico Eagle has maintained sole responsibility for the construction, operations (including dewatering and mining), on-going inspection, and maintenance of all of the components of the Meadowbank Mine and has been successfully operating in Nunavut since 2007. A summary of major procedural steps taken by the Agnico Eagle (its predecessor) and the NIRB are shown in Volume 2, Appendix 2-C.

Consistent with the 2015 amendment filed for the Vault Pit expansion (Phaser Pit and BB Phaser Pit), Agnico Eagle has provided the necessary information for environmental review as a stand-alone document capable of supporting the public review, comment, and assessment process.

Agnico Eagle is seeking approval to extend the Meadowbank Mine to include development of resources from Whale Tail Pit and requests the NIRB reconsider the terms and conditions set out in Project Certificate (No. 004) issued for the Meadowbank Mine. Notwithstanding NIRBs authority, or at the request of any other interested party a request for reconsideration of the terms and conditions contained in the NIRB Project Certificate, Agnico Eagle has highlighted the specific terms and conditions for reconsideration. Refer to the NIRB Record of Compliance Volume 2, Appendix 2-A.

1.1.5.3 Nunavut Water Board

Any project using water or depositing of waste is required to obtain approval from the NWB. Agnico Eagle currently holds a Type A Water Licence for the Meadowbank Mine (2AM-MEA1525) and two Type B water licenses (i.e., exploration 2BE-MEA1318 and the exploration access road 8BC-AEA1525).

For additional details on the Type A Water Licence Amendment Application, project definition, the NWB regulatory regime and requirements, or any other matters which fall under the mandate of the NWB under Article 13 of the NLCA or in accordance with the NWNSRTA including a list of current water licenses and compliance related to the Project refer to Volume 2.

1.1.5.4 Fisheries Act Authorizations

The *Fisheries Act* requires that projects avoid causing serious harm to fish unless authorized by the Minister of Fisheries and Oceans Canada (DFO). This applies to work being conducted in or near waterbodies that support fish that are part of or that support a commercial, recreational, or Aboriginal fishery. To protect fish and fish habitat, efforts should be made to avoid, mitigate, and/or offset harm.

Agnico Eagle holds two existing DFO Authorizations under Sections 32 and 35 of the *Fisheries Act* for the Meadowbank Mine. The existing Authorizations are for Second and Third Portage Lakes (NU-03-0191.3) and Vault Lake (NU-03-0191.4). For the Amaruq exploration access road, Agnico Eagle submitted a proponent self-assessment and request for review to DFO. Fisheries and Oceans Canada approved construction of the road as designed, without the need for issuing an Authorization under the *Fisheries Act*. Authorization for the Vault expansion (Phaser Pit and BB Phase Pit) is currently pending.

Environment Canada administers the Metal Mining Effluent Regulations and Schedule II listing of Second Portage Lake Northwest Arm for Meadowbank Mine. No further Schedule II listing is required for Whale Tail.

Fisheries protection and pollution prevention measures for the Project are subject to the requirements of the *Fisheries Act* s.35, which states that no person shall carry on any work, undertaking, or activity that results in serious harm to fish that are part of a commercial, recreational, or Aboriginal fishery, or to fish species that support such a fishery.

Agnico Eagle has conducted two years' of aquatic baseline studies for the Project, and will work together with DFO to seek a *Fisheries Act* Authorization during the review/regulatory phase of this Project.

1.1.6 Land Tenure

Agnico Eagle's land tenure is on a mix of IOL administered by the KIA, Crown Land administered by INAC, and Commissioner Land administered by the Government of Nunavut. Agnico Eagle's land tenure is summarized in Table 1.1-4 and shown in Figure 1.1-1.

Table 1.1-4: Land Tenure Summary

Property	Land[a]			Total (km^2)
	IOL (km^2)	Crown (km^2)	Commissioner (km^2)	
Meadowbank	231.26	73.95	-	305.21
Amaruq property	408	-	-	408
Baker Lake marshalling area	-	-	5.79	
Haul road (between Meadowbank and Whale Tail site)	0.13	0.28	-	0.41
All Weather Access Road (Baker Lake to Meadowbank)	1.40	1.98	0.21	3.59

[a] Numbers have been rounded to two decimal places.
km^2 = square kilometres.

Agnico Eagle has sole responsibility for the construction and on-going inspection and maintenance of all of the components of the current Project.

1.1.6.1 Nature of Interest in the Land

Under the NLCA enacted in 1993, the mineral rights for about 2% of the territory have been transferred from Canada to the Inuit. The Designated Inuit Organization under the NLCA is NTI; it negotiates terms and conditions for those blocks that are not under federal jurisdiction. The Whale Tail deposit is located on IOL with the surface rights managed by the KIA and the sub-surface mineral rights managed by NTI. Surface rights for IOL are vested in the KIA, which administers the access and management of the lands for the benefit of the Inuit of the region. Access to and use of surface lands requires an Inuit Land Use permit, licence, or commercial lease issued by the KIA.

The exploration and mineral development rights for the Amaruq property are 100% owned by Agnico Eagle under an agreement from NTI, and are currently in good standing.

Crown Land

Nunavut mining and exploration activities are regulated by INAC. This federal department ensures compliance with the Canada Mining Regulations across the territory. There are three main types of mineral interests under the Canada Mining Regulations: a mineral claim, a prospecting permit, and a mineral lease (also referred to as mining lease). Surface rights on Crown Land are vested in the federal government and administered/managed by INAC. Access to and use of these surface lands requires a land use permit, licence, or commercial lease issued by the INAC. A summary of land tenure is provided in Table 1.1-4.

Inuit Owned Lands

As stated previously, the 408 km^2 Amaruq property is located on IOL, and the rights to explore and develop mineral resources were acquired by Agnico Eagle in 2013 subject to a mineral exploration agreement with NTI. The surface ownership of the land is held by the KIA. Land and environmental management in this area are generally governed by the provisions of the NLCA.

The proposed Whale Tail Pit and associated infrastructure is to be constructed on IOL leased by Agnico Eagle from the KIA. In addition, quarry permits will be sought from the KIA as needed. A list of current quarry permits held by Agnico Eagle are provided in Appendix 1-B.

Because it lies on IOL, the Project can only proceed with the full consent of the Inuit as provided by the KIA.

1.1.7 Land Use Planning

All project proposals in the Keewatin Planning Region that require a licence or authorization from a land use authorizing agency must be assessed by the NPC for conformity with the Keewatin Regional Land Use Plan (NPC 2000). The proposed Whale Tail Pit is entirely within the Kivalliq (Keewatin) Region of Nunavut and therefore is subject to confirmation of conformity determination under the Keewatin Regional Land Use Plan. Agnico Eagle is requesting that NPC undertake a conformity determination on the proposed Project. Agnico Eagle anticipates the amendment of the Type A application to the NWB, and screening request to the NIRB will trigger NPC conformity determination requirements.

1.1.8 Inuit Impact Benefit Agreement and Inuit Water Rights

Inuit Owned Land is administered by the KIA. Inuit Beneficiaries in the Kivalliq Region are represented by the KIA. Agnico Eagle currently has in place an IIBA with the KIA for Meadowbank Mine.

Agnico Eagle has entered into negotiations with the KIA for the provision of benefits to Inuit through an IIBA. Under the NLCA Section 12.5.2 f, Agnico Eagle is required to detail the steps it proposes to take to compensate interests adversely affected by the Project.

Agnico Eagle and the KIA initiated in early 2016 re-negotiation of the Meadowbank IIBA to include the Project, and continue to advance discussions in accordance with the requirements set out in Article 26 of the NLCA. Both parties are working towards finalizing the IIBA, which could occur later in 2016.

For the purposes of the Project IIBA, the KIA and Agnico Eagle have agreed that the most affected communities are Baker Lake and Chesterfield Inlet, but the IIBA will cover all seven Kivalliq Communities. Once agreement in principle has been achieved on the IIBA, both KIA and Agnico Eagle will take the proposed IIBA to their respective Boards of Directors for approval. As negotiations are still underway, Agnico Eagle is not in a position to publically disclose any of the details of this IIBA.

In addition to the IIBA, Agnico Eagle and the KIA have in place an agreement to provide benefits for impacts on wildlife and wildlife habitat. Agnico Eagle signed a Water Compensation Agreement for the Meadowbank Mine with the KIA in accordance with the requirements of Article 20 of the NLCA. It is expected that these agreements (i.e., wildlife agreement and water compensation agreement) will be revised during the regulatory process to cover the development of the proposed Project. Agnico Eagle is aware that the NWB is precluded from issuing a water licence for the Project if a water compensation agreement has not been reached with the KIA. Because it lies on IOL, the Project can only proceed with the full consent of the Inuit as provided by the KIA working with NTI.

1.1.9 Existing and Other User Water Rights

Presently, there are no properties adjacent to the proposed Mine that have any influence on the Project. No trap lines have been identified within or directly adjacent to the proposed Mine footprint. No third party or individuals have been identified, or have come forward as existing or other water users with rights that might be impacted by the Project. Agnico Eagle knows of no other water rights that must be secured for the Project.

1.1.10 Other Authorizations

1.1.10.1 Government of Nunavut

The current marshalling area in Baker Lake is sited on Commissioner's land, administered by the Department of Community and Government Services for the benefit of the Hamlet of Baker Lake. The extension of the Meadowbank Mine does not require additional permitting of this facility. A lease is in place for the marshalling facility. Agnico Eagle currently holds a Nunavut archaeological permit as well as wildlife research permit for works undertaken for the access road and ongoing exploration. The permits will be maintained in good standing as needed. Agnico Eagle is not intending to dispose of waste to municipal facilities or use municipal water in any significant amount.

1.1.10.2 Transport Canada

The Project may be subject to the *Navigation Protection Act*. Agnico Eagle met with Transport Canada to explore the implications of applying the *Navigation Protection Act* to the Project. The *Navigation Protection Act* which came into force on 1 April 2014, is the result of the 2012 amendments made to the *Navigable Waters Protection Act*.

Along the current alignment of the haul road, none of the water crossings are located on Transport Canada's schedule of navigable waters. Eleven watercourses are considered to be potential migration routes and/or potentially provide spawning or nursery habitat for large-bodied or small-bodied fish.

At this time, Agnico Eagle does not believe that the small lakes, ponds, and streams within the Project's footprint on the Whale Tail site are navigable waterbodies. Agnico Eagle will work with Transport Canada to confirm this to ensure compliance with the *Navigation Protection Act*.

1.1.11 Consultation

Public consultation and engagement is a legal requirement in Nunavut, an industry best practice, and an important corporate commitment. Effective public consultation and engagement helps ensure that community members are informed and knowledgeable about proposed projects, that community support for those projects is more readily obtained, and sustainable development goals are achieved. A key goal of Agnico Eagle's public

consultation and engagement program has been to ensure the Company obtains a “social licence to operate”, by securing the support of a majority of residents from potentially impacted local communities.

To obtain this goal, a number of process goals have been followed:

- identification and prioritization of communities and community stakeholder groups;
- developing an understanding of key community and stakeholder views regarding the Project;
- addressing community and stakeholder issues and expectations;
- identifying current and historical patterns of land- and resource-use;
- identifying VCs and VSECs;
- determining criteria for evaluating the significance of potential impacts;
- deciding upon mitigating measures;
- formulating compensation packages;
- identifying and implementing monitoring measures, including post-project audits; and
- continuous improvement.

Since operation of the Meadowbank Mine began, Agnico Eagle has continued public consultation by meeting with employees local employees that live throughout the Kivalliq, meeting in the community and local stakeholders, and regulatory agencies routinely which has allowed a better general understanding of the rights, interests, values, aspirations, and concerns of the potentially affected stakeholders, with particular reference to the local population. Through this continued consultation Agnico Eagle has developed an operational culture that recognizes and respects these relevant interests in the planning and executing processes. A record of consultation including government engagement is provided in Volume 2, Table 2-H. Agnico Eagle has and will continue to engage with the KIA and other stakeholders.

1.2 Project Description and Alternatives

1.2.1 Project Justification

1.2.1.1 Project Purpose and Rationale

Since 2009, Agnico Eagle has operated the Meadowbank Mine. Components of the Meadowbank Mine include a marshalling facility in Baker Lake and the 110 km All Weather Access Road (AWAR) between Baker Lake and Meadowbank (Figure 1.1-1). The Meadowbank Mine consists of several gold-bearing deposits that will be mined until Q3 of 2018. Mining at Meadowbank is currently occurring in three open pits (Goose Pit, Portage Pit, and Vault Pit). Much of the pit development is located in close proximity to the mill, office, and lodging infrastructure, with the exception of the Vault Pit which is approximately 8 km northeast of the main mine site.

As the economics of the Meadowbank Mine have changed and details of the last few years of the Meadowbank Mine are optimized, mine engineers began considering the feasibility of expanding Meadowbank operations through development of Vault Pit expansion, Phaser Pit, and BB Phaser Pit, which was initiated in 2015.

The extension of the Meadowbank LOM is expected to help bridge the production gap between the end of production at Meadowbank and the start of the proposed Meliadine Mine with the proposed start of production of a satellite pit located on the Amaruq property called Whale Tail Pit. The company is actively exploring the Amaruq deposit, and expects to ultimately develop Whale Tail Pit, as a satellite operation to Meadowbank, with the potential to have full production in 2019. A major challenge is that the gold reserves at Meadowbank will be exhausted by the third quarter of 2018. Although Agnico Eagle is working closely with regulatory agencies, full authorizations, approvals, and permits required for Whale Tail Pit are not expected to be completed until early 2018 and not fully operational until the third quarter of 2019. Agnico Eagle is optimistic that permits will be received in a timely matter and are therefore planning on Whale Tail Pit construction and progressive closure at Meadowbank that will reduce a potential employment gap from one year to a shorter period of time.

The development of the Project, a satellite deposit, is part of an effort to extend the LOM at Meadowbank Mine while exploration activity continues. The deposit will be mined as an open pit (Whale Tail Pit; Figure 1.2-1), and ore will be hauled to the approved infrastructure at Meadowbank Mine for milling. As a result of development, Agnico Eagle is also proposing to expand the width of the exploration access road to a haul road to accommodate increased traffic rates and haul trucks.

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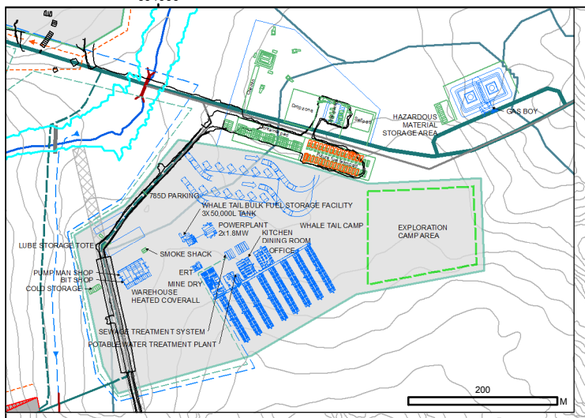


NEMO FRESHWATER INTAKE
NEMO LAKE
C38
ROAD AROUND WRSF
SADDLE / COFFER DAM #1
WHALE TAIL WASTE ROCK STORAGE FACILITY
WHALE TAIL LANDFILL
WRSF POND
WRSF DIKE
NORTH CHANNEL
MAMMOTH CHANNEL CULVERT
MAMMOTH DIKE
MAMMOTH CHANNEL CULVERT
MAMMOTH LAKE DIFFUSER
MAMMOTH LAKE
A16
NORTHEAST POND
NORTHEAST LAKE
STORM WATER STORAGE POND
WASTE ROCK EXPLORATION PAD
BERM
EXPLORATION RAMP PORTAL
EXPLORATION LAYDOWN AREA
COMMUNICATION TOWER
CRUSHING AREA (2X CRUSHER)
ORE STOCKPILE 1
ORE STOCKPILE 2
6508-WHL-001-001
EXPLORATION RAMP VENT RAISE
WHALE TAIL ATTENUATION POND
WATER TREATMENT PLANT
SADDLE / COFFER DAM
ORE STOCKPILE 3
OVERBURDEN STORAGE
WHALE TAIL DIKE
WHALE TAIL EAST CHANNEL
WHALE TAIL CAMP
WHALE TAIL BULK FUEL STORAGE FACILITY
HAUL ROAD
EXPLOSIVE MAGAZINE 35,000kg
CAP MAGAZINE
CAP MAGAZINE
EXPLOSIVE MAGAZINE 35,000kg
EXPLOSIVE MAGAZINE 35,000kg
EXPLOSIVE MAGAZINE 35,000kg
WHALE TAIL DIVERSION CHANNEL
WHALE TAIL LAKE (SOUTH BASIN)
A17
ELEVATION ZONE EL. 156m
ARCHAEOLOGICAL SITE 2015-14
A18
184
185
186
183
182
181

LEGEND

- FINAL WHALE TAIL WASTE ROCK STORAGE FACILITY
- WHALE TAIL LAKE (SOUTH BASIN) FLOODED LIMIT (WATER LEVEL 156.0m)
- NATURAL WATERSHED
- DIKE
- POND/SUMP
- ARCHAEOLOGICAL SITE
- ROAD
- TEMPORARY ROAD
- DIVERSION CHANNEL
- COLLECTION CHANNEL
- CULVERT
- INTAKE WATER PIPE
- CONTACT WATER PIPE
- FRESHWATER PIPE
- WATERCOURSE
- WATERBODY

REFERENCE

1. INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED FROM 6108-600-210-002_R2(2019)s.dwg.
2. WATERCOURSE AND WATERBODY DATA OBTAINED FROM PHOTOSAT
DATUM: NAD 83 CSRS PROJECTION: UTM ZONE 14

400 0 400
METRES

PROJECT
AGNICO EAGLE

AGNICO EAGLE MINES LIMITED:
MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

TITLE

SITE LAYOUT

Golder Associates

PROJECT		1541520	FILE No.	
DESIGN	JR	24 Mar. 2016	SCALE AS SHOWN	REV. 0
GIS	CDB	05 May 2016		
CHECK	JR	09 May 2016		
REVIEW	LY	09 May 2016		

FIGURE 1.2-1

Y:\burnaby\CAD-GIS\Client\Agnico_Eagle_Mines_Ltd\Whale_Tail\99_PROJECTS\1541520_FEIS\02_PRODUCTION\FEIS\MXD\1300_Documentation\1340_Project_Description\Report\1541520_FIG_1.2-1_SITE_LAYOUT.mxd

1.2.1.2 Project Need

The Meadowbank Mine is scheduled to exhaust its mineable reserves by Q3 of 2018. The Kivalliq Region of Nunavut offers limited, and usually seasonal, employment opportunities. The population is predominately young with a high level of unemployment. Elders have stated that the young must find jobs in the wage economy as they will not be able to live off the land as Inuit did in the past. Agnico Eagle will continue exploration activities with the objective to extend Meadowbank Mine life beyond Q3 of 2018. The Project is expected to last about seven years followed by post-closure, including filling of the open pit. The addition of the Whale Tail Pit will add an additional three to four years to the LOM for Meadowbank Mine. Pre-development will begin as soon as permits are received and the construction and site preparation is planned to start in early 2018, dike construction in Q2 2018, followed by excavation and stockpiling of ore and waste rock in Q4 of 2018, and milling of ore commencing in Q3 of 2019 and extending into 2022.

The Government of Nunavut describes the vision for Nunavut to the year 2030 and lists an improved standard of living; active, healthy, and happy individuals and families; self-reliant communities with strong Inuit societal values, and recognition for Nunavut's unique culture. Nunavut's economic and social development plans focus on the economic sectors that can provide the most growth and employment potential, without harming the environment. These sectors are mining, tourism (and arts and crafts), and commercial fishing.

The current Meadowbank Mine is an important contributor (through employment income and training opportunities) to the economy of Baker Lake and to the economy of the Kivalliq Region, especially to the communities of Arviat and Rankin Inlet. The development of the Whale Tail Pit would mean opportunities for continued employment, as well as forthcoming benefits and revenue stream to NTI and KIA, from direct taxes paid to governments, personal income tax, and sales tax from employment.

Continued operations of Meadowbank Mine will reduce dependence on government, without compromising the health of the people or the land, through the creation of stable private sector employment that will both contribute to a better standard of living for the residents of Kivalliq as well as reducing dependence on social assistance programs. The continued operation will also contribute to the economic vision of a more self-reliant Nunavut as a key contributor to the future economic well-being of Canada as projected by the Government of Canada (GN 2009).

The Meadowbank Mine extension will support the vision and contribute to the goals of Inuit Beneficiaries of Nunavut as expressed by NTI and KIA. Benefits will accrue to Inuit from the IIBA, and also from royalties paid to NTI over the extended operating life of the mine.

Article 17.1.1 of the NLCA states the purpose of IOL:

> is to promote economic self-sufficiency of Inuit through time, in a manner consistent with Inuit societal and cultural needs and aspirations" and this economic self-sufficiency will be obtained through balanced economic development and selection of IOL that holds value both for renewable resources and the development of non-renewable resources (NLCA 17.1.2 and 17.1.3)".

Approximately 90% of all IOL identified in the NLCA is IOL-Surface lands in which Inuit Organizations administer surface rights only. The remaining IOL is designated to have both surface and subsurface (mineral) rights administered by Inuit organizations. The Whale Tail Pit is located on IOL (Figure 1.1-1) where the surface rights

and subsurface mineral rights are administered for the benefit of Inuit Beneficiaries by Inuit Organizations, KIA, and NTI, respectively.

The purpose of the proposed Project is to extend mining at Meadowbank Mine to maximize benefits from site construction, process the ore on-site to extract the gold as a gold bullion, and then to ship the gold bullion for final refining and subsequent sale into the world gold markets. Gold is used in a number of uses including jewelry, electronics, and underpinning the value of money. The extension of Meadowbank Mine life will:

- contribute to durable social and economic benefits;
- create employment for Canadians;
- create employment for Nunavummiut;
- contribute to the vision and goals of Nunavummiut in terms of sustainable development (employment, training, career development, economic stability for residents of the Kivalliq Region, and the creation of new business opportunities for Nunavut based businesses);
- contribute to the vision and goals of Inuit Beneficiaries through royalty payments to NTI and through land use fees, water compensation payments and IIBA benefits to the KIA allowing both NTI and KIA to pursue their goals for sustainable development of IOL;
- provide revenue to the Government of Canada through corporate and income taxes allowing Canada to continue funding northern development and northern programs;
- provide revenue to the Government of Nunavut through payroll taxes, equivalent municipal taxes, and fuel taxes allowing the Government of Nunavut to pursue its goals and vision for Nunavut; and
- generate a return on the investment made by Agnico Eagle on behalf of its shareholders (return on investment) and generate a profit for Agnico Eagle and its shareholders.

The proposed development of the Project will be financed by Agnico Eagle from its own operating revenue stream. A statement of financial responsibility and overview of Agnico Eagle's past performance is provided in Appendix 1-A.

1.2.2 Project Components and Activities

The Project facilities will consist of a personnel camp (i.e., Main Camp), power plant, heli-pad, maintenance shop, tank farm, a waste rock storage facility (WRSF), an ore stockpiling facility, an attenuation pond, a water and sewage collection and treatment system, haul roads, access road, water management infrastructure (e.g., collection ponds, channels, dikes, dams, and culverts), and the Whale Tail Pit. The general mine site layout is provided in Figure 1.2-1 The Project will also require widening of the exploration access road between the Whale Tail Pit site and the existing Meadowbank Mill, Tailings Storage Facility (TSF), and Camp (referred to in the subsequent text as the Meadowbank Mine).

The Project scope is defined in Table 1.1-1. The facilities are similar to those required for the approved Vault Pit operations (which are located 8 km from the Meadowbank Mill, TSF, and Camp); however, the Whale Tail deposit is located approximately 50 km northwest of Meadowbank Mine.

A list of all engineering figures is provided in Appendix 1-C.

1.2.2.1 Deposit, Mining Methods, and Production of Whale Tail Pit

Consistent with the FEIS, production will be by surface or open pit mining. Approximately 8.3 million tonnes (Mt) of ore will be mined from the Whale Tail Pit and processed over a three to four year mine life. The mine operations will generate approximately 8.3 Mt of tailings, 46.1 Mt of mine waste rock, and 5.7 Mt of overburden soil, with very limited organic material.

The Whale Tail Pit is an open pit that extends across the northern edge of Whale Tail Lake (Figure 1.2-1). There are some rock types, specifically intermediate intrusive and southern greywacke waste rock (during early mine development) from the Whale Tail deposit that are suitable for construction. There is no acid rock drainage (ARD) or metal leaching (ML) concern from the esker material tested; indicating that this material can be used for road construction. The report titled Evaluation of the Geochemical Properties of Waste Rock, Ore, Tailing, Overburden and Sediment from the Whale Tail Pit and Road Aggregate Materials (Volume 5, Appendix 5-E) provides detailed assessment of geochemical properties. Segregation of waste will be important to the operation of the Whale Tail Pit and is outlined in the addendum to the approved Operational ARD-ML Sampling and Testing Plan (Volume 8, Appendix 8-E.5).

Whale Tail Pit development will occur in three phases:

- Construction Phase (refers to construction of surface facilities beginning as early as 2018, pending regulatory approval, including the Whale Tail Dike and dewatering of Whale Tail Lake (North Basin)) which is planned to begin in Q2 (June), 2018;
- Operational Phase (refers to the extraction of ore and waste material) set to begin in Q4 of 2018. Upon regulatory approval, milling of ore is planned to begin at the latest in Q3 2019 until 2022; and
- Closure Phase (refers to active rehabilitation activities, such as removal of surface infrastructure, and commencement of pit flooding, and restoration of Whale Tail Lake water levels) occurring from 2022 to 2029. This will be followed by passive closure measures until the pit has flooded, Whale Tail Lake water levels are restored, and runoff from the Whale Tail WRSF is shown to be suitable for uncontrolled release.

The pit design and geotechnical stability will be monitored using the same best practices currently applied at Meadowbank Mine. The geological setting of the ore body is important for open pit slope design. The main lithologies encountered at the Project are summarized in Volume 5, Appendix 5-E. Project design considerations for the open pit slope design and a typical cross-section of the deposit is shown in Appendix 1-D. Agnico Eagle will use the same equipment already on-site that is currently in use for the Meadowbank operations, with the addition of specialized long-distance haul trucks. Project design considerations are discussed in Section 1.2.14 and detailed Volume 2.

Explosives management and blasting practices will be consistent with practices in place for Meadowbank Mine. Refer to the addendum to the Ammonia Management Plan (Volume 8, Appendix 8-D.1) for additional details. For additional information on explosives production and storage, refer to Section 1.2.10.

The production details of the proposed Whale Tail Pit are presented in Table 1.2-1.

Table 1.2-1: Summary of Mine Life Materials Balance

Year	Ore Mined (t)	Waste Rock Excavated (t)	Overburden Excavated (t)	Ore Stockpile Balance (t)
2018	160,020	1,481,594	1,418,078	160,020
2019	2,289,976	13,797,463	4,118,981	807,495
2020	3,352,314	21,504,494	81,300	874,809
2021	2,476,834	9,320,843	0	66,644
2022[a]	0	0	0	0
Total	**8,279,144**	**46,104,394**	**5,618,359**	**-**

[a] Preliminary economics do not include ore mined in 2022.

1.2.2.2 Processed Ore Containment (and Tailings Storage Facility)

Agnico Eagle proposes to process the Whale Tail ore and dispose of the tailings slurry at the existing Meadowbank Mine TSF, which is authorized under the current Project Certificate and Type A Water Licence. Ore from Whale Tail Pit will be segregated by grade and temporarily stored in one of three stockpiles at the Whale Tail Pit site, if deemed necessary, it will be crushed pending transport to the main Meadowbank Mine for milling. The mill rate is not expected to change significantly and remain on average 9,000 tonnes per day (t/day) and up to a peak mill throughput of 12,000 t/day (which is the current rate capacity at Meadowbank Mill).

Excavated ore material will be hauled to the ore stockpile facility, or if needed to the crushing facility, located east of the pit using mine trucks. Material will either be dumped into a chute, which feeds the jaw crusher, or dumped on the ground and then dumped into the chute using a wheel loader. The throughput for the crusher will be approximately 9,000 to 12,000 t/day. The conceptual layout of the crushing facility is provided in Appendix 1-C.

All tailings produced by Meadowbank Mine are deposited in accordance with the approved Mine Waste Rock and Tailings Management Plan (Volume 8, Appendix 8-A.1). Tailings will be generated as a result of the milling process and deposited in the existing TSF at the Meadowbank site. The 8.3 Mm^3 of tailings produced from processing of Whale Tail ore will be accommodated within the existing footprint of the TSF by building an internal structure in the north cell of the approved TSF and within the current footprint of the south cell of the TSF (see Volume 8, Appendix 8-A.1). Neither the footprint of the facility nor the chemical nature of the tailings and process water are expected to change from current operations. The Whale Tail tailings have a slightly different geo-environmental properties but similar parameters of environmental interest as compared to current Meadowbank tailings. Whale Tail tailings will require the same long-term environmental control mechanisms as the Meadowbank tailings.

1.2.3 Overburden and Waste Rock Disposal

The Whale Tail Pit operations will remove a total of 46.1 Mt of waste rock plus approximately 5.7 Mt of overburden (see Table 1.2-1). Approximately 2.1 Mt of waste rock will be used for construction activities such as roads, pads, and water management facilities (i.e., dike, berm, rip rap, etc.). The remaining waste rock and overburden material will be hauled to the Whale Tail WRSF, which is located northwest of the pit area as shown on Figure 1.2-1. A second, temporary overburden storage for staging purposes is located west of Whale Tail Lake (see Figure 1.2-1).

A summary of the geochemical properties of the overburden and waste rock including a summary of waste rock for use as construction material is provided in the Mine Waste and Tailings Management Plan (Volume 8, Appendix 8-A.1) and detailed geochemical properties are presented in Volume 5, Appendix 5-E.

Overburden will mainly be produced during the construction phase of the Project. Waste rock will be produced during both construction and operations. Waste rock and overburden will be co-disposed together in one of the two piles constituting the storage facility. These piles have the potential to merge into one at the end of the LOM.

The Whale Tail WRSF will be approximately 80 metres (m) high, with bench heights of 20 m and an overall slope of 23 degrees. The design is similar to the approved Vault WRSF. A typical cross section of the facility is provided in Appendix 1-C.

1.2.4 Freshwater Supply

Freshwater to support the Meadowbank Mill, TSF, and Camp is authorized under the existing Type A Water Licence (No. 2AM-MEA1525). Water supply for milling will continue to be sourced from the reclaim pond located near the mill and freshwater from Third Portage Lake as approved in the existing water licence.

Freshwater for the Whale Tail Camp will be sourced from Whale Tail Lake and from Nemo Lake. Freshwater usage includes potable use, fire suppression, dust suppression, drilling water (if contact water is not available), and water for the truck shop. The freshwater source at the Whale Tail site is Whale Tail Lake during the first part of construction (i.e., Q1 and Q2 of 2018) and closure, and Nemo Lake during construction and operations. Freshwater will also be required to refill Whale Tail Lake (North Basin) at closure and will be sourced from the Whale Tail Lake (South Basin), and natural inflows to Whale Tail Lake (North Basin). Agnico Eagle will endeavour to minimize the amount of freshwater required for the Project, where possible.

1.2.4.1 Freshwater Requirements

The Whale Tail Camp will have a water treatment plant for potable (domestic) water. The design flow rate for the potable water for the main camp and accommodations (i.e., kitchen, laundry) is 84 cubic metres per day (m^3/day), based on a 350 people camp capacity, using both the existing exploration camp and additional 210 units and a nominal consumption of 240 litres (L)/day/person from Nemo Lake.

In total, 118,625 m^3/year will be required during operations from Nemo Lake, with 241 m^3/day required for freshwater use and 84 m^3/day required for potable water use. During construction, freshwater will be sourced from Whale Tail Lake and Nemo Lake. Approximately 48 m^3/day of freshwater will be required during construction. During construction, 8,760 m^3/year will be required from Whale Tail Lake (approximately Q1 and Q2 of 2018) and 8,760 m^3/year will be required from Nemo Lake (approximately Q3 and Q4 of 2018). Freshwater use will switch from Whale Tail Lake to Nemo Lake once the water intake in Nemo Lake is constructed. Approximately 17,520 m^3/year will be required during closure from Whale Tail Lake, based on a requirement of 48 m^3/day of freshwater.

During closure, the Whale Tail Pit and Whale Tail Lake, north of the Whale Tail Dike, will be allowed to flood naturally with non-contact freshwater from direct precipitation, runoff from adjacent land, and Whale Tail Lake (South Basin). It is anticipated that approximately 24,000,000 m^3 over eight years is required to fill the mined-out Whale Tail Pit (i.e., approximately 17,000,000 m^3) and Whale Tail Lake (North Basin) (i.e., approximately 7,000,000 m^3) to its original level, including approximately 2,300,000 m^3/year from Whale Tail Lake (South

Basin), 120,000 m^3/year from tributaries to Whale Tail Lake (North Basin), and 580,000 m^3/year from direct precipitation to Whale Tail Lake (North Basin).

1.2.4.2 Freshwater Source and Capacity

Freshwater supply for the Whale Tail site will be sourced from Nemo Lake and during a portion of construction and during closure from Whale Tail Lake. The freshwater intake locations are shown in Figure 1.2-1, with a typical layout and cross-section provided in Appendix 1-C.

Nemo Lake

The Nemo Lake catchment has a total area of 17.6 km^2 (including 14.4 km^2 of land surface area and 3.24 km^2 lake catchment surface area). The average outflow rates for baseline at the outlet of Nemo Lake are 0.05 cubic metres per second (m^3/s) for June, 0.02 m^3/s for August, and 0.01 m^3/s for September (Volume 6, Appendix 6-C).

Whale Tail Lake (South Basin)

The Whale Tail Lake catchment has a total area of 28.1 km^2, of which 3.9 km^2 (i.e., north of the Whale Tail Dike) will be diverted as part of operations. The average outflow rates for baseline at the outlet of Whale Tail Lake are 4.23 m^3/s for June, 0.19 m^3/s for August, and 0.01 m^3/s for September (Volume 6, Appendix 6-C).

1.2.4.3 Freshwater Infrastructure

Intakes

The intakes will consist of vertical filtration wells fitted with vertical turbine pumps that supply water on demand. The intakes will be connected to the pump houses with piping buried under a rockfill causeway (Appendix 1-C). The intake pipe inlets will be located at the bottom of the causeways, and will be fitted with a stainless steel screen. The rockfill causeways will act as a secondary screen to prevent fish from becoming entrained in the pumps. The stainless steel screen design for the water intakes will be consistent with DFO criteria (1995).

Pump Houses, Pipelines, and Storage Tanks

A pump station will be located adjacent to the intakes and will house two freshwater pumps for distribution, one operating and one on standby. In addition, two fire pumps will be housed in the vicinity of the Nemo Lake intake. One fire pump will be equipped with an electric motor and the other with a diesel motor.

Freshwater will be pumped from the lakes through overland pipelines to insulated storage tanks located at the main camp for potable water treatment, and south of the camp for process water. The freshwater pipelines will be high density polyethylene pipe, which will be insulated and heat traced.

Storage capacity on-site will be approximately 150 m^3 for potable water and 400 m^3 for freshwater. The storage tank located at the personnel camp will provide both fire suppression water and freshwater storage prior to potable water treatment. The tank is adequate for two hours of firefighting.

Potable Water Treatment

In the portable water treatment plant, the freshwater will first go through sand filters and then be pumped through ultraviolet units, and finally be treated with chlorine. The treated water will be stored within a potable water tank. Potable water will be monitored according to the Health Canada regulations for total and residual chlorine and

microbiological parameters. Treated potable water will be piped to facilities requiring potable water, including the camp.

1.2.5 Water Management

In support of the Project, Agnico Eagle has prepared a fully revised addendum in form of an Appendix to the Meadowbank Mine detailed Water Management Plan. The addendum is provided in Volume 8, Appendix 8-B.2 while a brief summary is provided below.

The main objectives pertaining to water management are to limit and/or stop the flow of surface water runoff in the pit and to limit the impact on the local environment. In developing the water management plan, the following principles were followed:

- keep the different water types separated as much as possible;
- control and minimize contact water through diversion and containment;
- minimize freshwater consumption by recycling and reusing the contact and process water wherever feasible; and
- meet discharge criteria before any site contact water is released to the downstream environment.

The preferred site water management option was selected based on four aspects: society, environment, economy, and viability (see Section 1.10.6). The selected option consists of isolating the pit area located in Whale Tail Lake with two dikes (Whale Tail Dike and Mammoth Dike), and raising the water level of the Whale Tail Lake by 4 m to reroute water flow towards the Northwest passage through a channel. Mammoth Dike is required for dewatering the pit area and to limit the water flow from Mammoth Lake into the pit during important flood events.

The Project site was divided into nine sectors. These sectors were also assigned to one of two categories based on the type of surface runoff to manage: contact water and non-contact water. Contact water will be collected in several ponds or sumps and pumped to the Attenuation Pond before being treated and discharged into Mammoth Lake. Non-contact water will be rerouted or discharged directly into the environment without treatment.

1.2.5.1 Water Management Infrastructure

The Project will include construction of the following water management infrastructure:

- four turbidity curtains;
- three contact water collection ponds (Attenuation, Whale Tail WRSF, and Whale Tail Camp);
- two freshwater collection ponds (South Whale Tail and Northeast);
- three water diversion channels (South Whale Tail, East, and North);
- four water retention dikes (Whale Tail, Mammoth, Whale Tail WRSF, and Northeast);
- two coffer/saddle dams;
- seven culverts;

- a freshwater intake causeway and pump system;
- a Water Treatment Plant and associated intake causeway;
- a water treatment plant for construction;
- a Sewage Treatment Plant;
- pipeline and associated pump system;
- a potable water treatment plant; and
- a discharge diffuser located in Mammoth Lake.

Design criteria with required design drawings for water management control structures are provided in Appendix 1-C. In addition for further information refer to the addendum to the Water Management Plan found in Volume 8, Appendix 8-B.2. Prior to construction detailed design drawings will be submitted to the NWB in accordance with the Type A Water Licence. Based on experience at the Meadowbank Mine, one saddledam and one channel may not be required and are dependent on the potential presence and volume of water. Any refinements to the Water Management Plan will be submitted to the NWB prior to construction. The discharge diffuser will be conceptually similar to the diffuser for the Vault Pit discharge (Agnico Eagle 2013).

The water management infrastructure required for the access road (i.e., bridges and culverts) have already been assessed and construction is underway. Works are authorized under Type B Water Licence 8BC-AEA1525.

1.2.5.2 Non-Contact Water Management

The addendum to the Water Management plan defines non-contact water as surface water or runoff that is not physically or chemically affected by a mining project's development areas and/or activities. The Water Management Plan (Volume 8, Appendix 8-B.2; and Figure 1.2-2) provides additional detail on non-contact water management.

The non-contact water sectors are:

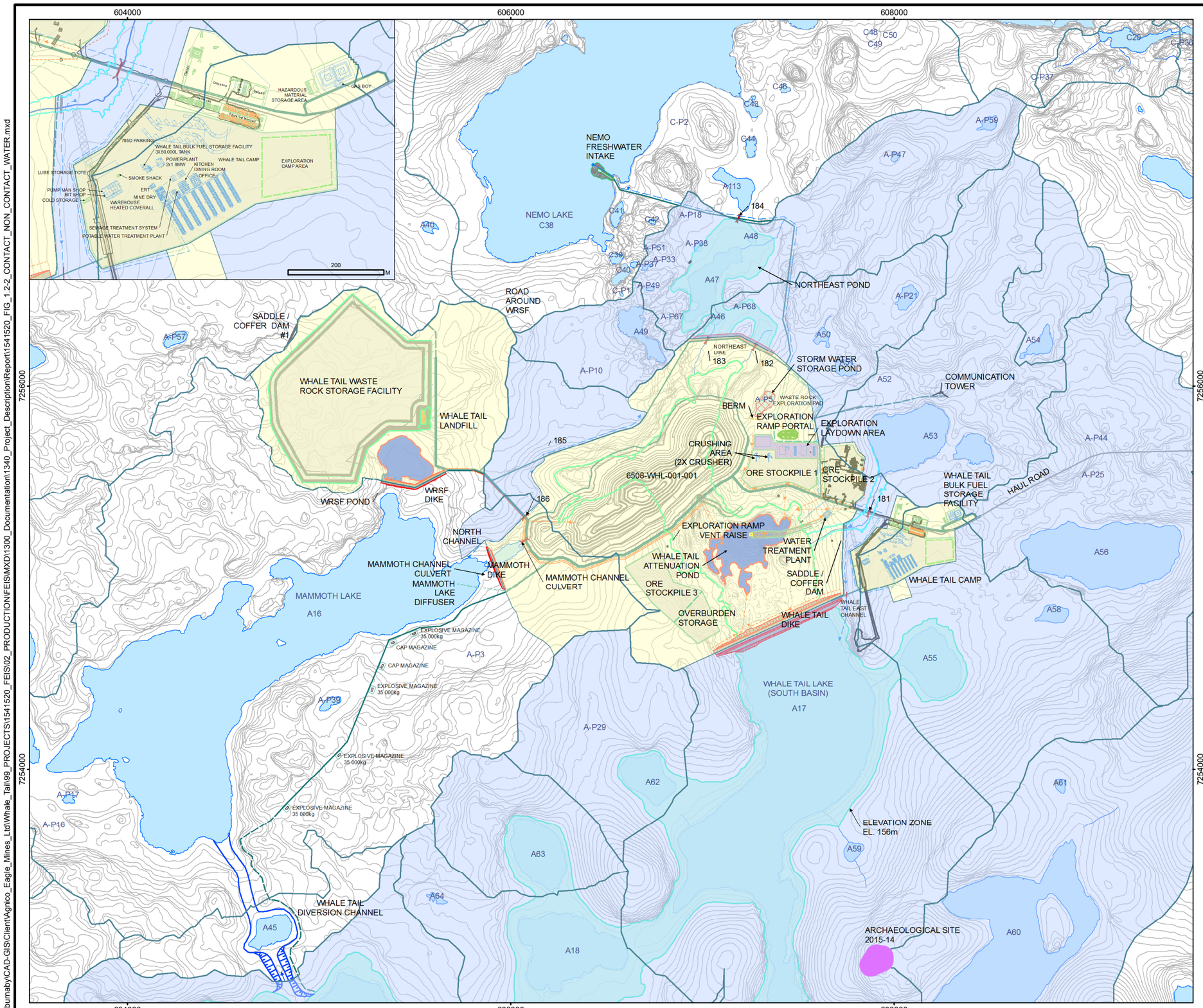
- South Whale Tail Lake Sector: The water will then flow through the South Whale Tail Diversion Channel and into Mammoth Lake.
- Northeast Sector: The water will be contained using a retaining dike and will flow toward Nemo Lake.
- East Sector: To limit the flow of non-contact water into the Attenuation Pond, a diversion channel (East Channel) will intersect the lake's final effluent. The East Channel will collect and divert the flow of Lake A53 to Whale Tail Lake.
- North Channel Sector: The construction of the road, or if deemed necessary the North Channel, located to the north of the pit will prevent non-contact runoff water from reaching the pit. This runoff water will flow by gravity towards Mammoth Lake.

1.2.5.3 Contact Water Management

Contact water is defined as surface water or runoff that has been in contact with Project development areas and/or activities. The Water Management Plan (Volume 8, Appendix 8-B.2, and Figure 1.2-2) provides additional detail on contact water management. Contact water was categorized into the following five sectors:

- Whale Tail Waste Rock Storage Facility Sector: The water is considered to be contact water, such that a dike is required to contain the water in a pond to prevent flow to Mammoth Lake.
- Industrial Camp Sector: Pads in the industrial sector and in the crushing area will be graded to redirect contact water towards the collection channel. The contact water will then flow by gravity to the Attenuation Pond.
- Main Camp Sector: Water will drain from the camp sector pad will be directed toward the Whale Tail Attenuation Pond.
- Pit Sector: All water not collected within the other sectors upstream of the pit will flow into it. Runoff from precipitation and ground will be pumped out of Whale Tail Pit, into the Attenuation Pond.
- Whale Tail Attenuation Pond Sector: Will collect all the water from the other contact water sectors, as well as the contact water from its own watershed and seepage from the Whale Tail Dike.

Contact water management associated with the existing facilities at Meadowbank Mine (i.e., tailings storage facility) is authorized under the Type A Water Licence No. 2AM-MEA1525 and will continue to be managed in the same way.



LEGEND

- FINAL WHALE TAIL WASTE ROCK STORAGE FACILITY
- WHALE TAIL LAKE (SOUTH BASIN) FLOODED LIMIT (WATER LEVEL 156.0m)
- DIKE
- POND/SUMP
- ARCHAEOLOGICAL SITE
- NATURAL WATERSHED
- CONTACT WATER SECTOR
- NON-CONTACT WATER SECTOR
- ROAD
- TEMPORARY ROAD
- DIVERSION CHANNEL
- COLLECTION CHANNEL
- CULVERT
- INTAKE WATER PIPE
- CONTACT WATER PIPE
- FRESHWATER PIPE
- WATERCOURSE
- WATERBODY

REFERENCE

1. INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED FROM 6108-600-210-002_R2(2019)s.dwg.
2. WATERCOURSE AND WATERBODY DATA OBTAINED FROM PHOTOSAT

DATUM: NAD 83 CSRS PROJECTION: UTM ZONE 14

400 0 400
METRES

PROJECT
AGNICO EAGLE

AGNICO EAGLE MINES LIMITED:
MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

TITLE

WHALE TAIL SITE CONTACT VS. NON-CONTACT WATER

Golder Associates

PROJECT		1541520	FILE No.	
DESIGN	JR	24 Mar. 2016	SCALE AS SHOWN	REV. 0
GIS	CDB	05 May 2016		
CHECK	JR	13 May 2016		
REVIEW	LY	13 May 2016		

FIGURE 1.2-2

Y:\burnaby\CAD-GIS\Client\Agnico_Eagle_Mines_Ltd\Whale_Tail\99_PROJECTS\1541520_FEIS\02_PRODUCTION\FEIS\MXD\1300_Documentation\1340_Project_Description\Report\1541520_FIG_1-2-2_CONTACT_NON_CONTACT_WATER.mxd

1.2.5.4 Whale Tail Lake (North Basin) Dewatering

Agnico Eagle proposes to begin to dewater Whale Tail Lake from February through September 2019 following the construction of the dike and the fish out from July through September 2018. To allow the mining of the Whale Tail Pit, Whale Tail Lake will be partly dewatered once the Whale Tail Dike is constructed. The estimated total volume of Whale Tail Lake is 8.5 million m^3, inclusive of 3.4 million m^3 in Whale Tail Lake (North Basin) (i.e., where Whale Tail Pit is located), and 5.1 million m^3 in Whale Tail Lake (South Basin). Whale Tail Lake (North Basin) will be dewatered to either Whale Tail Lake (South Basin) or to Mammoth Lake through the discharge diffusor. It is assumed that approximately 66% of the volume (i.e., approximately 2.2 million m^3) will be pumped directly to Whale Tail Lake (South Basin) if it meets discharge criteria, and the remaining 34% (i.e., 1.2 million m^3) will be pumped to the water treatment plant first and then discharged to Lake A16 (Mammoth Lake). The dewatering activity is planned from February to May 2019 to Whale Tail Lake (South Basin) and from June to September 2019 to Mammoth Lake.

1.2.5.5 Water Treatment, Contact Water Ponds, and Attenuation Pond

Actiflo Clarifier, having an approximate hydraulic capacity of 2,000 m^3/h, will be used to remove the suspended solids during dewatering of Whale Tail Lake (North Basin). The Actiflo Clarifier process is based on the coagulation/flocculation/clarification principle. Water will be treated to meet the discharge criteria and pumped to the receiving environment (Mammoth Lake) via the discharge pipeline and the submerged diffuser.

1.2.5.6 Re-Filling

Following completion of mining, the open pit will be filled with natural runoff and water pumped from Whale Tail Lake (South Basin). During the summer of the Year 4 (2022), the water accumulated in Whale Tail Lake (South Basin) over the years of operations will be pumped into the open pit. It will take approximately 4 years to refill the pit. Following this first pumping summer, the water elevation in Whale Tail Lake (South Basin) will be back to the baseline value (152.5 metres above sea level [masl]) and no outlets will be available for this basin as the Whale Tail Lake (South Basin) Diversion Channel is at the elevation 156 masl and the Whale Tail Dike is maintained in place. During the following years and until Whale Tail Lake (North Basin) reaches the same water elevation as Whale Tail Lake (South Basin) (i.e., baseline water surface elevation of 152.5 masl), the yearly accumulated water in Whale Tail Lake (South Basin) (i.e., over the baseline water surface elevation of 152.5 masl) is pumped to Whale Tail Lake (North Basin). The north and south basins of Whale Tail Lake will be at the same elevation eight years after the end of the operational phase and then the Whale Tail Dike and the Mammoth Dike will be breached if the water quality monitoring results meet discharge criteria to allow water to naturally flow to the outside environment.

1.2.6 Marine Area

Meadowbank Mine relies on marine transportation for most of its supplies including fuel, construction and operation equipment, materials and consumables, including dangerous goods, food, household goods, and other non-perishable supplies. Consistent with existing Meadowbank operation materials will be transported to Baker Lake via barge and will either be directly transported to Meadowbank Mine and/or the Whale Tail Pit site or held for a short period of time in the Baker Lake marshalling area.

Dry cargo is shipped from Becancour using multipurpose ocean-going vessels, which transit through Hudson Strait and Hudson Bay until reaching an established freight transfer (lightering) site located approximately 20 nautical miles (nm) east of Chesterfield Narrows, near Helicopter Island, Nunavut. The ship is anchored at

this point and cargo is unloaded onto two barges using the multipurpose crane system (P. Paquette, NSSI, 2016, pers. comm.). The barges then transport the shipment through Chesterfield Narrows to Baker Lake. Dry cargo shipments are provided by Nunavut Sealink & Supply Inc.

Fuel is supplied to Baker Lake by marine fuel tankers at an annual volume of 66.8 million L (65 million L of ULSD and 1.8 million L of Jet A). The fuel is transported by ocean-going tankers between Lewisporte, NL and a fuel transfer (lightering) site located near Helicopter Island, Nunavut. Once the fuel tankers are securely anchored, fuel is transferred to either tug-assisted fuel barges or smaller shuttle tankers. The fuel barges / shuttle tankers then transport the fuel shipment through Chesterfield Narrows to Baker Lake. Fuel shipping is provided by Woodland Coastal Shipping Ltd.

Agnico Eagle does not forecast changes to the existing transportation requirements related to the marine environment; in other words no additional ship trips are expected to be added by this Project as compared to the level of shipping currently required to re-supply the Meadowbank Mine on an annual basis. The proposed marine activity will simply be extended for an additional three to four years of operations.

1.2.7 Haul Roads, All-Weather Roads, and Winter Roads

The current operational components include marshalling facilities in Baker Lake and the 110 km AWAR between Baker Lake and the Meadowbank Mine. Vault Pit is approximately 8 km northeast of the main mine site. In 2015, Agnico Eagle received approval to construct a 64.1 km long exploration access road from Vault to the Amaruq exploration camp site in support of exploration activities. Agnico Eagle is proposing to upgrade this exploration road to a haul road to support the development of Whale Tail Pit and the hauling of ore and supplies needed between the Whale Tail Pit and the Meadowbank Mill. No changes are proposed for the Meadowbank AWAR to Baker Lake.

The proposed upgrade of the exploration road mainly entails widening from the current 6.5 m width to 9.5 m width. Road surfacing will be constructed using waste rock or aggregates from the quarry sites and esker material already permitted and leased. Typical cross-sections of the upgraded road based on underlying ground conditions are provided in Appendix 1-C. The bridges are already designed at the exploration stage to accommodate potential for use of the exploration road as a haul road. Culverts are already designed and will be extended to allow for adequate drainage. The bridges and culverts for the access road have been screened by NIRB and approved by the NWB and DFO for construction.

On-site standard culverts will be installed similar to haul roads within the Meadowbank Mine site. Typical cross-section and profile for culverts is provided in Appendix 1-C.

Agnico Eagle has developed the Whale Tail Pit Haul Road Management Plan. Refer to Volume 8, Appendix 8-C.1.

1.2.8 Maintenance, Warehouse, and Laydown

Primary maintenance will occur using existing infrastructure at Meadowbank Mine. For light maintenance the industrial site adjacent to the Whale Tail Pit will include one maintenance shop for mine equipment and one for haul trucks. Agnico Eagle may also include a wash bay, a machine shop, and a welding shop. The concrete foundation will be designed according to the type of bay (e.g., for a wash bay, drains in the foundation will be designed for used water with a sump for an oil separator).

1.2.9 Airport Facilities

There are no anticipated changes to the currently approved airport facilities at Meadowbank Mine. The small airstrip at the exploration site will be progressively reclaimed, and potentially 4,000 m^3 of existing airstrip surface material may be reused as construction material for the proposed infrastructure at the Whale Tail site.

1.2.10 Explosives Production and Storage Sites

The existing emulsion plant located near the Meadowbank Mine will be maintained with deliveries on an as need basis during operations. The haul road will be used to truck explosives between Meadowbank Mine and the Whale Tail site, with a minimum amount of explosives to be stored at the Whale Tail Pit site. Explosives truck(s) will be based at the emulsion plant at Meadowbank Mine. The location of general infrastructure for the management of explosives at the Whale Tail site are shown on Figure 1.2-1.

The Whale Tail site will primarily use emulsion based explosives during construction and operations to minimize the use of ammonium nitrate/fuel oil (ANFO). Presplit explosives will also be used to control the final pit walls, where required.

The explosives storage facilities will be safely located away from vulnerable facilities, as stipulated by the federal and territorial *Explosives Use Act* and *Regulations*. The minimum setback distances between the proposed explosives storage facilities and the other mine site facilities will be governed by the *Quantity-Distance Principles User's Manual,* as published by the Explosives Branch of Natural Resources Canada. Use of these setback distances will ensure that the location of these proposed facilities meet all federal and territorial regulations regarding safe siting of such facilities. Agnico Eagle has also taken into account for stoppage of haul road closures due to caribou migration and weather by appropriately sizing the on-site ore storage stockpile both at the Whale Tail Pit site and at Meadowbank Mine.

Fuel and raw materials for manufacturing explosives will continue to be supplied to Meadowbank Mine using the approved shipping routes.

1.2.11 Fuel Storage Sites

The construction and operations of the Whale Tail site will require the use of fuel (P-50 Fuel Diesel ULSD-43). Fuel usage between the Meadowbank Mill and operations at the Whale Tail site is projected to be approximately 66.8 million L/year. The Whale Tail Bulk Fuel Storage Facility will be located east of the Whale Tail Camp adjacent to the mine operations haul road (see Figure 1.2-1). Fuel storage at the Whale Tail site will be in one above ground storage tank with approximately 500,000 L capacity. The bulk fuel tank will be re-filled by a fuel truck on a regular basis throughout the year.

The diesel tanks will be single-walled, constructed of welded steel, and designed, constructed, and located to meet the Canadian Council of Ministers of the Environment guidelines for *Aboveground Storage Tank Systems Containing Petroleum and Allied Petroleum Products*. The fuel unloading facility will be located within a lined and bermed area sized to hold 110% of the volume of the largest tank. All other petroleum fuel and lubricant products will be delivered and stored in the original packing containers as delivered from the manufacturer.

The approved fuel storage facilities at Meadowbank Mine and Baker Lake marshalling area remain unchanged as a result of the proposed development of Whale Tail Pit and associated infrastructure. No additional marine shipping beyond current annual requirements will be needed; however, the activities will be extended by three to four years. The haul road will be used to truck fuel between Meadowbank Mine and the Whale Tail site.

1.2.12 Waste (Domestic and Hazardous) Management

All hazardous waste will be properly shipped to approved disposal facilities in the south. All organic material from the Whale Tail site will similarly be disposed of using the existing Meadowbank incinerator. Waste oil will be collected and used on-site in waste oil burners. Peak incinerated waste volumes are expected to remain similar to those occurring under current operational conditions at Meadowbank. Construction debris and domestic waste generated on-site will be disposed of in an on-site landfill to be located in the Whale Tail WRSF. The total capacity of this landfill is to be 59,000 m^3.

1.2.13 Power

The Power Plant will be a diesel-fueled facility using reciprocating engines housed in a modular building with a floor area 215 square metres (m^2). The two 1.8 MW/600 Volt (V) gensets will be relocated from the Vault Mine site to Whale Tail. An initial load estimation has been completed which gives us an expected load of 1,358 kW representing less than 85% of the one genset capacity. One spare unit will be installed for standby and/or service maintenance.

During construction, four 600 V diesel generator sets will be used to provide power for temporary facilities, such as office trailers and power for construction activities. These generators will progressively be bought during the construction period to provide power when needed (e.g., new building, and temporary power). After construction is completed, these generators will be consolidated and used as an emergency standby system. There will be no change to the power requirements at the Meadowbank Mine than is currently present.

1.2.14 Borrow Pits and Quarry Sites

Construction of the exploration access road utilized a series of quarry sites from which road construction material is sourced (the 6.5 m wide exploration road is currently under construction). These quarries will be expanded (first by depth, and if needed in width) to obtain material for haul road construction. Quarry material on the Whale Tail site will also be used for industrial site pad, access roads, and dikes. Proposed and currently licensed quarry sites are shown in Appendix 1-C. Ripping frozen borrow pit material will be attempted using a dozer. This loosens the material and allows it to be picked up using a loader or a hydraulic shovel. Should this fail, standard drill and blast procedures would be used. The sequence of steps under this circumstance follows that for waste rock from the Vault Pit.

While ARD/ML testing has been conducted as a measure to avoid using reactive road building materials; if sufficient water volume accumulates in the borrow sources, water quality monitoring of seeps from borrow pits will be conducted to provide information on possible impacts on the environment should the water reach any nearby waterbodies. A buffer of at least 31 m of undisturbed land will be maintained between borrow pits and waterbodies, and best management practices will prevent direct drainage away from the quarry sites. However, any significant seeps originating from the borrow pits that are likely to reach receiving waters will be sampled and analysed for a full suite of water quality parameters. Any problematic water will be directed away from waterbodies, or held if possible. If necessary, silt curtains will be used to control suspended sediments in water seeping from the borrow pits. Although erosion is not expected to originate from water flow from borrow pits, any evidence of erosion will be repaired by placing riprap over the affected area, and measures will be taken to reduce the velocity of the water with, for example, silt curtains.

Agnico Eagle has developed the Whale Tail Pit Haul Road Management Plan in support of Project operations. Refer to Volume 8, Appendix 8-C.1 for specific details.

1.3 Project Design

Agnico Eagle continues to conduct feasibility and design studies with both the cold northern climate and remote location as the principal engineering considerations for successful design, construction, and operations. Consistent with the FEIS (Cumberland 2005), the Whale Tail Pit was designed to minimize the areas of surface disturbance, stabilize disturbed land surfaces against erosion, and return the land to a post-mining use for traditional pursuits and wildlife habitat. This will mainly be achieved by rapidly dewatering during the open water season, mining the pit as efficiently as possible, and then refilling as early as possible during closure.

Design criteria with required design drawings for Project infrastructure are provided in Appendix 1-C.

1.4 Pace, Scale, and Timing of Project

As stated in Section 1.2.1.2 Project Need, Meadowbank Mine is scheduled to exhaust its mineable reserves by Q3 of 2018. The Kivalliq Region of Nunavut offers limited, and usually seasonal, employment opportunities. Agnico Eagle will continue exploration activities with the objective to extend Meadowbank Mine life beyond Q3 2018.

Agnico Eagle is actively exploring the Amaruq exploration property and expects to begin construction in 2018 and ultimately have full production in 2019. However, if permits are received earlier construction on-site will begin immediately thereafter.

By extending the LOM at Meadowbank, Agnico Eagle will progressively close portions of the Meadowbank Mine while operating. More specifically, the Whale Tail Pit operations will allow Agnico Eagle to progressively close the Vault Pit operations during extended operations (i.e., closing roads, infrastructure, Vault WRSF and refilling the pits, Phaser Lake and Vault Lake) according to the approved interim Meadowbank Closure Plan. Furthermore, Agnico Eagle will optimize closure planning by progressively closing portions of the Meadowbank Mine (i.e., Portage WRSF, reflooding Goose Pit and Portage Pit and reclaiming unused roads). Figure 1.4-1 provides a graphical representation of the key phases of Whale Tail and key phases at Meadowbank Mine.

The development sequence for the mine infrastructure and water management infrastructure is summarized in Table 1.4-1.

Figure 1.4-1: Key Phases at Whale Tail Pit and Meadowbank Mine

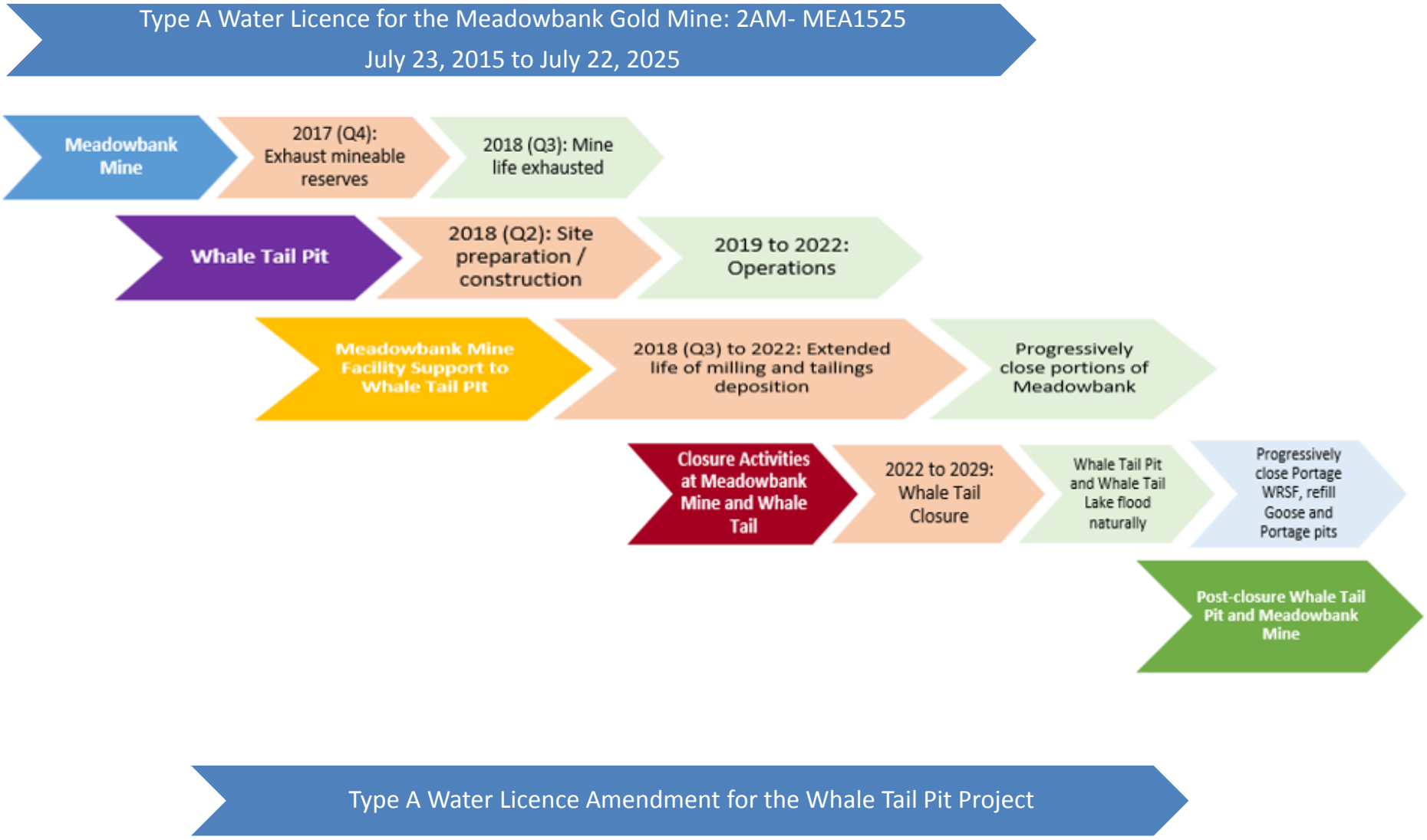


Table 1.4-1: Mine Development Sequence and Key Activities

Mine Year	Mine Development Sequence and Key Activities
Year -1 (2018) Construction	• Start the widening of the exploration access road to a haul road • Start the stripping of the open pit • Start to place waste rock and overburden in the Whale Tail WRSF area • Start the construction of the industrial pad and associated buildings • Start the construction of ore stockpiles and overburden storage • Start the construction of Whale Tail Dike • Start the construction of Mammoth Dike • Start the construction of the access roads on site • Start the construction of the contact water intake causeway in the Whale Tail Attenuation Pond • Construct Whale Tail WRSF Dike • Fish out Whale Tail Lake (North Basin) • Construct fresh water intake causeway in Nemo Lake • Construct the Water Treatment Plant • Construct the explosive magazine pads
Year 1 (2019) Operations	• Complete the widening of the haul road • Complete the construction of the industrial pad and associated buildings • Complete the construction of ore pads and overburden storage pad • Complete the construction of Whale Tail Dike • Complete the construction of Mammoth Dike • Complete communication tower construction • Complete the construction of the access roads on-site • Complete the construction of the causeway in the Attenuation Pond • Construct North East dike • Complete the construction of the water management infrastructure • Perform the dewatering of Whale Tail Lake (North Basin) • Construct discharge diffuser in Mammoth Lake • Construct the South Whale Tail Diversion Channel • Construct the water management Channel in the North Sector • Construct and operate the landfill • Start the cover with NPAG waste in the Whale Tail WRSF area
Year 3 (2021) Operations	• Complete the mining of the open pit
Year 4 (2022) Closure	• Complete the trucking of the ore to the Meadowbank Mill • Complete the cover with NPAG waste in the Whale Tail WRSF area • Decommission non-essential mine infrastructure and support buildings • Draw-down of Northeast sector and breach the Northeast dike • Draw-down of the raised Whale Tail Lake (South Basin) to natural elevation to contribute to refilling of the mined-out open pit • Start to reclaim the non-essential infrastructure • Start to fill the mined-out open pit by active pumping and natural flow • Start the monitoring period

Table 1.4-1: Mine Development Sequence and Key Activities (continued)

Mine Year	Mine Development Sequence and Key Activities
Year 6 (2024) Closure	• Complete the decommissioning of non-essential mine infrastructure and support buildings (except the water treatment plant and related infrastructures) • Complete the reclaiming of non-essential infrastructure
Year 7 (2025) Closure	• Refill the mined-out open pit by actively pumping from Whale Tail Lake (South Basin) and natural flow • Move the water treatment plant to the Whale Tail WRSF area, if necessary
Year 11 (2029) Post-closure	• Refill Whale Tail Lake (North Basin) • Breach the Whale Tail Dike when North Basin and South Basin of Whale Tail Lake are at the same elevation
Year 14 (2032) Post-closure	• Complete the decommissioning and the reclaiming • Breach the Whale Tail WRSF Dike
Year 16 (2034) Post-closure	• Complete the monitoring period

WRSF = waste rock storage facility; NPAG = non-potentially acid generating.

1.5 Environmental Assessment Summary

The FEIS (Cumberland 2005) and this FEIS Amendment applies an ecosystem-based approach by describing the ecological function of each ecosystem component or VC, indicating the ecological and cultural pathways of the potential impacts that are predicted, and designing mitigation and monitoring plans to deal with those impacts.

Baseline programs have been completed for the Project and have included data collection for the physical environment (e.g., terrain and soils, permafrost, geochemistry, noise, and surface water quantity and quality), biological environment (e.g., vegetation, terrestrial wildlife and birds, and fish and other aquatic organisms), and the cultural environment (e.g., IQ, archaeology, and socio-economics). Baseline data are summarized in a series of baseline reports that are included as supporting documents to the FEIS Amendment and/or are provided on the NIRB website (NIRB 2015).

In general the approach and methods for analysing, assessing, and determining the significance of environmental impacts included defining and describing these key elements:

- valued components;
- special and temporal boundaries;
- existing conditions;
- pathway analysis;
- residual effects analysis (includes project specific and cumulative effects);
- prediction confidence and uncertainty;
- residual impact classification and determination of significance; and
- monitoring and follow-up (including steps to be taken to fill gaps where applicable).

An impact assessment was completed for terrain, permafrost, and soils, air quality, noise, surface water quantity, surface water quality, fish, vegetation, terrestrial wildlife and birds, archaeology, traditional land use, socio-economic, and cumulative effects. Key impacts are related to localized changes in water quantity from dewatering, water quality changes from effluent discharge, impacts to local fish populations from dewatering Whale Tail Lake (North Basin), sensory disturbance to wildlife from the haul road and mining activity, localized changes to vegetation as a result of dust deposition, direct wildlife habit loss, socio-economics, including employment, government revenues, income, and traditional use effects from the extension of the LOM of the Meadowbank Mine. While there will be some short-term positive and negative impacts from the Project, long-term, high magnitude negative impacts are not anticipated.

Detailed FEIS addendum and baseline studies used to assess the impacts of extending the Meadowbank LOM, from mining the Whale Tail deposit is provided in Volumes 2 to 8 of the FEIS submission. It includes a detailed description of the approach taken for the addendum, an assessment of atmospheric, terrestrial, freshwater, human environment, and presents associated mitigation and monitoring plan addendums that are consistent with approved Meadowbank plans.

1.6 Adaptive Management and Precautionary Principle

Making good use of adaptive management requires the recognition that it is a structured, iterative approach to environmental management decision making (CPR 2011). Many valued components applicable to the Project are part of dynamic natural and socio-economic systems where uncertainty can be a significant factor. The goal is to reduce uncertainty over time by incorporating learnings from design, monitoring, mitigation, and changes in operations into environmental management at the proposed mine site. For example, the exploration and haul road alignment was altered based on community feedback and the construction schedule for the haul road was altered to focus on winter construction to reduce permafrost degradation. Where applicable, an adaptive management strategy or approach will be used for those VCs that will be monitored by Agnico Eagle.

Agnico Eagle has taken steps to integrate its sustainable development program into all aspects of its business through the development and implementation of an internal Health, Safety, Environment and Community Relations Management System, labelled the RMMS. Trends are compiled, followed, and analyzed in the RMMS and compared to the pre-established goals/thresholds. Any action plan and corrective actions to be taken are documented through the RMMS.

In 2014, Agnico Eagle continued development and implementation of its RMMS, the company's internal Health, Safety, Environment and Community Relations Management System. Its approach is to ensure that its system is consistent with the ISO 14001 standard for environmental management and the OHSAS 18001 standard for health and safety management. System documentation is supported by Intelex software. The RMMS is designed to integrate management of the requirements of the TSM initiative, the International Cyanide Management Code, the Carbon Disclosure Project, the Global Reporting Initiative, and the Conflict-Free Gold Standard.

The system is designed to quickly identify any adverse impact that could result from design features, mitigation measures, practices, and procedures that are mistakenly absent or not as effective as anticipated. The main concern in these instances is to evaluate the potential severity of the anticipated effect, and prioritize actions plans to mitigate impacts. Each of the management plans developed for the Project include an intrinsic process of continuous improvement that is aimed at evaluating the effectiveness of the design features, mitigation measures, operating practices, and procedures put in place.

Monitoring and adaptive management are essential tools for ensuring that a project is implemented as planned, that mitigation measures are successful, that the procedures and practices are effective, that potential adverse impacts are avoided or minimized, and that enhancement measures are effective. It is through monitoring that any unanticipated adverse environmental impacts can be discovered. Adaptive management is particularly useful in implementing the appropriate remedial measures in these instances. Additionally, the objectives of monitoring and adaptive management are to verify that:

- commitments are fulfilled;
- regulatory and other requirements are met;
- adverse effects are avoided or minimized; and
- benefits are enhanced.

As described above, adaptive management is used within the feedback process to make decisions to minimize or eliminate an adverse effect. It is employed where operations are planned and implemented, monitoring data collected and analyzed, and practices and procedures adjusted to reduce or eliminate any observed adverse effects. Continual use of the feedback loop allows environmental and socio-economical management decisions to be made on an ongoing basis and can lead to improvements in environmental management over time. Successful adaptive management will be evidenced in mitigation measures being effective. Should the measures employed not be successful, the particular activities will be curtailed while a detailed analysis is carried out to find the cause.

The precautionary principle, in conjunction with adaptive management, will be used in decision-making. In the face of uncertainty, conservative approaches will be used with an aim to reducing uncertainty over time via monitoring and mitigation.

Inspection precedes maintenance. Inspections, combined with monitoring, will signal when adaptive management must be used to mitigate possible negative effects.

1.7 Performance Measurement and Monitoring

As part of the Mining Association of Canada, Agnico Eagle reports its global performance through its annual Corporate Social Responsibility report. This report includes, notably, the indicators of the Global Reporting Initiative and Towards Sustainable Mining Initiative and have been incorporated into the Meadowbank RMMS. Main indicators to follow will be selected by taking into account:

- the compliance with relevant regulatory requirements and permitting targets;
- activities trends; and
- the progress towards achieving targets.

Regulatory requirements and targets are identified in each of the management plans, as appropriate. Corrective actions will be triggered when those thresholds are reached. The RMMS will link the thresholds to appropriate corrective actions and establish accountability.

The performance of the management plans will be monitored periodically and the results communicated. Independent researchers or consultants may be engaged to review performance where necessary. The

accuracy of the environmental impact predictions and the effectiveness of the mitigation measures will be verified through that process. If unusual or unforeseen adverse environmental impacts are noticed, corrective action will be put in place. Through the adaptive management process, the existing mitigation measures will be adjusted or new mitigation measures implemented if necessary. External reporting will be completed, as required.

A follow-up program will verify the effectiveness of any mitigation measures taken in response to expected and unexpected adverse environmental effects. An environmental effects monitoring program, will monitor the effectiveness of all mitigation measures. This program will include a reporting and response system.

Consistent with the existing Meadowbank Water Licence, Agnico Eagle will continue to comply with annual reporting requirements to the NIRB, KIA, and NWB.

1.8 Potential Future Developments

Agnico Eagle will continue exploration activities with the objective to extend Meadowbank Mine life beyond Q3 2018. Exploration is the act of searching for the purpose of discovery additional resources for potential future development. A list of current authorization and permits for exploration is provided in Appendix 1-B and ongoing baseline data collection activities are provided in Volume 2, Appendix 2-D.

In the original Project Certificate (Item 29) NIRB acknowledged that planned changes and project alternatives has potential and that ongoing expansion of Meadowbank was a possibility. Item 29 states:

> [Agnico Eagle] report to the NIRB if and when [Agnico Eagle] develops plans for an expansion of the Meadowbank Gold Mine…

The right to explore and develop the mineral resources at the Amaruq property (formerly the IVR project) was acquired by Agnico Eagle in April 2013 subject to a mineral exploration agreement with NTI. The development of Whale Tail Pit as proposed represents a portion of the mineralization identified for the Whale Tail zone. The 408 km^2 Amaruq property has potential for future development (refer to Figure 1.7-1 and Figure 1.7-2) as:

- the initial exploration target areas of mineralization potential the “I zone”, “V Zone” and “R Zone” intersects;
- underground mining of the Whale Tail ore body;
- expansion or pushback of proposed Whale Tail Pit; and
- Mammoth intersect potential underground and/or open pit.

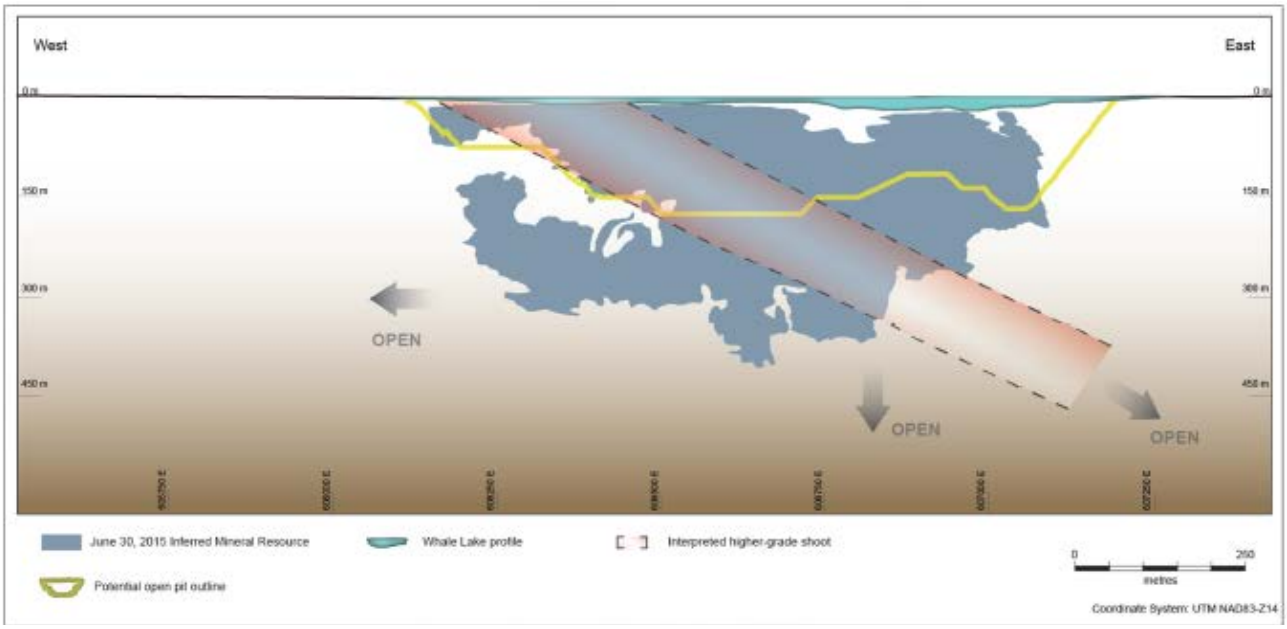


Figure 1.7-1: Underground Potential of the Whale Tail Ore Body

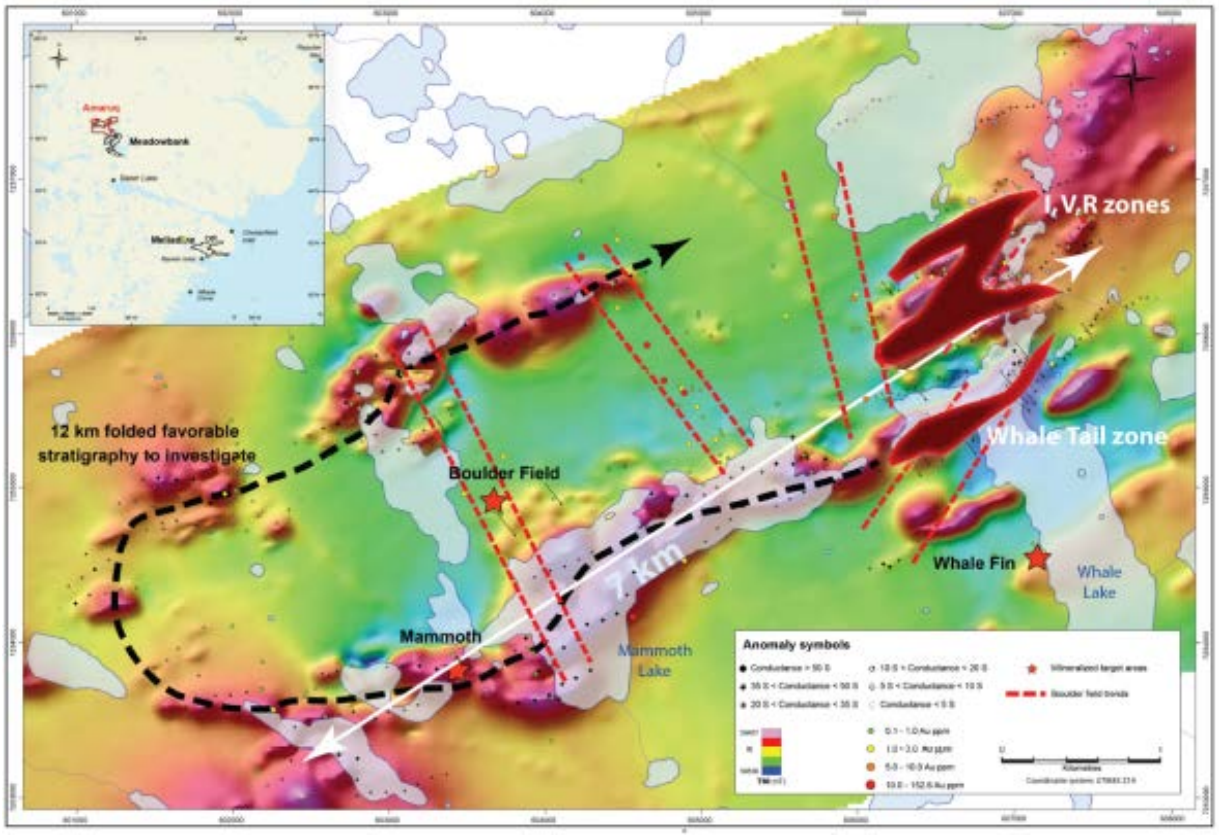


Figure 1.7-2: Geophysics Survey of the Amaruq Exploration Site and Future Development Opportunities

In March 2016, Agnico Eagle requested an amendment to the Type B exploration water licence to expand ongoing exploration of the Whale Tail zone to include advanced exploration and a bulk sample to assess the underground mining potential of the Whale Tail ore body.

Agnico Eagle proposes to continue delineation drilling of the IVR and Mammoth intersect zones in 2016.

The areas of potential future development are within the study area for the current Project. If proven economically viable the exploitation of the additional deposits would extend the LOM for Meadowbank Mine operations. Agnico Eagle would seek the appropriate modifications and/or amendments, if applicable.

1.9 Technology

The most current concepts have been selected for Project design (i.e., mining, processing, and effluent treatment). Although the technologies are considered state-of-the-art, the Meadowbank project team have adapted to difficult climatic conditions and have designed infrastructure accordingly and used up-to-date technology to solve problems.

For example, Agnico Eagle will continue to work with researchers at RIME (Research Institute of Mine and Environment) as part of an ongoing research project to evaluate tailings encapsulation at Meadowbank, as well as waste rock facility performance.

Presently two experimental cells have been built in the TSF:

- one with a cover of NPAG material of 2.0 m over the tailings; and
- one with a cover of NPAG material of 4.0 m over the tailings.

The experiment cells are instrumented with temperature probes, water content probes, suction probes, and oxygen consumption probes. The data from the instrumentation is collected by Agnico Eagle and sent to RIME for analysis. As additional data becomes available (i.e., after a complete year of instrumentation readings), the data will be presented and commented on in the 2015 Annual Report to NIRB and regulators. Additional test pads may be constructed over the tailings in 2016. The information collected will also be used by Agnico Eagle in developing a final design for tailings cover required at closure.

Furthermore, Agnico Eagle continues to work with academic and government researchers to improve the ability to predict and monitor environment impacts (specifically related to socio-economics, caribou, predatory birds, vegetation covers, and fisheries monitoring) in the north.

The mining and processing techniques proposed for Whale Tail Pit are an extension of current mining practices, thus Agnico Eagle intends to use familiar, proven approaches seen at many mining operations in production today however the company is continually addressing problems using proven newest technologies to improve mining efficiency, production efficiency, reduce fuel consumption, and ultimately reduce emissions.

1.10 Alternatives to the Project

Project alternatives were considered during all stages of Project design. Consultation and regulatory engagement discussions have been considered as part of the alternatives assessment. In general, Project alternatives were evaluated according to the following criteria:

- Environmental - potential impacts to the environment, project footprint, reclamation;

- Engineering and Viability – best engineering practices, technology, permitting, risk, and flexibility;
- Economy – cost implications, construction capital, operating costs, maintenance cost for reclamation; and
- Society – community acceptance or preference, traditional knowledge, health and safety, quality of life, employment, and socio economic effects.

The alternatives that shaped the overall Project include the following:

- Project Go/No-Go decision;
- Deposit, Mining Method, and Production;
- Processed Ore Containment and Tailing Storage;
- Overburden and Waste Rock Disposal;
- Water Management;
- Transportation, Access, and Quarry Development; and
- Infrastructure Support.

1.10.1 Project Go/No-Go Decision

The proposed Project is an opportunity made real by existing mining and milling facilities at Meadowbank Mine. Without these existing facilities it is not likely that Whale Tail Pit ore reserves could be economically mined. Without the Project expansion, the Meadowbank Mine will close in Q3 of 2018.

From the economic and societal view, the no-go alternative would result in a substantial lost opportunity. Tax and royalty revenues to government and employment and business contracting opportunities to individuals and companies would be lost.

From an environmental perspective, the no-go alternative would mean no additional impacts from mining. Existing site facilities would be decommissioned and the area disturbed by exploration would be restored within the terms of the existing licenses.

Delays in the Project associated with permitting may affect the long-term economic viability of the Project. Agnico Eagle has an obligation and commitment to reclaim infrastructure through progressive reclamation as facilities are no longer needed. To reduce economic and environmental liability for the proposed Project and existing Meadowbank Mine, Agnico Eagle's key objective is to minimize the "gap" in time between Meadowbank closure due to lack of resources and the mining/processing of additional resources from the proposed Project.

1.10.2 Infrastructure, Transportation Access, and Quarry

To improve economics for the Project, Agnico Eagle has minimized Project footprint, reduced potential impacts to the environment, and reduced infrastructure requiring reclamation by using as much as possible, the established Meadowbank Mine infrastructure.

In 2015 the NIRB and regulators approved the exploration access road to support the level of exploration needed by Agnico Eagle to evaluate the economic viability of further deposits.

The Project will require the expansion of the approved 6.5 m wide access road to a proposed 9.5 m wide haul road. The access road allows Agnico Eagle to use Meadowbank infrastructure to the fullest extent possible. If no road existed and Project economics supported the development of Whale Tail Pit, the project would require additional on-site support infrastructure including maintenance shop, administration, larger accommodation, and increased fuel storage. The existence of the road allows Agnico Eagle to minimize Project footprint.

Consultation was undertaken in development of the exploration access road and road selection alternatives were discussed with community representatives (Volume 7, Appendix 7-A). Agnico Eagle modified the road route to take into account community preference and traditional knowledge, are working with the Department of Culture and Heritage to respectfully mitigate existing cultural heritage sites, and have avoided all burial sites.

Quarry selection and use options were evaluated in the application filed for the exploration access road. Agnico Eagle, where possible, has prioritized use based on feedback from the community and KIA.

1.10.3 Deposit, Mining Method, and Production

Agnico Eagle outlined the potential for future development of the Amaruq property (Section 1.8) these options were considered as Project alternatives.

Initial drilling results for the IVR zones are promising; however, the Whale Tail Pit drilling results were more favorable and therefore advanced significantly through extensive drilling in 2014 and 2015 to confirm prefeasibility level economic viability. Additional deposits within the Amaruq property including IVR zones and underground require further exploration to assess economic viability.

Agnico Eagle considered delaying the Project and mining open pit and underground or solely underground to mine the Whale Tail zone; however, this would increase the overall gap between Meadowbank closure and continued mining beyond 2018 to at least two to three years given the present knowledge of the underground potential; without advanced exploration the current understanding is insufficient to support development. In March 2016 Agnico Eagle submitted an application to regulators to undertake advanced exploration of the Whale Tail zone to further evaluate the economic viability of underground mine development.

Agnico Eagle also considered widening the open pit footprint of Whale Tail Pit and adding in the mining of several smaller pits, including IVR. However, tailings storage facility capacity within the footprint of the approved TSF limited the size of the pits. Ultimately the size of the pits and Whale Tail WRSF were kept small in size to reduce the footprint of the Whale Tail Pit site and to remain within the approved Meadowbank TSF footprint and closure concept.

1.10.4 Processed Ore Containment and Tailing Storage

The processing of ore and disposal of tailings using the existing Meadowbank Mine facilities:

- reduces potential impacts to the environment by reducing Project footprint and need for reclamation of additional facilities;
- the raise in the north cell assists in contouring the TSF to control contact water runoff in closure;
- applies proven engineering best practices and technology which has been in use since 2006;
- reduces need for permitting of an additional tailings containment area;

- reduces the overall capital cost and operating cost by using existing processing facilities and existing tailings storage facilities;
- leverages operational knowledge;
- reduces reclamation costs and long-term environmental liability with respect to added infrastructure; and
- preferred by the KIA as land owner.

A new TSF on-site at Whale Tail would increase the Project footprint, require additional engineering (i.e., water management control structures), and increase environmental and post-closure monitoring obligations.

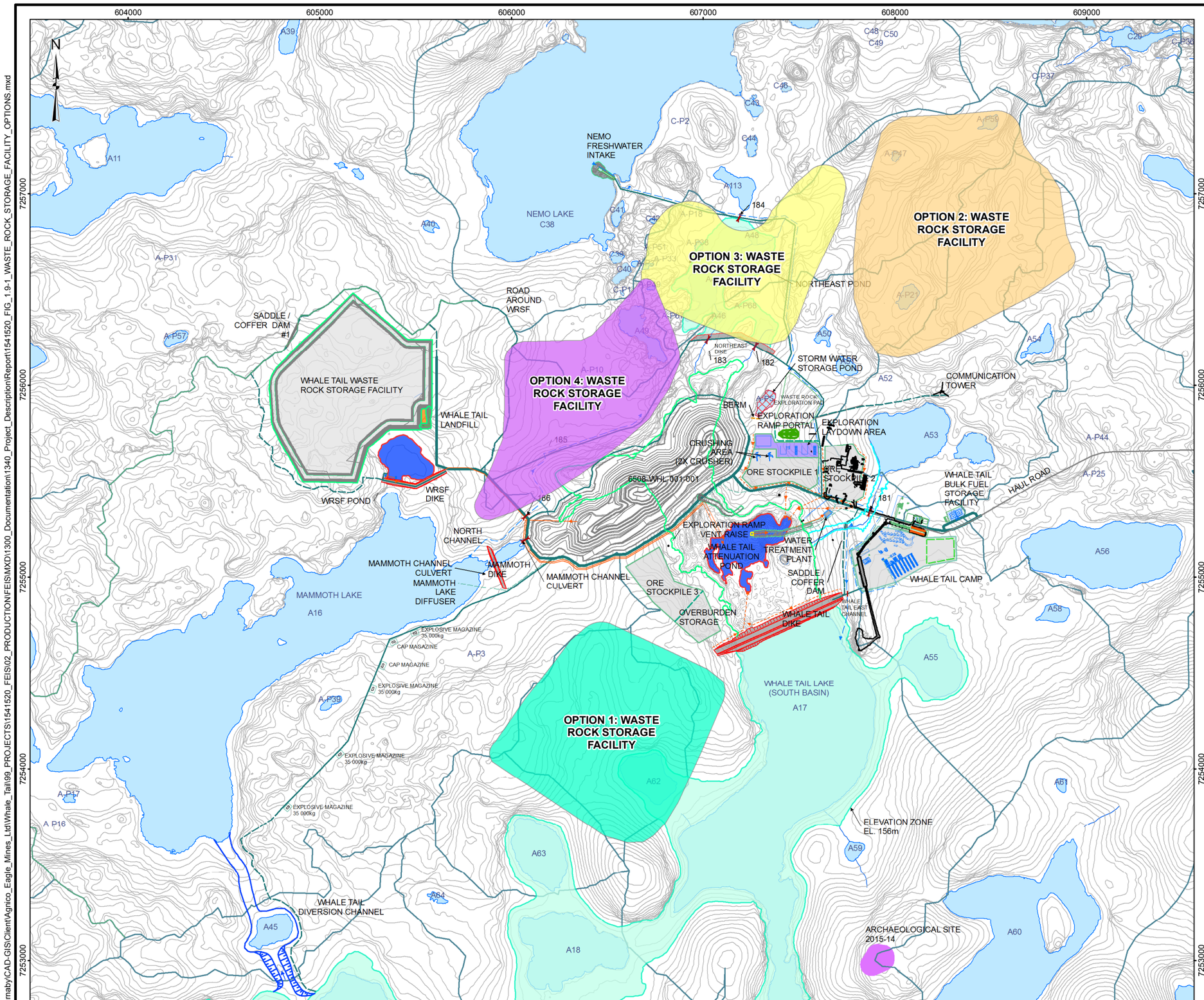
Other TSF options were considered near to the Meadowbank Mill, including, but not limited to deposition in Portage Pit or Bay-Goose Pit. These and other TSF expansion concepts are promising for future expansions and may be discussed with regulators and stakeholders in the future. However, under the current Whale Tail Pit operating life of mine of 3 to 4 years, these options were not evaluated as they are outweighed by the factors listed above, and specifically, the opportunity to optimize the approved TSF and the importance of staying within the approved TSF closure concept.

1.10.5 Overburden and Waste Rock Disposal

Agnico Eagle is continuing to explore within the Amaruq Exploration property and it was important that proposed infrastructure site locations were not sited over potential mineralization, that might prove economical in the future. Understanding the location of existing and potential future mineralization on the Amaruq property was key in the proposed siting of the overburden and waste rock disposal areas; site water management also played a key role in siting the Whale Tail WRSF. Whale Tail WRSF and overburden pile placements was determined by taking into account the potential for environmental impacts in consort with facilities engineering to minimize the amount of contact water generated, requiring treatment, or requiring containment during operations and especially post-closure.

Agnico Eagle considered various locations for the Whale Tail WRSF, while simultaneously looking at water management. The locations for Whale Tail WRSF options and the selected facility are presented in Figure 1.9-1. The selected option is also provided in Figure 1.9-1. Ultimately, the location was determined based on a number of reasons listed above, but the primary decision criteria used to select the Whale Tail WRSF option was:

- to reduce the risks to the downstream waterbodies;
- to reduce the direct impacts on waterbodies; and
- to reduce interaction of surface water with the Whale Tail WRSF.



LEGEND

- FINAL WHALE TAIL WASTE ROCK STORAGE FACILITY
- WHALE TAIL LAKE (SOUTH BASIN) FLOODED LIMIT (WATER LEVEL 156.0m)
- NATURAL WATERSHED
- DIKE
- POND/SUMP
- ARCHAEOLOGICAL SITE
- ROAD
- TEMPORARY ROAD
- DIVERSION CHANNEL
- COLLECTION CHANNEL
- CULVERT
- INTAKE WATER PIPE
- CONTACT WATER PIPE
- FRESHWATER PIPE
- CONTOUR (1 m INTERVAL)
- WATERCOURSE
- WATERBODY

WASTE ROCK STORAGE FACILITY OPTIONS

- OPTION 1
- OPTION 2
- OPTION 3
- OPTION 4

REFERENCE

1. INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED FROM 6108-600-210-002_R2(2019)s.dwg.
2. WATERCOURSE AND WATERBODY DATA OBTAINED FROM PHOTOSAT
DATUM: NAD 83 CSRS PROJECTION: UTM ZONE 14

400 0 400
METRES

PROJECT
AGNICO EAGLE

AGNICO EAGLE MINES LIMITED:
MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

TITLE

WASTE ROCK STORAGE FACILITY OPTIONS

Golder Associates

PROJECT		1541520	FILE No.	
DESIGN	JR	27 Apr. 2016	SCALE AS SHOWN	REV. 0
GIS	MH	05 May 2016		
CHECK	JR	09 May 2016		
REVIEW	LY	09 May 2016		

FIGURE 1.9-1

Y:\burnaby\CAD-GIS\Client\Agnico_Eagle_Mines_Ltd\Whale_Tail\99_PROJECTS\1541520_FEIS\02_PRODUCTION\FEIS\MXD\1300_Documentation\1340_Project_Description\Report\1541520_FIG_1.9-1_WASTE_ROCK_STORAGE_FACILITY_OPTIONS.mxd

1.10.6 Water Management

In the fall of 2014 SNC-Lavalin on behalf of Agnico Eagle initiated a scoping study, performed a conceptual study of the geotechnical and water management infrastructure for the Project, as well as completion of permitting level engineering. A detailed water management multiple account analysis (MAA) was completed on various options for Project water management. The MAA is provided in Appendix 1-E and summarized herein.

Five options were assessed in the MAA as follows:

- Option 1 – Pumping towards Mammoth Lake.

  The concept is to block the flow of water with a dike 10 m high and 800 m long, to obtain sufficient capacity, and divert inflow to Mammoth Lake by pumping, to maintain the raised water level of Whale Tail Lake (South Basin).

- Option 2 – Channel from Whale Tail Lake to Mammoth Lake

  The concept is to block the flow of water of Whale Tail Lake (South Basin) with a dike to promote its diversion via a diversion channel directed towards Mammoth Lake. The proposed dike would be about 6 m high and 750 m long (4 m lower than with Option 1).

- Option 3 – Rerouting Water towards Mammoth Lake

  Option 3 consists of blocking the water flow with the construction of the Whale Tail Dike and rerouting the water flow towards the Northwest Passage to Mammoth watershed.

- Option 4 – Rerouting Water towards Southern Watershed

  Option 4 is similar to Option 3, but all water is rerouted towards the southern watershed. The dike would need to be constructed at the same elevation as Option 3 (about 14 m high).

- Option 5 – Channel and rerouting water towards Mammoth Lake

  Option 5 consists of blocking the water flow with the construction of the Whale Tail Dike, raising the water level of the Whale Tail Lake to approximately 156 m, and rerouting the water flow towards the Northwest Passage to Mammoth watershed through a channel.

The best option has been assigned this score for its performance in the following categories: health and safety, social acceptability, operating cost during construction, natural hazards, adaptability, and permits. The channel and rerouting water from Whale Tail Lake to Mammoth Lake option (Option 5) obtained the best score, followed by the rerouting water towards Mammoth Lake option (Option 3). Since this option is very similar to Option 5, most of its strengths are similar to the preferred option. Option 3 is not as suitable as Option 5 mainly because of the height of the dike; the construction of the dike represents a higher risk for the workers, higher energy required for the construction, and higher capital costs than the preferred option.

Option 5 suggests lower capital costs due to the height of the dike, and lower operating costs during construction and more likely to be socially accepted as it is a passive water diversion system. With respect to viability, this Option integrates with Meadowbank current operations and allows natural hazards to be better managed. It also proposes a smaller diversion channel (as compared to Option 3) and uses a natural boulder-field prior to discharge into Mammoth Lake. In addition, this option is likely to be positively received by regulatory agencies

since it uses a passive water management approach and creates additional fish habitat during operation and closure, thus offsetting temporal impacts due to the dewatering of Whale Tail Lake (North Basin). Also, its passive water management will facilitate the closure and post-closure periods since the water accumulation from Whale Tail Lake (South Basin) may be used to re-flood the completed pit faster. The main disadvantage of Option 5 is the large zone of land to be flooded, which impacts the seasonal water level and the existing drainage network due to the elevation of the basins that will be disturbed.

1.11 References

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NIRB. 2015. Meadowbank Mine Final Environmental Impact Statement – Supporting Documents. Available on-line at: ftp://ftp.nirb.ca/02-REVIEWS/COMPLETED%20REVIEWS/03MN107-MEADOWBANK%20GOLD%20MINE/02-REVIEW/09-FINAL%20EIS/02-FEIS/SUPPORTING_DOCS/001%20Baseline/. Access on 27 November 2015.

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Paquette, P. (personal communication). 2016. Superintendant, Arctic Operations Desgagne Transarctik Inc. (NSSI), emails and phone interview, March 2016.

APPENDIX 1-A

Agnico Eagle Financial Statements

AGNICO EAGLE

Annual Audited Consolidated Financial Statements

(Prepared in accordance with United States GAAP)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Board of Directors (the "Board") and Shareholders of Agnico Eagle Mines Limited:

We have audited Agnico Eagle Mines Limited's internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 1992 (the "COSO criteria"). Agnico Eagle Mines Limited's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying management certification report on internal control over financial reporting. Our responsibility is to express an opinion on Agnico Eagle Mines Limited's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that revenues and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Agnico Eagle Mines Limited maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013 based on the COSO criteria.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Agnico Eagle Mines Limited as of December 31, 2013 and December 31, 2012, and the consolidated statements of income (loss) and comprehensive income (loss), shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2013, and our report dated March 21, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Chartered Accountants
Licensed Public Accountants

Toronto, Canada
March 21, 2014

MANAGEMENT CERTIFICATION

Management of Agnico Eagle Mines Limited (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the Company's Chief Executive Officer and Chief Financial Officer and effected by the Company's Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2013. In making this assessment, the Company's management used the criteria outlined by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework* issued in 1992. Based on its assessment, management concluded that, as of December 31, 2013, the Company's internal control over financial reporting was effective.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2013 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report that appears herein.

Toronto, Canada
March 21, 2014

By /s/ Sean Boyd

Sean Boyd
Vice Chairman, President and Chief Executive Officer

By /s/ David Smith

David Smith
Senior Vice-President, Finance and Chief Financial Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board and Shareholders of Agnico Eagle Mines Limited:

We have audited the accompanying consolidated balance sheets of Agnico Eagle Mines Limited as of December 31, 2013 and December 31, 2012, and the related consolidated statements of income (loss) and comprehensive income (loss), shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Agnico Eagle Mines Limited at December 31, 2013 and December 31, 2012 and the consolidated results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2013 in conformity with United States generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Agnico Eagle Mines Limited's internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 1992 and our report dated March 21, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Chartered Accountants
Licensed Public Accountants

Toronto, Canada
March 21, 2014

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

These consolidated financial statements of Agnico Eagle Mines Limited ("Agnico Eagle" or the "Company") are expressed in thousands of United States dollars ("US dollars", "US$" or "$"), except where noted, and have been prepared in accordance with United States generally accepted accounting principles ("US GAAP"). Certain information in the consolidated financial statements is presented in Canadian dollars ("C$"). As a precise determination of assets and liabilities depends on future events, the preparation of consolidated financial statements for a period necessarily involves the use of estimates and approximations. Actual results may differ from such estimates and approximations. The consolidated financial statements have, in management's opinion, been prepared within reasonable limits of materiality and within the framework of the significant accounting policies referred to below.

Basis of consolidation

These consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries and entities in which it has a controlling financial interest, after the elimination of intercompany accounts and transactions. The Company has a controlling financial interest if it owns a majority of the outstanding voting common stock or has significant control over an entity through contractual arrangements or economic interests of which the Company is the primary beneficiary.

Cash and cash equivalents

Cash and cash equivalents include cash on hand and short-term investments in money market instruments with remaining maturities of three months or less at the date of purchase. Short-term investments are designated as held to maturity for accounting purposes and are carried at amortized cost, which approximates market value given the short-term nature of these investments. Agnico Eagle places its cash and cash equivalents and short-term investments in high quality securities issued by government agencies, financial institutions and major corporations and limits the amount of credit exposure by diversifying its holdings.

Inventories

Inventories consist of ore stockpiles, concentrates, dore bars and supplies. Inventory amounts are reduced based on average cost or in the case of supplies, the lower of average cost and replacement cost. The current portion of stockpiles, ore on leach pads and inventories are determined based on the expected amounts to be processed within the next twelve months. Stockpiles, ore on leach pads and inventories not expected to be processed or used within the next twelve months are classified as long term.

Ore Stockpiles

Stockpiles consist of coarse ore that has been mined and hoisted from underground or delivered from an open pit that is available for further processing and in-stope ore inventory in the form of drilled and blasted stopes ready to be mucked and hoisted to the surface. The stockpiles are measured by estimating the tonnage, contained ounces (based on assays) and recovery percentages (based on actual recovery rates for processing similar ore). Specific tonnages are verified and compared to original estimates once the stockpile is milled. Ore stockpiles are valued at the lower of net realizable value and mining costs incurred up to the point of stockpiling the ore. The net realizable value of stockpiled ore is calculated by subtracting the estimated future processing and selling costs from the estimated revenue from the ore, which is based on the estimated tonnage and grade of stockpiled ore.

Mining costs include all costs associated with mining operations and are allocated to each tonne of stockpiled ore. Costs fully absorbed into inventory values include direct and indirect materials and consumables, direct labour, utilities and amortization of mining assets incurred up to the point of stockpiling the ore. Royalty expenses and production taxes are included in production costs, but are not capitalized into inventory. Stockpiles are generally processed within twelve months of extraction, with certain exceptions. Due to the structure of certain ore bodies, a significant amount of drilling and blasting may be undertaken in the early years of a mine's life, which can result in a long-term stockpile. The decision to process stockpiled ore is based on a net smelter return analysis. The Company processes its stockpiled ore if its estimated revenue, on a per tonne basis and net of estimated smelting and refining costs, is greater than the related mining and milling costs. The Company has never elected to not process stockpiled ore and does not anticipate departing from this practice in the future. Stockpiled ore on the surface is exposed to the elements, but the Company does not expect its condition to deteriorate significantly as a result.

Pre-production stripping costs are capitalized until an "other than *de minimis*" level of mineral is produced, after which time such costs are either capitalized to inventory or expensed. The Company considers various relevant criteria to assess when an "other than *de minimis*" level of mineral is produced. The criteria considered include: (1) the number of ounces mined compared to total ounces in mineral reserves; (2) the quantity of ore mined compared to the total quantity of ore expected to be mined over the life of the mine; (3) the current stripping ratio compared to the expected stripping ratio over the life of the mine; and (4) the ore grade compared to the expected ore grade over the life of the mine.

Major development expenditures, including stripping costs to prepare unique and identifiable areas outside the current mining area for future production that are considered to be pre-production mine development, are capitalized.

Concentrates and dore bars

Concentrate and dore bar inventories consist of concentrates and dore bars for which legal title has not yet passed to third-party smelters. Concentrate and dore bar inventories are measured based on assays of the processed concentrates and are valued based on the lower of net realizable value and the fully absorbed mining and milling costs associated with extracting and processing the ore.

Supplies

Supplies, consisting of mine stores inventory, are valued at the lower of average cost and replacement cost.

Mining properties, plant and equipment and mine development costs

Significant payments related to the acquisition of land and mineral rights are capitalized as mining properties at cost. If a mineable ore body is discovered, such costs are amortized to income when production begins, using the units-of-production method, based on estimated proven and probable mineral reserves. If no mineable ore body is discovered, such costs are expensed in the period in which it is determined that the property has no future economic value.

Expenditures for new facilities and improvements that can extend the useful lives of existing facilities are capitalized as plant and equipment at cost. Interest costs incurred for the construction of significant projects are capitalized.

Mine development costs incurred after the commencement of production are capitalized or deferred to the extent that these costs benefit the mining of the entire ore body. Costs incurred to access single ore blocks are expensed as incurred; otherwise, such vertical and horizontal development is classified as mine development costs.

Agnico Eagle records amortization on mine development costs used in commercial production on a units-of-production basis based on the estimated tonnage of proven and probable mineral reserves of the mine. The units-of-production method defines the denominator as the total tonnage of proven and probable mineral reserves. Plant and equipment is amortized on a straight-line basis over its specifically identified useful life.

Repairs and maintenance expenditures are charged to income as production costs. Assets under construction are not depreciated until the end of the construction period. Upon achieving commercial production, the capitalized construction costs are transferred to the appropriate category of plant and equipment.

Mineral exploration costs are charged to income in the year in which they are incurred. When it is determined that a mining property can be economically developed as a result of established proven and probable mineral reserves, the costs of drilling and development to further delineate the ore body on such property are capitalized. The establishment of proven and probable mineral reserves is based on results of final feasibility studies that indicate whether a property is economically feasible. Upon commencement of the commercial production of a development project, these costs are transferred to the appropriate asset category and are amortized to income using the methodology described above. Mine development costs, net of salvage values, relating to a property that is abandoned or considered uneconomic for the foreseeable future are written off.

The carrying values of mining properties, plant and equipment and mine development costs are periodically reviewed for possible impairment, when impairment factors exist, based on the future undiscounted net cash flows of the operating mine or development property. If it is determined that the estimated net recoverable amount is less than the carrying value, then a write down to the estimated fair value amount is made with a charge to income. Estimated future cash flows of operating mines and development properties include estimates of recoverable ounces of gold based on proven and probable mineral reserves. To the extent that economic value exists beyond the proven and probable mineral reserves of an operating mine or development property, this value is included as part of the estimated future cash flows. Estimated

future cash flows also involve estimates regarding metal prices (considering current and historical prices, price trends and related factors), production levels, capital and reclamation costs, and related income and mining taxes, all based on detailed life-of-mine plans. Cash flows are subject to risks and uncertainties and changes in the estimates of the cash flows may affect the recoverability of long-lived assets.

Goodwill

Business combinations are accounted for using the purchase method whereby assets acquired and liabilities assumed are recorded at their fair values as of the date of acquisition and any excess of the purchase price over such fair values is recorded as goodwill. Goodwill is not amortized.

The Company performs goodwill impairment tests on an annual basis as well as when events and circumstances indicate that the carrying amounts may no longer be recoverable. In performing the impairment tests, the Company estimates the fair values of its reporting units that include goodwill and compares those fair values to each reporting unit's carrying amount. If a reporting unit's carrying amount exceeds its fair value, the Company compares the implied fair value of the reporting unit's goodwill to the carrying amount and any excess of the carrying amount of goodwill over the implied fair value is charged to income.

Financial instruments

Agnico Eagle uses derivative financial instruments (primarily option and forward contracts) to manage exposure to fluctuations in byproduct metal prices, interest rates and foreign currency exchange rates and may use such means to manage exposure to certain input costs. Agnico Eagle does not hold financial instruments or derivative financial instruments for trading purposes.

The Company recognizes all derivative financial instruments in the consolidated financial statements at fair value regardless of the purpose or intent for holding the instrument. Changes in the fair value of derivative financial instruments are either recognized periodically in the consolidated statements of income (loss) and comprehensive income (loss) or in shareholders' equity as a component of accumulated other comprehensive loss, depending on the nature of the derivative financial instrument and whether it qualifies for hedge accounting. Financial instruments designated as hedges are tested for effectiveness on a quarterly basis. Gains and losses on those contracts that are proven to be effective are reported as a component of the related transaction.

Revenue recognition

Revenue is recognized when the following conditions are met:

(a) persuasive evidence of an arrangement to purchase exists;

(b) the price is determinable;

(c) the product has been delivered; and

(d) collection of the sales price is reasonably assured.

Revenue from gold and silver in the form of dore bars is recorded when the refined gold or silver is sold and delivered to the customer. Generally, all the gold and silver in the form of dore bars recovered in the Company's milling process is sold in the period in which it is produced.

Under the terms of the Company's concentrate sales contracts with third-party smelters, final prices for the metals contained in the concentrate are determined based on the prevailing spot market metal prices on a specified future date, which is established as of the date that the concentrate is delivered to the smelter. The Company records revenues under these contracts based on forward prices at the time of delivery, which is when transfer of legal title to concentrate passes to the third-party smelters. The terms of the contracts result in differences between the recorded estimated price at delivery and the final settlement price. These differences are adjusted through revenue at each subsequent financial statement date.

Revenues from mining operations consist of gold revenues, net of smelting, refining, transportation and other marketing charges. Revenues from byproduct metals sales are shown net of smelter charges as part of revenues from mining operations.

Foreign currency translation

The functional currency for each of the Company's operations is the US dollar. Monetary assets and liabilities of Agnico Eagle's operations denominated in a currency other than the US dollar are translated into US dollars using the exchange rate in effect at period end. Non-monetary assets and liabilities are translated at historical exchange rates, while revenues and expenses are translated at the average exchange rate during the period, with the exception of amortization, which is translated at historical exchange rates. Exchange gains and losses are included in income, except for gains and losses on foreign currency contracts used to hedge specific future commitments in foreign currencies. Gains and losses on these contracts are accounted for as a component of the related hedge transactions.

Reclamation costs

On an annual basis, the Company assesses cost estimates and other assumptions used in the valuation of asset retirement obligations ("AROs") at each of its mineral properties to reflect events, changes in circumstances and new information available. Changes in these cost estimates and assumptions have a corresponding impact on the fair value of the AROs. For closed mines, any change in the fair value of AROs results in a corresponding charge or credit to income, whereas at operating mines the charge is recorded as an adjustment to the carrying amount of the corresponding asset.

AROs arise from the acquisition, development, construction and operation of mining properties and plant and equipment due to government controls and regulations that protect the environment on the closure and reclamation of mining properties. The major parts of the carrying amount of AROs relate to tailings and heap leach pad closure and rehabilitation, demolition of buildings and mine facilities, ongoing water treatment and ongoing care and maintenance of closed mines. The fair values of AROs are measured by discounting the expected cash flows using a discount factor that reflects the credit-adjusted risk-free rate of interest. The Company prepares estimates of the timing and amount of expected cash flows when an ARO is incurred. Expected cash flows are updated to reflect changes in facts and circumstances. The principal factors that can cause expected cash flows to change are the construction of new processing facilities, changes in the quantities of material in proven and probable mineral reserves and a corresponding change in the life-of-mine plan, changing ore characteristics that impact required environmental protection measures and related costs, changes in water quality that impact the extent of water treatment required and changes in laws and regulations governing the protection of the environment. When expected cash flows increase, the revised cash flows are discounted using a current discount factor, whereas when expected cash flows decrease, the reduced cash flows are discounted using the historical discount factor used in the original estimation of the expected cash flows. In either case, any change in the fair value of the ARO is recorded. Agnico Eagle records the fair value of an ARO when it is incurred. AROs are adjusted to reflect the passage of time (accretion), which is calculated by applying the discount factor implicit in the initial fair value measurement to the beginning of period carrying amount of the AROs. For producing mines, accretion expense is recorded in the cost of goods sold each period. Upon settlement of an ARO, Agnico Eagle records a gain or loss if the actual cost differs from the carrying amount of the ARO. Settlement gains/losses are recorded in income.

Environmental remediation liabilities ("ERLs") are differentiated from AROs in that they do not arise from environmental contamination in the normal operation of a long-lived asset or from a legal obligation to treat environmental contamination resulting from the acquisition, construction or development of a long-lived asset. The Company is required to recognize a liability for obligations associated with ERLs arising from past acts. ERL fair value is measured by discounting the expected related cash flows using a discount factor that reflects the credit-adjusted risk-free rate of interest. The Company prepares estimates of the timing and amount of expected cash flows when an ERL is incurred. On an annual basis, the Company assesses cost estimates and other assumptions used in the valuation of ERLs to reflect events, changes in circumstances and new information available. Changes in these cost estimates and assumptions have a corresponding impact on the fair value of the ERL. Any change in the fair value of ERLs results in a corresponding charge or credit to income. Upon settlement of an ERL, Agnico Eagle records a gain or loss if the actual cost differs from the carrying amount of the ERL. Settlement gains/losses are recorded in income.

Other environmental remediation costs that are not AROs or ERLs as defined by the Financial Accounting Standards Board's Accounting Standards Codification ("ASC") 410-20 – *Asset Retirement Obligations* and 410-30 – *Environmental Obligations*, respectively, are expensed as incurred.

Income and mining taxes

Agnico Eagle follows the liability method of tax allocation in accounting for income taxes. Under this method of tax allocation, deferred income and mining tax assets and liabilities are measured using the enacted tax rates and laws expected to be in effect when the temporary differences are expected to reverse.

The Company's operations involve dealing with uncertainties and judgments in the application of complex tax regulations in multiple jurisdictions. The final taxes paid are dependent upon many factors, including negotiations with taxation authorities in various jurisdictions and resolution of disputes arising from federal, provincial, state and international tax audits. The Company recognizes the effect of uncertain tax positions and records tax liabilities for anticipated tax audit issues in Canada and other tax jurisdictions where it is more likely than not based on technical merits that the position would not be sustained. The Company recognizes the amount of any tax benefits that have a greater than fifty percent likelihood of being ultimately realized upon settlement.

Changes in judgment related to the expected ultimate resolution of uncertain tax positions are recognized in the year of such change. Accrued interest and penalties related to unrecognized tax benefits are recorded in income tax expense. The Company adjusts these reserves in light of changing facts and circumstances. However, due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from the Company's estimate of the tax liabilities. If the Company's estimate of tax liabilities proves to be less than the ultimate assessment, an additional charge to expense would result. If the estimate of tax liabilities proves to be greater than the ultimate assessment, a tax benefit would result.

Stock-based compensation

The Company's Employee Stock Option Plan provides for the granting of options to directors, officers, employees and service providers to purchase common shares. Options have exercise prices equal to the market price on the day prior to the date of grant. The fair value of these options is recognized in the consolidated statements of income (loss) and comprehensive income (loss) or in the consolidated balance sheets if capitalized as part of property, plant and mine development over the applicable vesting period as a compensation cost. Any consideration paid by employees on exercise of options or purchase of common shares is credited to share capital.

Fair value is determined using the Black-Scholes option valuation model, which requires the Company to estimate the expected volatility of the Company's share price and the expected life of the stock options. Limitations with existing option valuation models and the inherent difficulties associated with estimating these variables create difficulties in determining a reliable single measure of the fair value of stock option grants. The dilutive impact of stock option grants is factored into the Company's reported diluted net income (loss) per share.

Net income (loss) per share

Basic net income (loss) per share is calculated on net income (loss) for the year using the weighted average number of common shares outstanding during the year. The weighted average number of common shares used to determine diluted net income (loss) per share includes an adjustment, using the treasury stock method, for stock options outstanding and warrants outstanding. Under the treasury stock method:

- the exercise of options or warrants is assumed to occur at the beginning of the period (or date of issuance, if later);
- the proceeds from the exercise of options or warrants plus the future period compensation expense on options granted are assumed to be used to purchase common shares at the average market price during the period; and
- the incremental number of common shares is (the difference between the number of shares assumed issued and the number of shares assumed purchased) is included in the denominator of the diluted net income (loss) per share calculation.

Pension costs and obligations and post-retirement benefits

In Canada, Agnico Eagle maintains a defined contribution plan covering all of its employees (the "Basic Plan"). The Basic Plan is funded by Company contributions based on a percentage of income for services rendered by employees. In addition, the Company has a supplemental plan for designated executives at the level of Vice-President or above (the "Supplemental Plan"). Under the Supplemental Plan, an additional 10% of the designated executives' income is contributed by the Company. The Company does not offer any other post-retirement benefits to its employees.

Agnico Eagle also provides a non-registered supplementary executive retirement defined benefit plan for certain senior officers (the "Executives Plan"). The Executives Plan benefits are generally based on the employee's years of service and level of compensation. Pension expense related to the Executives Plan is the net of the cost of benefits provided, the interest cost of projected benefits, return on plan assets and amortization of experience gains and losses. Pension fund assets are measured at current fair values. Actuarially determined plan surpluses or deficits, experience gains or losses and the cost of pension plan improvements are amortized on a straight-line basis over the expected average remaining service life of the employee group.

Commercial production

The Company assesses each mine construction project to determine when a mine moves into the production stage. The criteria used to assess the start date are determined based on the nature of each mine construction project, such as the complexity of a plant and its location. The Company considers various relevant criteria to assess when the mine is substantially complete and ready for its intended use and moved into the production stage. The criteria considered include: (1) the completion of a reasonable period of testing of mine plant and equipment; (2) the ability to produce minerals in saleable form (within specifications); and (3) the ability to sustain ongoing production of minerals. When a mine construction project moves into the production stage, the capitalization of certain mine construction costs ceases and costs are either capitalized to inventories or expensed, except for sustaining capital costs related to mining properties, plant and equipment or mine development.

OTHER ACCOUNTING DEVELOPMENTS

Recently adopted accounting pronouncements

Disclosures about Offsetting Assets and Liabilities

In November 2011, ASC guidance was issued relating to disclosure on offsetting financial instrument and derivative financial instrument assets and liabilities. Under the updated guidance, entities are required to disclose gross information and net information about both instruments and transactions eligible for offset in the consolidated balance sheets and instruments and transactions subject to an agreement similar to a master netting arrangement. The Company adopted this updated guidance, effective for the fiscal year beginning January 1, 2013. See notes 4 and 15 for disclosure on offsetting financial instrument and derivative financial instrument assets and liabilities.

Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Loss

In February 2013, ASC guidance was issued relating to the reporting of amounts reclassified out of accumulated other comprehensive loss. Under the updated guidance, entities are required to provide information about the amounts reclassified out of accumulated other comprehensive loss by component and by consolidated statement of income (loss) line item, as required under US GAAP. The Company adopted this updated guidance, effective for the fiscal year beginning January 1, 2013. See the Company's consolidated statements of income (loss) and comprehensive income (loss) for reporting of amounts reclassified out of accumulated other comprehensive loss.

Recently Issued Accounting Pronouncements and Developments

Under Securities and Exchange Commission ("SEC") Staff Accounting Bulletin 74, the Company is required to disclose information related to new accounting standards that have not yet been adopted. Agnico Eagle has evaluated newly issued accounting standards that have not yet been adopted and does not expect them to significantly impact the Company's consolidated financial statements.

International Financial Reporting Standards

As permitted by both the SEC in the United States and the Canadian Securities Administrators ("CSA") in Canada, Agnico Eagle currently prepares and files its consolidated financial statements in accordance with US GAAP. Generally accepted accounting principles for Canadian publicly accountable enterprises became International Financial Reporting Standards ("IFRS") in 2011 and the SEC now accepts financial statements prepared in accordance with IFRS without reconciliation to US GAAP from foreign private issuers. Accordingly, Agnico Eagle has decided to convert its basis of accounting to IFRS to enhance the comparability of its financial statements to the Company's peers in the mining industry.

The Company has commenced the process of converting its basis of accounting from US GAAP to IFRS with a transition date of January 1, 2013. Agnico Eagle anticipates reporting under IFRS for interim and annual periods beginning in the third quarter of 2014, with comparative information restated under IFRS.

The adoption of IFRS may require the Company to make changes in accounting policies that may have an impact on its reported financial position and results of operations. Where accounting policy alternatives are available, Agnico Eagle's primary objective will be the selection of IFRS accounting policies that provide meaningful and transparent information to shareholders.

The Company has developed a detailed IFRS conversion plan which includes the following three phases and the key activities to be performed in each phase:

- **Assessment phase:** During this now completed phase, the Company established a steering committee and IFRS working group, developed a detailed project plan, designed and implemented internal controls over the IFRS conversion plan and evaluated the high level differences between US GAAP and IFRS that may have an impact on the Company.
- **Impact analysis and design phase:** This phase involves the detailed analysis and quantification of the differences between Agnico Eagle's accounting policies under US GAAP and IFRS, the selection of IFRS accounting policies, the assessment of the impact on financial information systems and the development of a strategy for capturing IFRS comparative financial information, the incorporation of IFRS accounting policy and process changes into the Company's internal controls, the assessment of contractual arrangements and budgeting processes for IFRS conversion impacts and the provision of technical training to key finance and other personnel. This phase is in process and is expected to be completed during the second quarter of 2014.
- **Implementation phase:** This phase involves the implementation of changes to the Company's accounting policies and business processes as identified through the impact analysis and design phase and the revision of the Company's Accounting Policies and Procedures Manual to reflect these changes. The implementation phase will culminate in the preparation of IFRS consolidated financial statements including first-time adoption reconciliations from US GAAP in the third quarter of 2014.

Significant identified differences between US GAAP and IFRS and available IFRS accounting policy choices that may have an impact on the Company's consolidated financial statements are outlined below. These differences should not be regarded as a complete list of changes that will result from the transition to IFRS, rather they encompass management's high level evaluation of significant differences between US GAAP and IFRS and available IFRS accounting policy choices as they currently exist. At this stage in the IFRS conversion plan, the Company has not quantified the anticipated impact of these differences on our consolidated financial statements nor has the Company selected the IFRS accounting policies it will adopt.

First-time adoption of IFRS

IFRS 1 First-time Adoption of International Financial Reporting Standards ("IFRS 1") provides guidance for an entity's initial adoption of IFRS. IFRS 1 generally requires that IFRS effective at the end of an entity's first IFRS reporting period be applied retrospectively, with specific mandatory exceptions and certain optional exemptions. In accordance with its IFRS conversion plan, Agnico Eagle's first IFRS reporting period will be the third quarter of 2014.

Impairment

Under US GAAP, a two-step approach is used for long-lived asset impairment testing whereby long-lived assets are first tested for recoverability based on their expected undiscounted cash flows. If a long-lived asset's expected undiscounted cash flow exceeds the recorded carrying amount, no impairment charge is required. If the expected undiscounted cash flow is lower than the recorded carrying amount, the long-lived assets are written down to their estimated fair value. US GAAP does not permit the reversal of impairment losses.

Under IFRS, IAS 36 Impairment of Assets ("IAS 36") prescribes a one-step approach for asset impairment testing and measurement whereby an asset's recoverable amount is compared directly against its recorded carrying amount. Under IAS 36, an asset's recoverable amount is determined as the higher of the estimated fair value less costs to sell or value in use (which is measured using discounted cash flows). If an asset's recoverable amount is less than the recorded carrying amount, an impairment charge is required. IAS 36 also requires the reversal of previously recorded impairment losses where circumstances have changed such that the impairments have been reduced.

The difference in the approach to asset impairment testing and measurement may result in more frequent impairment charges under IFRS, where asset carrying values previously supported under US GAAP on an undiscounted cash flow basis cannot be supported on a discounted cash flow basis. However, the impact of any additional asset impairments recorded under IFRS may be partially offset by the requirement to reverse previously recorded impairment losses where circumstances have changed.

Production stripping costs

Under US GAAP, the cost of removing overburden and waste materials to expose ore and access mineral deposits for extraction during the production phase of a surface mine ("production stripping costs") are accounted for as production costs and are included in the cost of the inventory produced during the period in which the stripping costs are incurred.

Under IFRS, IFRIC Interpretation 20 Stripping Costs in the Production Phase of a Surface Mine ("IFRIC 20") requires that production stripping costs relating to improved access to ore be capitalized as part of a non-current stripping activity asset if probable future economic benefits will be realized, the costs can be reliably measured and the component of an ore body for which access has been improved can be identified. To the extent that ore is extracted and inventory is produced in the current period, IFRIC 20 instead prescribes that production stripping costs be accounted for as part of the cost of the inventory produced.

The difference in approach to accounting for production stripping costs will result in a decrease in direct production costs and an increase in amortization expense relating to the recognition of non-current stripping activity assets under IFRS.

Exploration and evaluation

Under US GAAP, the Company accounts for exploration and evaluation ("E&E") expenditures as current period operating expenses until it is determined that a mining property can be economically developed as a result of established proven and probable reserves. Once proven and probable reserves are established based on the results of a final feasibility study, the costs of drilling and development to further delineate the ore body are capitalized.

IFRS 6 Exploration for and Evaluation of Mineral Resources ("IFRS 6") provides guidance related to expenditures incurred during the E&E phase. IFRS 6 requires entities to select and consistently apply an accounting policy that specifies which expenditures are capitalized as E&E assets. However, IFRS 6 provides no specific guidance as to when E&E expenditures are to be capitalized.

Agnico Eagle is in the process of defining the E&E phase within the context of IFRS 6 and developing an accounting policy that outlines the point at which specific types of E&E expenditures will be capitalized.

Revenue Recognition

Revenue recognition criteria under IAS 18 Revenue ("IAS 18") include the probability that economic benefits associated with the transaction will flow to the entity and that the revenue can be measured reliably. The Company does not expect that the point at which it recognizes revenue will change under IFRS.

Property, Plant and Equipment

Under IFRS, IAS 16 Property, Plant and Equipment requires the separate identification and measurement of significant individual components of property, plant and equipment, with individual components depreciated based on their individual useful lives. The Company identified significant individual components of property, plant and equipment under US GAAP in 2013 and will assess whether an adjustment relating to the retrospective application and depreciation of these components is required to its opening January 1, 2013 balance sheet under IFRS.

COMPARATIVE FIGURES

Certain figures in the comparative consolidated financial statements have been reclassified from statements previously presented to conform to the presentation of the 2013 consolidated financial statements.

AGNICO EAGLE MINES LIMITED
CONSOLIDATED BALANCE SHEETS

(thousands of United States dollars, except share amounts, US GAAP basis)

	As at December 31,	
	2013	2012
ASSETS		
Current		
Cash and cash equivalents	$ 139,101	$ 298,068
Short-term investments	2,217	8,490
Restricted cash (note 14)	28,723	25,450
Trade receivables (notes 1 and 4)	67,300	67,750
Inventories:		
Ore stockpiles	39,941	52,342
Concentrates and dore bars	58,543	69,695
Supplies	253,160	222,630
Income taxes recoverable (note 9)	18,682	19,313
Available-for-sale securities (notes 2(b) and 4)	74,581	44,719
Fair value of derivative financial instruments (notes 4 and 15)	5,590	2,112
Other current assets (note 2(a))	116,993	92,977
Total current assets	804,831	903,546
Other assets (note 2(c))	66,394	55,838
Goodwill (notes 10 and 19)	39,017	229,279
Property, plant and mine development (note 3)	4,049,117	4,067,456
	$4,959,359	$5,256,119
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current		
Accounts payable and accrued liabilities (note 11)	$ 173,374	$ 185,329
Reclamation provision (note 6(a))	3,452	16,816
Dividends payable	–	37,905
Interest payable (note 5)	13,803	13,602
Income taxes payable (note 9)	7,523	10,061
Capital lease obligations (note 13(a))	12,035	12,955
Fair value of derivative financial instruments (notes 4 and 15)	467	277
Total current liabilities	210,654	276,945
Long-term debt (note 5)	1,000,000	830,000
Reclamation provision and other liabilities (note 6)	178,236	127,735
Deferred income and mining tax liabilities (note 9)	593,320	611,227
SHAREHOLDERS' EQUITY		
Common shares (notes 7(a), 7(b) and 7(c)):		
Outstanding – 174,181,163 common shares issued, less 227,188 shares held in trust	3,294,007	3,241,922
Stock options (note 8(a))	174,470	148,032
Warrants (note 7(b))	–	24,858
Contributed surplus	37,254	15,665
Retained earnings (deficit)	(513,441)	7,046
Accumulated other comprehensive loss (note 7(d))	(15,141)	(27,311)
Total shareholders' equity	2,977,149	3,410,212
	$4,959,359	$5,256,119
Contingencies and commitments (notes 6, 9, 12, 13(b) and 21)		

On behalf of the Board:

Sean Boyd CPA, CA, Director

Mel Leiderman CPA, CA, Director

See accompanying notes

AGNICO EAGLE MINES LIMITED
CONSOLIDATED STATEMENTS OF INCOME (LOSS) AND COMPREHENSIVE INCOME (LOSS)
(thousands of United States dollars, except per share amounts, US GAAP basis)

	Year ended December 31,		
	2013	2012	2011
REVENUES			
Revenues from mining operations (note 1)	$1,638,406	$1,917,714	$1,821,799
COSTS, EXPENSES AND OTHER INCOME			
Production[(i)]	924,927	897,712	876,078
Exploration and corporate development	44,236	109,500	75,721
Amortization of property, plant and mine development (note 3)	296,078	271,861	261,781
General and administrative (note 16)	115,800	119,085	107,926
Impairment loss on available-for-sale securities (notes 2(b) and 4)	34,272	12,732	8,569
Provincial capital tax	(1,504)	4,001	9,223
Interest expense (note 5)	57,999	57,887	55,039
Interest and sundry expense	8,824	2,389	5,188
(Gain) loss on derivative financial instruments (note 15)	(1,509)	819	(3,683)
Gain on sale of available-for-sale securities (note 2(b))	(74)	(9,733)	(4,907)
Impairment loss (note 18)	537,227	–	907,681
Loss on Goldex mine (note 17)	–	–	302,893
Foreign currency translation (gain) loss	(7,188)	16,320	(1,082)
Income (loss) before income and mining taxes	(370,682)	435,141	(778,628)
Income and mining taxes expense (recovery) (note 9)	35,844	124,225	(209,673)
Net income (loss) for the year	$ (406,526)	$ 310,916	$ (568,955)
Attributed to non-controlling interest	$ –	$ –	$ (60)
Attributed to common shareholders	$ (406,526)	$ 310,916	$ (568,895)
Net income (loss) per share – basic (note 7(e))	$ (2.35)	$ 1.82	$ (3.36)
Net income (loss) per share – diluted (note 7(e))	$ (2.35)	$ 1.81	$ (3.36)
Cash dividends declared per common share (note 7(a))	$ 0.66	$ 1.02	$ –
COMPREHENSIVE INCOME (LOSS)			
Net income (loss) for the year	$ (406,526)	$ 310,916	$ (568,955)
Other comprehensive income (loss):			
Available-for-sale securities and other investments:			
Unrealized loss	(22,553)	(27,029)	(35,444)
Reclassification to impairment loss on available-for-sale securities (notes 2(b) and 4)	34,272	12,732	8,569
Reclassification to realized gain on sale of available-for-sale securities (note 2(b))	(74)	(9,733)	(4,907)
Derivative financial instruments (note 15):			
Unrealized (loss) gain	(284)	6,882	(5,863)
Reclassification to production costs	(117)	(2,738)	1,459
Pension benefits (note 6(b)):			
Unrealized gain (loss)	375	531	(1,595)
Reclassification to general and administrative expense	637	617	540
Income tax expense (recovery) impact of reclassification items (note 9)	(137)	558	(556)
Income tax expense (recovery) impact of other comprehensive income (loss) items (note 9)	51	(2,025)	2,301
Other comprehensive income (loss) for the year	12,170	(20,205)	(35,496)
Comprehensive income (loss) for the year	$ (394,356)	$ 290,711	$ (604,451)
Attributed to non-controlling interest	$ –	$ –	$ (60)
Attributed to common shareholders	$ (394,356)	$ 290,711	$ (604,391)

Note:

(i) Exclusive of amortization, which is shown separately.

See accompanying notes

AGNICO EAGLE MINES LIMITED
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(thousands of United States dollars, except share and per share amounts, US GAAP basis)

	Common Shares Outstanding							
	Shares	Amount	Stock Options	Warrants	Contributed Surplus	Retained Earnings (Deficit)	Accumulated Other Comprehensive Income (Loss)	Non-Controlling Interest
Balance December 31, 2010	168,720,355	$3,078,217	$ 78,554	$ 24,858	$ 15,166	$ 440,265	$ 28,390	$ –
Shares issued under employee stock option plan (note 8(a))	308,688	18,094	(4,396)	–	–	–	–	–
Stock options (note 8(a))	–	–	43,536	–	–	–	–	–
Shares issued under the incentive share purchase plan (note 8(b))	360,833	19,229	–	–	–	–	–	–
Shares issued under dividend reinvestment plan	176,110	10,130	–	–	–	–	–	–
Shares issued for purchase of mining property (notes 7(c) and 10)	1,250,477	56,146	–	–	–	–	–	–
Non-controlling interest addition upon acquisition (note 10)	–	–	–	–	–	–	–	12,251
Net loss for the year attributed to common shareholders	–	–	–	–	–	(568,895)	–	–
Net loss for the year attributed to non-controlling interest	–	–	–	–	–	–	–	(60)
Dividends declared (nil per share) (note 7(a))	–	–	–	–	–	(391)	–	–
Other comprehensive loss for the year	–	–	–	–	–	–	(35,496)	–
Restricted share unit plan (note 8(c))	(2,727)	(435)	–	–	–	–	–	–
Balance December 31, 2011	170,813,736	$3,181,381	$117,694	$ 24,858	$ 15,166	$(129,021)	$ (7,106)	$ 12,191
Shares issued under employee stock option plan (note 8(a))	416,275	$ 22,968	$ (4,759)	$ –	$ –	$ –	$ –	$ –
Stock options (note 8(a))	–	–	35,097	–	–	–	–	–
Shares issued under the incentive share purchase plan (note 8(b))	507,235	21,671	–	–	–	–	–	–
Shares issued under dividend reinvestment plan	444,555	18,907	–	–	–	–	–	–
Shares issued for purchase of mining property (notes 7(c) and 10)	68,941	2,447	–	–	499	–	–	–
Non-controlling interest eliminated upon acquisition (note 10)	–	–	–	–	–	–	–	(12,191)
Net income for the year	–	–	–	–	–	310,916	–	–
Dividends declared ($1.02 per share) (note 7(a))	–	–	–	–	–	(174,849)	–	–
Other comprehensive loss for the year	–	–	–	–	–	–	(20,205)	–
Restricted share unit plan (note 8(c))	(147,872)	(5,452)	–	–	–	–	–	–
Balance December 31, 2012	172,102,870	$3,241,922	$148,032	$ 24,858	$ 15,665	$ 7,046	$(27,311)	$ –
Shares issued under employee stock option plan (note 8(a))	213,500	$ 9,765	$ (3,292)	$ –	$ –	$ –	$ –	$ –
Stock options (note 8(a))	–	–	29,730	–	–	–	–	–
Shares issued under incentive share purchase plan (note 8(b))	812,946	23,379	–	–	–	–	–	–
Shares issued under dividend reinvestment plan	858,107	25,837	–	–	–	–	–	–
Warrant expiry (note 7(b))	–	–	–	(24,858)	21,589	–	–	–
Net loss for the year	–	–	–	–	–	(406,526)	–	–
Dividends declared ($0.66 per share) (note 7(a))	–	–	–	–	–	(114,118)	–	–
Other comprehensive income for the year	–	–	–	–	–	–	12,170	–
Restricted share unit plan (note 8(c))	(33,448)	(6,896)	–	–	–	157	–	–
Balance December 31, 2013	173,953,975	$3,294,007	$174,470	$ –	$ 37,254	$(513,441)	$(15,141)	$ –

See accompanying notes

AGNICO EAGLE MINES LIMITED
CONSOLIDATED STATEMENTS OF CASH FLOWS
(thousands of United States dollars, US GAAP basis)

	Year Ended December 31,		
	2013	2012	2011
Operating activities			
Net income (loss) for the year	$(406,526)	$ 310,916	$(568,955)
Add (deduct) items not affecting cash:			
Amortization of property, plant and mine development (note 3)	296,078	271,861	261,781
Deferred income and mining taxes (note 9)	(16,550)	72,145	(275,773)
Gain on sale of available-for-sale securities (note 2(b))	(74)	(9,733)	(4,907)
Stock-based compensation (note 8)	44,904	47,632	51,873
Impairment loss on available-for-sale securities (note 2(b))	34,272	12,732	8,569
Impairment loss (note 18)	537,227	–	907,681
Loss on Goldex mine (note 17)	–	–	302,893
Foreign currency translation (gain) loss	(7,188)	16,320	(1,082)
Other	23,817	16,048	22,992
Adjustment for settlement of environmental remediation	(9,081)	(21,449)	(7,616)
Changes in non-cash working capital balances:			
Trade receivables	450	8,149	37,050
Income taxes	717	13,304	(29,867)
Inventories	(23,232)	(44,145)	(43,066)
Other current assets	(23,447)	18,909	(25,838)
Accounts payable and accrued liabilities	(12,695)	(20,928)	31,837
Interest payable	(376)	4,246	(387)
Cash provided by operating activities	438,296	696,007	667,185
Investing activities			
Additions to property, plant and mine development (note 3)	(577,789)	(445,550)	(482,831)
Acquisition of Urastar Gold Corporation, net (note 10)	(10,051)	–	–
Acquisition of Grayd Resource Corporation (note 10)	–	(9,322)	(163,047)
Decrease (increase) in short-term investments	6,273	(1,920)	5
Net proceeds from sale of available-for-sale securities (note 2(b))	171	73,358	9,435
Purchase of available-for-sale securities and warrants (note 2(b))	(59,804)	(2,713)	(91,115)
(Increase) decrease in restricted cash (note 14)	(3,273)	9,991	(32,931)
Cash used in investing activities	(644,473)	(376,156)	(760,484)
Financing activities			
Dividends paid	(126,266)	(118,121)	(98,354)
Repayment of capital lease obligations (note 13(a))	(10,605)	(12,063)	(13,092)
Sale-leaseback financing (note 13(a))	10,928	–	–
Proceeds from long-term debt (note 5)	290,000	315,000	475,000
Repayment of long-term debt (note 5)	(120,000)	(605,000)	(205,000)
Notes issuance (note 5)	–	200,000	–
Long-term debt financing costs (note 5)	–	(3,133)	(2,545)
Repurchase of common shares for restricted share unit plan (note 8(c))	(19,000)	(12,031)	(3,723)
Common shares issued	23,672	32,742	26,536
Cash provided by (used in) financing activities	48,729	(202,606)	178,822
Effect of exchange rate changes on cash and cash equivalents	(1,519)	1,376	(1,636)
Net (decrease) increase in cash and cash equivalents during the year	(158,967)	118,621	83,887
Cash and cash equivalents, beginning of year	298,068	179,447	95,560
Cash and cash equivalents, end of year	$ 139,101	$ 298,068	$ 179,447
Supplemental cash flow information			
Interest paid	$ 58,152	$ 52,213	$ 52,833
Income and mining taxes paid	$ 56,478	$ 56,962	$ 110,889

See accompanying notes

1. TRADE RECEIVABLES AND REVENUES FROM MINING OPERATIONS

Agnico Eagle is a gold mining company with mining operations in Canada, Mexico and Finland. The Company earns a significant proportion of its revenues from the production and sale of gold in both dore bar and concentrate form. The remainder of revenue and cash flow is generated by the production and sale of byproduct metals. The revenue from byproduct metals is primarily generated by production at the LaRonde mine in Canada (silver, zinc and copper) and the Pinos Altos mine in Mexico (silver).

Revenues are generated from operations in Canada, Mexico and Finland. The cash flow and profitability of the Company's operations are significantly affected by the market price of gold and, to a lesser extent, silver, zinc, copper and lead. The prices of these metals can fluctuate significantly and are affected by numerous factors beyond the Company's control.

As gold can be sold through numerous gold market traders worldwide, the Company is not economically dependent on a limited number of customers for the sale of its product.

Trade receivables are recognized once the transfer of ownership for the metals sold has occurred and reflect the amounts owing to the Company in respect of its sales of dore bars or concentrates to third parties prior to the satisfaction in full of the payment obligations of the third parties.

	Year Ended December 31,		
	2013	**2012**	**2011**
Revenues from mining operations:			
Gold	$1,500,354	$1,712,665	$1,563,760
Silver	100,895	140,221	171,725
Zinc	16,685	45,797	70,522
Copper	20,653	19,019	14,451
Lead[(i)]	(181)	12	1,341
	$1,638,406	$1,917,714	$1,821,799

Note:

(i) In 2013, lead revenues of $0.9 million were nettled against lead concentrate direct fees of $1.1 million. Revenues from other metals contained in lead concentrate are included in their respective categories in the above table.

In 2013, precious metals (gold and silver) accounted for 98% of Agnico Eagle's revenues from mining operations (2012 – 97%; 2011 – 95%). The remaining revenues from mining operations consisted of net byproduct metals revenues. In 2013, these net byproduct metals revenues as a percentage of total revenues from mining operations were 1% from zinc (2012 – 2%; 2011 – 4%) and 1% from copper (2012 – 1%; 2011 – 1%).

2. OTHER ASSETS

(a) Other current assets

	As at December 31,	
	2013	**2012**
Federal, provincial and other sales taxes receivable	$ 71,053	$ 36,400
Prepaid expenses	35,396	36,119
Insurance receivable	1,369	6,553
Receivables from employees	780	1,800
Retirement compensation arrangement plan refundable tax receivable	–	4,044
Other	8,395	8,061
	$116,993	$ 92,977

(b) Available-for-sale securities

The Company's investments in available-for-sale securities consist primarily of investments in common shares of entities in the mining industry. The cost basis of available-for-sale securities is determined using the average cost method and they are carried at fair value. Detail on the Company's available-for-sale securities holdings is set out below:

	As at December 31,	
	2013	**2012**
Available-for-sale securities in an unrealized gain position:		
Cost (net of impairments)	$30,583	$ 4,352
Unrealized gains in accumulated other comprehensive loss	11,530	1,902
Estimated fair value	42,113	6,254
Available-for-sale securities in an unrealized loss position:		
Cost (net of impairments)	39,933	48,047
Unrealized losses in accumulated other comprehensive loss	(7,465)	(9,582)
Estimated fair value	32,468	38,465
Total estimated fair value of available-for-sale securities	**$74,581**	**$44,719**

In 2013, the Company received proceeds of $0.2 million (2012 – $73.4 million; 2011 – $9.4 million) and recognized a gain before income taxes of $0.1 million (2012 – $9.7 million; 2011 – $4.9 million) on the sale of certain available-for-sale securities.

2. OTHER ASSETS (Continued)

During the course of the year, certain available-for-sale securities fell into an unrealized loss position. In each case, the Company evaluated the near-term prospects of the issuers in relation to the severity and duration of the impairment. During the year ended December 31, 2013, the Company recorded a $34.3 million (2012 – $12.7 million; 2011 – $8.6 million) impairment loss on certain available-for-sale securities that were determined to be other-than-temporarily impaired.

At December 31, 2013, the fair value of available-for-sale securities in an unrealized loss position was $32.5 million (December 31, 2012 – $38.5 million) with total unrealized losses in accumulated other comprehensive loss of $7.5 million (December 31, 2012 – $9.6 million). Based on an evaluation of the severity and duration of the impairment of these available-for-sale securities (less than three months) and on the Company's intent to hold the investments for a period of time sufficient for a recovery of fair value, the Company does not consider these available-for-sale securities to be other-than-temporarily impaired as at December 31, 2013.

(c) Other assets

	As at December 31,	
	2013	**2012**
Deferred financing costs, less accumulated amortization of $11,420 (December 31, 2012 – $8,888)	$12,644	$15,836
Long-term ore in stockpile[(i)]	46,191	32,711
Other	7,559	7,291
	$66,394	$55,838

Note:
(i) Due to the ore body structures at the Pinos Altos, Kittila and Meadowbank mines, the Creston Mascota deposit at Pinos Altos and the La India project, a significant amount of drilling and blasting was undertaken early in their mine lives, resulting in long-term ore in stockpile. At December 31, 2013, long-term ore in stockpile was valued at $2.5 million (December 31, 2012 – $4.1 million) at the Pinos Altos mine, $26.7 million (December 31, 2012 – $7.7 million) at the Kittila mine, $7.8 million (December 31, 2012 – $10.2 million) at the Meadowbank mine, $8.2 million (December 31, 2012 – $10.7 million) at the Creston Mascota deposit at Pinos Altos and $1.0 million (December 31, 2012 – nil) at the La India project.

3. PROPERTY, PLANT AND MINE DEVELOPMENT

	As at December 31, 2013			As at December 31, 2012		
	Cost	**Accumulated Amortization**	**Net Book Value**	**Cost**	**Accumulated Amortization**	**Net Book Value**
Mining properties	$1,361,867	$ 89,700	$1,272,167	$1,356,227	$ 86,839	$1,269,388
Plant and equipment	2,286,887	662,394	1,624,493	2,538,328	617,826	1,920,502
Mine development costs	1,038,564	239,898	798,666	918,482	237,967	680,515
Construction in progress:						
Meliadine project	192,413	–	192,413	133,840	–	133,840
La India project	161,378	–	161,378	32,553	–	32,553
Goldex mine M and E Zones[(i)]	–	–	–	30,658	–	30,658
	$5,041,109	$ 991,992	$4,049,117	$5,010,088	$942,632	$4,067,456

Note:
(i) Upon achieving commercial production at the Goldex mine M and E Zones in October 2013, related costs accumulated in construction in progress were reclassified to mine development costs within property, plant and mine development.

3. PROPERTY, PLANT AND MINE DEVELOPMENT (Continued)

Geographic Information:

	As at December 31,	
	2013	**2012**
Northern Business:		
Canada	$2,312,166	$2,543,171
Finland	763,711	704,031
Southern Business:		
Mexico	962,971	809,556
United States	10,269	10,698
Total	$4,049,117	$4,067,456

In 2013, Agnico Eagle capitalized $2.5 million (2012 – $1.3 million) and expensed $1.4 million (2012 – $1.2 million) of computer software expenditures. The unamortized capitalized cost for computer software at December 31, 2013 was $6.8 million (December 31, 2012 – $5.7 million).

The unamortized capitalized cost for leasehold improvements at December 31, 2013 was $3.3 million (December 31, 2012 – $3.4 million), which is being amortized on a straight-line basis over the life term of the lease plus one renewal period.

The amortization of assets recorded under capital leases is included in the amortization of property, plant and mine development line item of the consolidated statements of income (loss) and comprehensive income (loss).

4. FAIR VALUE MEASUREMENT

ASC 820 – *Fair Value Measurement and Disclosure* defines fair value, establishes a framework for measuring fair value under US GAAP, and requires expanded disclosures about fair value measurements including the following three fair value hierarchy levels:

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 – Quoted prices in markets that are not active, or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability; and

Level 3 – Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity).

Fair value is the value at which a financial instrument could be closed out or sold in a transaction with a willing and knowledgeable counterparty over a period of time consistent with the Company's investment strategy. Fair value is based on quoted market prices, where available. If market quotes are not available, fair value is based on internally developed models that use market-based or independent information as inputs. These models could produce a fair value that may not be reflective of future fair value.

4. FAIR VALUE MEASUREMENT (Continued)

The following table sets out the Company's financial assets and liabilities measured at fair value as at December 31, 2013 using the fair value hierarchy:

	Level 1	Level 2	Level 3	Total
Financial assets:				
Trade receivables[(i)]	$ –	$67,300	$ –	$ 67,300
Available-for-sale securities[(ii)]	74,581	–	–	74,581
Fair value of derivative financial instruments[(iii)]	–	5,590	–	5,590
	$74,581	$72,890	$ –	$147,471
Financial liabilities:				
Fair value of derivative financial instruments[(iii)]	$ –	$ 467	$ –	$ 467

The following table sets out the Company's financial assets and liabilities measured at fair value as at December 31, 2012 using the fair value hierarchy:

	Level 1	Level 2	Level 3	Total
Financial assets:				
Trade receivables[(i)]	$ –	$67,750	$ –	$ 67,750
Available-for-sale securities[(ii)]	44,719	–	–	44,719
Fair value of derivative financial instruments[(iii)]	–	2,112	–	2,112
	$44,719	$69,862	$ –	$114,581
Financial liabilities:				
Fair value of derivative financial instruments[(iii)]	$ –	$ 277	$ –	$ 277

Notes:

(i) Trade receivables from provisional invoices for concentrate sales are valued using quoted forward rates derived from observable market data based on the month of expected settlement (classified within Level 2 of the fair value hierarchy).

(ii) Available-for-sale securities are recorded at fair value using quoted market prices (classified within Level 1 of the fair value hierarchy).

(iii) Derivative financial instruments are recorded at fair value using external broker-dealer quotations (classified within Level 2 of the fair value hierarchy).

In the event that a decline in the fair value of an investment in available-for-sale securities occurs and the decline in value is considered to be other-than-temporary, an impairment charge is recorded in the consolidated statements of income (loss) and comprehensive income (loss) and a new cost basis for the investment is established. The Company assesses whether a decline in value is considered to be other-than-temporary by considering available evidence, including changes in general market conditions, specific industry and investee data, the length of time and the extent to which the fair value has been less than cost, the financial condition of the investee and the near-term prospects of the individual investment. New evidence may become available in future periods which would affect this assessment and thus could result in

4. FAIR VALUE MEASUREMENT (Continued)

material impairment charges with respect to those investments in available-for-sale securities for which the cost basis exceeds its fair value.

As at December 31, 2013, the Company recorded impairment losses related to property, plant and mine development and goodwill (see note 18 for details). The estimated fair values of property, plant and mine development and goodwill used in determining the impairment losses followed the discounted cash flow approach. The total impairment loss recorded during 2013 was $436.3 million, net of tax (2012 – nil; 2011 – $644.9 million). The discounted cash flow approach uses significant unobservable inputs and is therefore considered a Level 3 fair value measurement under the fair value hierarchy.

5. LONG-TERM DEBT

Credit Facility

On June 22, 2010, the Company amended and restated one of its two unsecured revolving bank credit facilities (the "Credit Facility") and terminated its other unsecured revolving bank credit facility, increasing the amount available from an aggregate of $900.0 million to $1,200.0 million.

On July 20, 2012, the Company further amended the Credit Facility, extending the maturity date from June 22, 2016 to June 22, 2017 and amending pricing terms.

At December 31, 2013, the Credit Facility was drawn down by $200.0 million (December 31, 2012 – $30.0 million). Amounts drawn down, together with outstanding letters of credit under the Credit Facility, resulted in Credit Facility availability of $998.9 million at December 31, 2013.

2012 Notes

On July 24, 2012, the Company closed a $200.0 million private placement of guaranteed senior unsecured notes (the "2012 Notes") which, on issuance, had a weighted average maturity of 11.0 years and a weighted average yield of 4.95%.

The following table sets out details of the individual series of the 2012 Notes:

	Principal	Interest Rate	Maturity Date
Series A	$100,000	4.87%	7/23/2022
Series B	100,000	5.02%	7/23/2024
	$200,000		

2010 Notes

On April 7, 2010, the Company closed a $600.0 million private placement of guaranteed senior unsecured notes (the "2010 Notes") which, on issuance, had a weighted average maturity of 9.84 years and a weighted average yield of 6.59%.

5. LONG-TERM DEBT (Continued)

The following table sets out details of the individual series of the 2010 Notes:

	Principal	Interest Rate	Maturity Date
Series A	$115,000	6.13%	4/7/2017
Series B	360,000	6.67%	4/7/2020
Series C	125,000	6.77%	4/7/2022
	$600,000		

Covenants

Payment and performance of Agnico Eagle's obligations under the Credit Facility, 2012 Notes and 2010 Notes is guaranteed by each of its significant subsidiaries and certain of its other subsidiaries (the "Guarantors").

The Credit Facility contains covenants that limit, among other things, the ability of the Company to incur additional indebtedness, make distributions in certain circumstances and sell material assets.

The 2012 Notes and 2010 Notes contain covenants that restrict, among other things, the ability of the Company to amalgamate or otherwise transfer its assets, sell material assets and carry on a business other than one related to mining and the ability of the Guarantors to incur indebtedness.

The Credit Facility, 2012 Notes and 2010 Notes also require the Company to maintain a total net debt to EBITDA ratio below a specified maximum value as well as a minimum tangible net worth.

The Company was in compliance with all covenants contained in the Credit Facility, 2012 Notes and 2010 Notes as at December 31, 2013.

Interest on long-term debt

For the year ended December 31, 2013, total interest expense was $58.0 million (2012 – $57.9 million; 2011 – $55.0 million) and total cash interest payments were $58.2 million (2012 – $52.2 million; 2011 – $52.8 million). In 2013, cash interest on the Credit Facility was $1.8 million (2012 – $3.6 million; 2011 – $1.7 million), cash standby fees on the Credit Facility were $4.8 million (2012 – $4.2 million; 2011 – $8.6 million) and cash interest on the 2010 Notes and 2012 Notes was $49.4 million (2012 – $39.5 million; 2011 – $39.5 million). In 2013, interest expenditures of $3.5 million (2012 – $1.5 million; 2011 – $1.0 million) were capitalized to construction in progress.

The Company's weighted average interest rate on all of its long-term debt as at December 31, 2013 was 5.37% (December 31, 2012 – 6.02%; December 31, 2011 – 5.02%).

6. RECLAMATION PROVISION AND OTHER LIABILITIES

Reclamation provision and other liabilities consist of the following:

	As at December 31,	
	2013	2012
Reclamation provision (note 6(a))	$150,849	$101,753
Long-term portion of capital lease obligations (note 13(a))	11,843	12,108
Pension benefits (note 6(b))	15,278	13,734
Other	266	140
Total	$178,236	$127,735

(a) Reclamation provision

Agnico Eagle's reclamation provision includes both asset retirement obligations and environmental remediation liabilities. Reclamation provision estimates are based on current legislation, third party estimates, management's estimates and feasibility study calculations.

The following table reconciles the beginning and ending carrying amounts of the Company's asset retirement obligations:

	2013	2012
Asset retirement obligations – long-term, beginning of year	$ 89,720	$86,386
Asset retirement obligations – current, beginning of year	4,630	–
Current year additions and changes in estimate, net	44,898	1,495
Current year accretion	4,624	5,068
Liabilities settled	(853)	(254)
Foreign exchange revaluation	(3,678)	1,655
Reclassification from long-term to current, end of year	(1,029)	(4,630)
Asset retirement obligations – long-term, end of year	$138,312	$89,720

Due to the suspension of mining operations on the Goldex Extension Zone ("GEZ") at the Goldex mine on October 19, 2011 (see note 17 for details), Agnico Eagle recognized an environmental remediation liability. The

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

following table reconciles the beginning and ending carrying amounts of the Goldex mine's environmental remediation liability:

	2013	2012
Environmental remediation liability – long-term, beginning of year	$12,033	$ 19,057
Environmental remediation liability – current, beginning of year	12,186	26,069
Current year additions and changes in estimate, net	1,005	(36)
Liabilities settled	(9,045)	(21,450)
Foreign exchange revaluation	(1,219)	579
Reclassification from long-term to current, end of year	(2,423)	(12,186)
Environmental remediation liability – long-term, end of year	$12,537	$ 12,033

(b) Pension benefits

Agnico Eagle provides the Executives Plan for certain senior officers. The funded status of the Executives Plan is based on actuarial valuations performed as of July 1, 2013, projected to December 31, 2013 and covering the period through June 30, 2014.

The components of Agnico Eagle's net pension benefits expense relating to the Executives Plan are as follows:

	Year Ended December 31,		
	2013	2012	2011
Service cost – benefits earned during the year	$ 457	$ 650	$ 996
Interest cost on projected benefit obligation	431	489	663
Amortization of net transition asset	164	169	171
Prior service cost	25	26	26
Loss due to settlement	–	2,921	–
Recognized net actuarial loss	379	340	245
Net pension benefits expense	$1,456	$4,595	$2,101

Assets for the Executives Plan consist of deposits on hand with regulatory authorities that are refundable when benefit payments are made or on the ultimate wind-up of the plan. The accumulated benefit obligation for the Executives Plan at December 31, 2013 was $9.6 million (December 31, 2012 – $9.7 million).

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

The funded status of the Executives Plan for 2013 and 2012 is as follows:

	2013	2012
Reconciliation of the market value of plan assets:		
Fair value of plan assets, beginning of year	$ 2,373	$ 2,952
Agnico Eagle's contribution	374	839
Benefit payments	(244)	(520)
Settlements	–	(961)
Effect of exchange rate changes	(157)	63
Fair value of plan assets, end of year	2,346	2,373
Reconciliation of projected benefit obligation:		
Projected benefit obligation, beginning of year	10,818	14,370
Service cost	456	650
Interest cost	431	489
Net actuarial loss	573	675
Benefit payments	(244)	(520)
Settlements	–	(5,148)
Effect of exchange rate changes	(736)	302
Projected benefit obligation, end of year	11,298	10,818
Deficiency of plan assets compared with projected benefit obligation	$ (8,952)	$ (8,445)

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

The Executives Plan is comprised of the following net amounts recognized in the consolidated balance sheets:

	As at December 31,	
	2013	2012
Accrued employee benefit liability	$5,733	$5,008
Accumulated other comprehensive loss:		
Transition obligation	159	341
Prior service cost	24	52
Net actuarial loss	3,036	3,044
Net liability	$8,952	$8,445
Assumptions:		
Weighted average discount rate – net periodic pension cost	4.00%	4.45%
Weighted average discount rate – projected benefit obligation	4.90%	4.00%
Weighted average rate of compensation increase	3.00%	3.00%
Estimated average remaining service life for the plan (in years)[(i)]	5.0	6.0

Note:
(i) Estimated average remaining service life for the Executives Plan was developed for individual senior officers.

Executives Plan components expected to be recognized in accumulated other comprehensive loss in 2014:

Transition obligation	$159
Prior service cost	24
Net actuarial loss	476
	$659

6. RECLAMATION PROVISION AND OTHER LIABILITIES (Continued)

Estimated benefit payments from the Executives Plan over the next ten years are set out below:

Year ended December 31,:	Estimated Executives Plan Benefit Payments
2014	$ 109
2015	$ 107
2016	$ 105
2017	$ 103
2018	$ 102
2019 – 2023	$5,295

In addition to the Executives Plan, the Company maintains the Basic Plan and the Supplemental Plan. Under the Basic Plan, Agnico Eagle contributes 5% of certain employees' base employment compensation to a defined contribution plan. In 2013, $12.5 million (2012 – $11.9 million; 2011 – $10.7 million) was contributed to the Basic Plan. Effective January 1, 2008, the Company adopted the Supplemental Plan for designated executives at the level of Vice-President or above. The Supplemental Plan is funded by the Company through notional contributions equal to 10% of the designated executive's earnings for the year (including salary and short-term bonus). In 2013, the Company made $1.2 million (2012 – $0.8 million; 2011 – $0.9 million) in notional contributions to the Supplemental Plan. The Supplemental Plan is accounted for as a cash balance plan.

7. SHAREHOLDERS' EQUITY

(a) Common shares

The Company's authorized share capital includes an unlimited number of common shares. As at December 31, 2013, Agnico Eagle's issued common shares totaled 174,181,163 (December 31, 2012 – 172,296,610), less 227,188 common shares held by a trust in connection with the Company's restricted share unit ("RSU") plan (December 31, 2012 – 193,740 common shares held in trust). The trust is treated as a variable interest entity and, as a result, its holdings of shares are offset against the Company's issued shares in its consolidated financial statements (see note 8(c) for details).

In 2013, the Company declared dividends on its common shares of $0.66 per share (2012 – $1.02 per share; 2011 – nil per share).

(b) Private placements and warrants

On December 3, 2008, the Company closed a private placement of 9.2 million units, with each unit consisting of one common share and one-half of one common share purchase warrant. Each whole warrant entitled the holder to purchase one common share of the Company at a price of $47.25 per share at any time during the five-year term of the warrant. As consideration for the lead purchaser's commitment, the Company issued to the lead purchaser an additional 4.0 million warrants. The net proceeds of the private placement were approximately $281.0 million, after deducting share issue costs of $8.8 million. The warrants expired unexercised on December 3, 2013.

7. SHAREHOLDERS' EQUITY (Continued)

(c) Issuance of common shares on take-over bid

On November 18, 2011, the Company issued 1,250,477 common shares with a market value of $56.1 million in connection with the acquisition of 94.77% of the outstanding shares of Grayd Resource Corporation ("Grayd") under a take-over bid. On January 23, 2012, the Company issued an additional 68,941 common shares with a market value of $2.4 million in connection with the compulsory acquisition of the remaining outstanding shares of Grayd it did not already own (see note 10 for details).

(d) Accumulated other comprehensive loss

The following table sets out the changes in accumulated other comprehensive loss by component for the year ended December 31, 2013:

	Cumulative Translation Adjustment	Available-for-sale Securities and Other Investments	Derivative Financial Instruments	Pension Benefits	Total
Accumulated other comprehensive (loss) income, December 31, 2012	$ (16,206)	$ (7,680)	$ 72	$ (3,497)	$(27,311)
Unrealized other comprehensive (loss) gain	–	(22,553)	(284)	375	(22,462)
Income tax expense (recovery) impact	–	–	150	(99)	51
Reclassifications from accumulated other comprehensive (loss) income to the Consolidated Statements of Income (Loss)	–	34,198	(117)	637	34,718
Income tax expense (recovery) impact	–	–	31	(168)	(137)
Other comprehensive income (loss) for the year	–	11,645	(220)	745	12,170
Accumulated other comprehensive (loss) income, December 31, 2013	$ (16,206)	$ 3,965	$ (148)	$ (2,752)	$(15,141)

7. SHAREHOLDERS' EQUITY (Continued)

The following table sets out the changes in accumulated other comprehensive loss by component for the year ended December 31, 2012:

	Cumulative Translation Adjustment	Available-for-sale Securities and Other Investments	Derivative Financial Instruments	Pension Benefits	Total
Accumulated other comprehensive (loss) income, December 31, 2011	$ (16,206)	$ 16,350	$ (2,913)	$ (4,337)	$ (7,106)
Unrealized other comprehensive (loss) gain	–	(27,029)	6,882	531	(19,616)
Income tax recovery impact	–	–	(1,885)	(140)	(2,025)
Reclassifications from accumulated other comprehensive (loss) income to the Consolidated Statements of Income (Loss)	–	2,999	(2,738)	617	878
Income tax expense (recovery) impact	–	–	721	(163)	558
Other comprehensive income (loss) for the year	–	(24,030)	2,985	840	(20,205)
Accumulated other comprehensive (loss) income, December 31, 2012	$ (16,206)	$ (7,680)	$ 72	$ (3,497)	$(27,311)

(e) Net income (loss) per share

The following table sets out the weighted average number of common shares used in the calculation of basic and diluted net income (loss) per share:

	Year Ended December 31,		
	2013	2012	2011
Weighted average number of common shares outstanding – basic	172,892,654	171,250,179	169,352,896
Dilutive impact of shares related to RSU plan	–	235,436	–
Weighted average number of common shares outstanding – diluted	172,892,654	171,485,615	169,352,896

Diluted net income (loss) per share has been calculated using the treasury stock method. In applying the treasury stock method, employee stock options and warrants with an exercise price greater than the average quoted market price of the common shares for the period outstanding are not included in the calculation of diluted net income (loss) per share as the impact is anti-dilutive. In 2011, the impact of any additional shares issued under the employee stock option plan, as a result of the conversion of warrants or related to the RSU plan would have been anti-dilutive as a result of the net loss recorded for the year. Consequently, diluted net loss per share was calculated in the same manner as basic net loss per share in 2011. In 2012, 7,742,151 employee stock options and all warrants were excluded from the calculation of diluted net income per share as their impact would have been anti-dilutive. In 2013, the impact of any additional shares issued under the employee stock option plan or related to the RSU plan would have been anti-dilutive as a result of the net loss recorded for the

7. SHAREHOLDERS' EQUITY (Continued)

year. Consequently, diluted net loss per share was calculated in the same manner as basic net loss per share in 2013.

8. STOCK-BASED COMPENSATION

(a) Employee Stock Option Plan ("ESOP")

The Company's ESOP provides for the granting of stock options to directors, officers, employees and service providers to purchase common shares. Under the ESOP, stock options are granted at the fair market value of the underlying shares on the day prior to the date of grant. The number of common shares that may be reserved for issuance to any one person pursuant to stock options (under the ESOP or otherwise), warrants, share purchase plans or other arrangements may not exceed 5% of the Company's common shares issued and outstanding at the date of grant.

On April 24, 2001, the Compensation Committee of the Board of Directors adopted a policy pursuant to which stock options granted after that date have a maximum term of five years. In 2011, the shareholders approved a resolution to increase the number of common shares reserved for issuance under the ESOP by 3,000,000 to 23,300,000. In 2012 and 2013 the shareholders approved a further 2,500,000 and 2,000,000 common shares for issuance under the ESOP, respectively.

Of the 2,803,000 stock options granted under the ESOP in 2013, 700,750 stock options vested immediately. The remaining stock options, all of which expire in 2018, vest in equal installments on each anniversary date of the grant over a three year period. Of the 3,257,000 stock options granted under the ESOP in 2012, 814,250 stock options vested immediately. The remaining stock options, all of which expire in 2017, vest in equal installments on each anniversary date of the grant over a three year period. Of the 2,630,785 stock options granted under the ESOP in 2011, 657,696 stock options vested immediately. The remaining stock options, all of which expire in 2016, vest in equal installments on each anniversary date of the grant over a three year period. Upon the exercise of stock options under the ESOP, the Company issues new common shares to settle the obligation.

The following summary sets out activity with respect to Agnico Eagle's outstanding stock options:

	2013		2012		2011	
	Number of Stock Options	Weighted Average Exercise Price	Number of Stock Options	Weighted Average Exercise Price	Number of Stock Options	Weighted Average Exercise Price
Outstanding, beginning of year	10,587,126	C$ 56.60	8,959,051	C$ 62.88	6,762,704	C$ 56.94
Granted	2,803,000	52.13	3,257,000	36.99	2,630,785	76.12
Exercised	(213,500)	37.06	(416,275)	43.51	(308,688)	43.62
Forfeited	(540,206)	58.15	(731,000)	59.72	(125,750)	67.47
Expired	(1,352,885)	54.67	(481,650)	47.49	–	–
Outstanding, end of year	11,283,535	C$ 56.02	10,587,126	C$ 56.60	8,959,051	C$ 62.88
Options exercisable at end of year	7,248,295		6,510,464		5,178,172	

8. STOCK-BASED COMPENSATION (Continued)

The following table sets out 2013 activity with respect to Agnico Eagle's non-vested stock options:

	2013	
	Number of Stock Options	Weighted Average Grant Date Fair Value
Non-vested, beginning of year	4,076,662	C$13.33
Granted	2,803,000	11.21
Vested	(2,661,216)	12.84
Forfeited (non-vested)	(183,206)	11.38
Non-vested, end of year	4,035,240	C$11.44

Cash received for stock options exercised in 2013 was $8.0 million (2012 – $18.2 million; 2011 – $13.6 million).

The total intrinsic value of stock options exercised in 2013 was C$3.1 million (2012 – C$3.6 million; 2011 – C$8.0 million).

The weighted average grant date fair value of stock options granted in 2013 was C$11.21 (2012 – C$8.29; 2011 – C$17.05). The total grant date fair value of stock options vested during 2013 was $34.2 million (2012 – $41.0 million; 2011 – $46.7 million).

The following table summarizes information about Agnico Eagle's stock options outstanding and exercisable at December 31, 2013:

	Stock Options Outstanding			Stock Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
C$33.39 – C$59.71	7,341,556	2.81 years	C$48.28	3,851,056	C$50.50
C$60.72 – C$83.08	3,941,979	1.14 years	70.43	3,397,239	69.46
C$33.39 – C$83.08	11,283,535	2.23 years	C$56.02	7,248,295	C$59.39

The weighted average remaining contractual term of stock options exercisable at December 31, 2013 was 1.6 years.

The Company has reserved for issuance 11,283,535 common shares in the event that these stock options are exercised.

The number of common shares available for the granting of stock options under the ESOP as at December 31, 2013, December 31, 2012 and December 31, 2011 was 4,807,876, 3,717,785, and 3,262,135, respectively.

8. STOCK-BASED COMPENSATION (Continued)

Subsequent to the year ended December 31, 2013, on January 2, 2014, 3,177,500 stock options were granted under the ESOP, of which 794,375 stock options vested immediately. The remaining stock options, all of which expire in 2019, vest in equal installments on each anniversary date of the grant over a three year period.

Agnico Eagle estimated the fair value of stock options under the Black-Scholes option pricing model using the following weighted average assumptions:

	2013	2012	2011
Risk-free interest rate	1.50%	1.26%	1.95%
Expected life of stock options (in years)	2.6	2.8	2.5
Expected volatility of Agnico Eagle's share price	35.0%	37.5%	34.70%
Expected dividend yield	1.82%	2.14%	0.89%

The Company uses historical volatility to estimate the expected volatility of Agnico Eagle's share price. The expected term of stock options granted is derived from historical data on employee exercise and post-vesting employment termination experience.

The aggregate intrinsic value of stock options outstanding and exercisable at December 31, 2013 was nil.

The total compensation expense for the ESOP recorded in the general and administrative line item of the consolidated statements of income (loss) and comprehensive income (loss) for 2013 was $26.4 million (2012 – $33.8 million; 2011 – $42.2 million). The total compensation cost related to non-vested stock options not yet recognized is $21.2 million as at December 31, 2013 and the weighted average period over which it is expected to be recognized is 1.7 years. Of the total compensation cost for the ESOP, $3.3 million was capitalized as part of the property, plant and mine development line item of the consolidated balance sheets in 2013 (2012 – $1.3 million; 2011 – $1.4 million).

(b) Incentive Share Purchase Plan

On June 26, 1997, the Company's shareholders approved an incentive share purchase plan (the "Purchase Plan") to encourage directors, officers and employees ("Participants") to purchase Agnico Eagle's common shares at market value. In 2009, the Purchase Plan was amended to remove non-executive directors as eligible Participants.

Under the Purchase Plan, Participants may contribute up to 10% of their basic annual salaries and the Company contributes an amount equal to 50% of each Participant's contribution. All common shares subscribed for under the Purchase Plan are issued by the Company. The total compensation cost recognized in 2013 related to the Purchase Plan was $7.8 million (2012 – $7.2 million; 2011 – $6.4 million).

In 2013, 812,946 common shares were subscribed for under the Purchase Plan (2012 – 507,235; 2011 – 360,833) for a value of $23.4 million (2012 – $21.7 million; 2011 – $19.2 million). In May 2008, the Company's shareholders approved an increase in the maximum number of common shares reserved for issuance under the Purchase Plan to 5,000,000 from 2,500,000. As at December 31, 2013, Agnico Eagle has reserved for issuance 829,907 common shares (2012 – 1,642,853; 2011 – 2,150,088) under the Purchase Plan.

8. STOCK-BASED COMPENSATION (Continued)

(c) Restricted Share Unit Plan

In 2009, the Company implemented the RSU plan for certain employees. Effective January 1, 2012, the RSU plan was amended to include directors and senior executives of the Company.

A deferred compensation balance is recorded for the total grant date value on the date of each RSU plan grant. The deferred compensation balance is recorded as a reduction of shareholders' equity and is amortized as compensation expense over the applicable vesting period.

In 2013, the Company funded the RSU plan by transferring $19.0 million (2012 – $12.0 million; 2011 – $3.7 million) to an employee benefit trust (the "Trust") that then purchased shares of the Company in the open market. The Trust is funded once per year during the first quarter of each year. For accounting purposes, the Trust is treated as a variable interest entity and consolidated in the accounts of the Company. The common shares purchased and held by the Trust are treated as not outstanding for the basic earnings per share ("EPS") calculations but are included in the basic EPS calculations once they have vested. All of the non-vested common shares held by the Trust are included in the diluted EPS calculations, unless the impact is anti-dilutive.

Compensation expense related to the RSU plan was $12.1 million in 2013 (2012 – $6.6 million; 2011 – $3.3 million). Compensation expense related to the RSU plan is included as part of the production, general and administrative and exploration and corporate development line items of the consolidated statements of income (loss) and comprehensive income (loss), consistent with the classification of other elements of compensation expense for those employees who held RSUs.

Subsequent to the year ended December 31, 2013, 293,041 RSUs were granted under the RSU plan which vest in 2017.

9. INCOME AND MINING TAXES

Income and mining taxes expense (recovery) is comprised of the following geographic components:

	Year Ended December 31,		
	2013	**2012**	**2011**
Current income and mining taxes:			
Canada	$ 7,934	$ 8,750	$ 62,382
Mexico	29,968	33,531	3,496
Finland	14,492	9,799	222
	52,394	52,080	66,100
Deferred income and mining taxes:			
Canada	(95,344)	26,041	(341,038)
Mexico	93,665	25,284	54,996
Finland	(14,871)	20,820	10,269
	(16,550)	72,145	(275,773)
Income and mining taxes	$ 35,844	$124,225	$(209,673)

9. INCOME AND MINING TAXES (Continued)

Cash income and mining taxes paid in 2013 were $56.5 million (2012 – $57.0 million; 2011 – $110.9 million).

The income and mining taxes expense (recovery) is different from the amount that would have been calculated by applying the Canadian statutory income tax rate as a result of the following:

	2013	2012	2011
Combined federal and composite provincial tax rates	26.3%	26.3%	27.8%
Increase (decrease) in tax rates resulting from:			
Provincial mining duties	1.4	3.6	5.9
Tax law changes	(13.6)	–	(2.7)
Impact of foreign tax rates	2.4	(1.5)	(0.2)
Permanent differences	(25.1)	1.0	(1.6)
Valuation allowances	(0.9)	1.2	(0.3)
Impact of changes in income tax rates	(0.2)	(2.1)	(2.0)
Actual rate as a percentage of pre-tax income	(9.7)%	28.5%	26.9%

The following table sets out the components of Agnico Eagle's deferred income and mining tax liabilities (assets):

	Liabilities (Assets) as at December 31,	
	2013	2012
Mining properties	$ 808,449	$ 761,508
Net operating and capital loss carryforwards	(129,019)	(102,005)
Mining duties	(68,728)	(36,158)
Reclamation provisions	(44,242)	(42,688)
Valuation allowance	26,860	30,570
Deferred income and mining tax liabilities	$ 593,320	$ 611,227

All of Agnico Eagle's deferred income and mining tax assets and liabilities are denominated in the local currency based on the jurisdiction in which the Company paid taxes, except for Canada, and were translated into US dollars using the exchange rate in effect at the applicable consolidated balance sheet dates. For Canadian income tax purposes, for December 31, 2008 and subsequent years, the Company elected to use the US dollar as its functional currency.

The Company operates in different jurisdictions and, accordingly, it is subject to income and other taxes under the various tax regimes in the countries in which it operates. The tax rules and regulations in many countries are highly complex and subject to interpretation. The Company may be subject in the future to a review of its historic income and other tax filings

9. INCOME AND MINING TAXES (Continued)

and in connection with such reviews, disputes can arise with the taxing authorities over the interpretation or application of certain tax rules and regulations to the Company's business conducted within the country involved.

A reconciliation of the beginning and ending amounts of the unrecognized tax benefits is set out below:

	2013	2012	2011
Unrecognized tax benefits, beginning of year	$10,867	$ 1,200	$1,630
Additions (reductions)	–	9,667	(430)
Unrecognized tax benefit, end of year	$10,867	$10,867	$1,200

The full amount of unrecognized tax benefits, if recognized, would reduce the Company's annual effective tax rate. The Company does not expect its unrecognized tax benefits to change significantly over the next year.

The Company is subject to taxes in Canada, Mexico and Finland, each with varying statutes of limitations. The 2007 through 2013 taxation years generally remain subject to examination.

10. ACQUISITIONS

Urastar Gold Corporation

On May 16, 2013, the Company completed the acquisition of all of the issued and outstanding common shares of Urastar Gold Corporation ("Urastar") pursuant to a court-approved plan of arrangement under the *Business Corporations Act* (British Columbia) for cash consideration of $10.1 million. The Urastar acquisition was accounted for as a business combination and goodwill of $9.8 million was recognized on the Company's consolidated balance sheets.

The transaction costs associated with the acquisition totaling $0.7 million were expensed through the general and administrative line item of the consolidated statements of income (loss) and comprehensive income (loss) during the year ended December 31, 2013.

10. ACQUISITIONS (Continued)

The following table sets out the allocation of the purchase price to assets acquired and liabilities assumed, based on management's estimates of fair value:

Total purchase price:	
Cash paid for acquisition	$10,127
Fair value of assets acquired and liabilities assumed:	
Mining properties	$ 1,994
Goodwill	9,802
Cash and cash equivalents	76
Trade receivables	731
Other current assets	12
Plant and equipment	2
Accounts payable and accrued liabilities	(791)
Other liabilities	(1,573)
Deferred tax liability	(126)
Net assets acquired	$10,127

The Company believes that goodwill for the Urastar acquisition arose principally because of the following factors: (1) the going concern value implicit in the Company's ability to sustain and/or grow its business by increasing mineral reserves and mineral resources through new discoveries; and (2) the requirement to record a deferred tax liability for the difference between the assigned values and the tax bases of assets acquired and liabilities assumed in a business combination at amounts that do not reflect fair value.

Pro forma results of operations for the Company assuming the acquisition of Urastar described above had occurred as of January 1, 2012 are detailed below. On a *pro forma* basis, there would have been no effect on the Company's consolidated revenues.

	Year Ended December 31, 2013	Year Ended December 31, 2012
	Unaudited	
Pro forma net income (loss) for the period	$(409,020)	$307,274
Pro forma net income (loss) per share – basic	$ (2.37)	$ 1.79

Grayd Resource Corporation

In September 2011, Agnico Eagle entered into an acquisition agreement with Grayd, a Canadian-based natural resource company listed on the TSX Venture Exchange, pursuant to which the Company agreed to make an offer to acquire all of the

10. ACQUISITIONS (Continued)

issued and outstanding common shares of Grayd. On October 13, 2011, the Company made the offer by way of a take-over bid circular, as amended and supplemented on October 21, 2011.

On November 18, 2011, Agnico Eagle acquired 94.77% of the outstanding shares of Grayd on a fully-diluted basis, under the take-over bid. The November 18, 2011 purchase price of $222.1 million was comprised of $166.0 million in cash and 1,250,477 Agnico Eagle common shares issued from treasury.

Transaction costs associated with the acquisition totalling $3.8 million were expensed through the interest and sundry expense (income) line item of the consolidated statements of income (loss) and comprehensive income (loss) during the fourth quarter of 2011. The Company has accounted for the purchase of Grayd as a business combination.

The following table sets out the allocation of the purchase price to assets acquired and liabilities assumed, based on management's estimates of fair value.

Total purchase price:	
Cash paid for acquisition	$165,954
Agnico Eagle common shares issued for acquisition	56,146
Total purchase price to allocate	$222,100
Fair value of assets acquired and liabilities assumed:	
Mining properties	$282,000
Goodwill	29,215
Cash and cash equivalents	2,907
Trade receivables	469
Other current assets	1,700
Equipment	56
Accounts payable and accrued liabilities	(9,767)
Deferred tax liability	(72,229)
Non-controlling interest	(12,251)
Net assets acquired	$222,100

The Company believes that goodwill for the Grayd acquisition arose principally because of the following factors: (1) the going concern value implicit in the Company's ability to sustain and/or grow its business by increasing mineral reserves and mineral resources through new discoveries; and (2) the requirement to record a deferred tax liability for the difference between the assigned values and the tax bases of assets acquired and liabilities assumed in a business combination at amounts that do not reflect fair value.

10. ACQUISITIONS (Continued)

Pro forma results of operations for Agnico Eagle assuming the acquisition of Grayd described above had occurred as of January 1, 2011 are set out below. On a *pro forma* basis, there would have been no effect on Agnico Eagle's consolidated revenues:

	Year Ended December 31, 2011
	Unaudited
Pro forma net loss attributed to common shareholders	$(582,762)
Pro forma net loss per share – basic	$ (3.42)

On January 23, 2012, the Company acquired the remaining outstanding shares of Grayd it did not already own, pursuant to a previously announced compulsory acquisition carried out under the provisions of the *Business Corporations Act* (British Columbia). The January 23, 2012 purchase price of $11.8 million was comprised of $9.3 million in cash and 68,941 newly issued Agnico Eagle common shares.

Summit Gold Project

On December 20, 2011, the Company completed the acquisition of 100% of the Summit Gold project from Columbus Gold Corporation, subject to a 2% net smelter returns mineral production royalty reserved by Cordilleran Exploration Company. The Nevada based project's purchase price of $8.5 million, including transaction costs, was comprised entirely of cash. This transaction was accounted for as an asset acquisition.

11. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	As at December 31,	
	2013	2012
Trade payables	$ 80,242	$ 89,289
Wages payable	35,881	35,752
Accrued liabilities	16,366	27,372
Other liabilities	40,885	32,916
	$173,374	$185,329

In 2013 and 2012, the other liabilities balance consisted primarily of various employee payroll tax withholdings and other payroll taxes.

12. COMMITMENTS AND CONTINGENCIES

As part of its ongoing business and operations, the Company has been required to provide assurance in the form of letters of credit for environmental and site restoration costs, custom credits, government grants and other general corporate purposes. As at December 31, 2013, the total amount of these guarantees was $174.3 million.

12. COMMITMENTS AND CONTINGENCIES (Continued)

Certain of the Company's properties are subject to royalty arrangements. The following are the most significant royalty arrangements:

The Company has a royalty agreement with the Finnish government relating to the Kittila mine. Starting 12 months after Kittila mine operations commenced, the Company is required to pay 2.0% on net smelter returns, defined as revenue less processing costs. The royalty is paid on a yearly basis the following year.

The Company is committed to pay a royalty on production from certain properties in the Abitibi area. The type of royalty agreements include, but are not limited to, net profits interest royalties and net smelter return royalties, with percentages ranging from 2.5% to 5.0%.

The Company is committed to pay a royalty on production from certain properties in the Pinos Altos mine area. The type of royalty agreements include, but are not limited to, net profits interest royalties and net smelter return royalties, with percentages ranging from 2.5% to 3.5%.

The Company regularly enters into various earn-in and shareholder agreements, often with commitments to pay net smelter return and other royalties.

The Company had the following purchase commitments as at December 31, 2013:

	Purchase Commitments
2014	$13,023
2015	8,373
2016	5,832
2017	4,290
2018	4,290
Thereafter	7,272
Total	$43,080

13. LEASES

(a) Capital leases

The Company has entered into sale-leaseback agreements with third parties for various fixed and mobile equipment within Canada. These arrangements represent sale-leaseback transactions in accordance with ASC 840-40 – *Sale-Leaseback Transactions*. The sale-leaseback agreements have an average effective annual interest rate of 5.9% and the average length of the contracts is 4.7 years.

All of the sale-leaseback agreements have end of lease clauses that qualify as bargain purchase options that the Company expects to execute. As at December 31, 2013, the total gross amount of assets recorded under sale-leaseback capital leases amounted to $37.6 million (2012 – $33.9 million).

The Company has agreements with third party providers of mobile equipment that are used at the Meadowbank mine. These arrangements represent capital leases in accordance with the guidance in ASC 840-30 – *Capital Leases*. The leases for mobile equipment at the Meadowbank mine are for five years and the effective annual interest rate on these leases is 5.5%.

13. LEASES (Continued)

The following is a schedule of future minimum lease payments under capital leases together with the present value of the net minimum lease payments as at December 31, 2013:

	Minimum Capital Lease Payments
2014	$12,776
2015	5,678
2016	2,268
2017	2,268
2018	2,268
Thereafter	–
Total minimum lease payments	25,258
Less amount representing interest	1,380
Present value of net minimum lease payments	$23,878

The Company's capital lease obligations are comprised of the following:

	As at December 31,	
	2013	2012
Total future lease payments	$25,258	$26,668
Less: interest	1,380	1,605
	23,878	25,063
Less: current portion	12,035	12,955
Long-term portion of capital lease obligations	$11,843	$12,108

At December 31, 2013, the gross amount of assets recorded under capital leases, including sale-leaseback capital leases was $51.8 million (2012 – $51.0 million; 2011 – $56.9 million). The charge to income resulting from the amortization of assets recorded under capital leases is included in the amortization of property, plant and mine development line item of the consolidated statements of income (loss) and comprehensive income (loss).

(b) Operating leases

The Company has a number of operating lease agreements involving office space. Some of the leases for office facilities contain escalation clauses for increases in operating costs and property taxes. Future minimum lease

13. LEASES (Continued)

payments required to meet obligations that have initial or remaining non-cancellable lease terms in excess of one year as at December 31, 2013 are as follows:

	Minimum Operating Lease Payments
2014	$1,783
2015	1,032
2016	822
2017	816
2018	836
Thereafter	2,470
Total	$7,759

The portion of operating leases relating to rental expense was $1.6 million in 2013 (2012 – $1.1 million; 2011 – $0.9 million).

14. RESTRICTED CASH

As part of the Company's insurance programs fronted by a third party provider and reinsured through the Company's internal insurance program, the third party provider requires that cash of $6.9 million be restricted as at December 31, 2013 (December 31, 2012 – $4.7 million).

As part of the Company's tax planning, $32.0 million was contributed to a qualified environmental trust ("QET") in December 2011 to fulfill the requirement of financial security for costs related to the environmental remediation of the Goldex mine. During the year ended December 31, 2013, $2.8 million (2012 – $12.0 million) was withdrawn from the QET to fund the environmental remediation expenditures. As at December 31, 2013, $16.8 million (December 31, 2012 – $20.7 million) remained in the QET.

On December 30, 2013, the Company deposited $5.0 million into a restricted account in connection with a Subscription Agreement to acquire 5,000 shares of Tocqueville Bullion Reserve, Ltd. at a price of $1,000 per share. The acquisition was completed subsequent to year end on January 2, 2014.

15. FINANCIAL INSTRUMENTS

From time to time, Agnico Eagle has entered into financial instruments with financial institutions in order to hedge underlying cash flow and fair value exposure arising from changes in commodity prices, interest rates, equity prices or foreign currency exchange rates.

Currency risk management

In 2013 and 2012, financial instruments that subjected Agnico Eagle to market risk and concentration of credit risk consisted primarily of cash and cash equivalents and short-term investments. Agnico Eagle places its cash and cash equivalents and short-term investments in high quality securities issued by government agencies, financial institutions and major corporations and limits the amount of credit exposure by diversifying its holdings.

15. FINANCIAL INSTRUMENTS (Continued)

Agnico Eagle generates almost all of its revenues in US dollars. The Company's Canadian operations, which include the LaRonde, Goldex, Lapa and Meadowbank mines and the Meliadine project have Canadian dollar requirements for capital, operating and exploration expenditures.

The Company uses foreign exchange hedges to reduce the variability in expected future cash flows arising from changes in foreign currency exchange rates. The hedged items represent a portion of the Canadian dollar denominated cash outflows arising from Canadian dollar denominated expenditures in 2013.

As at December 31, 2013, the Company had outstanding foreign exchange zero cost collars with a cash flow hedging relationship that did qualify for hedge accounting under ASC 815 – *Derivatives and Hedging*. The purchase of US dollar put options was financed through selling US dollar call options at a higher level such that the net premium payable to the different counterparties by the Company was nil. At December 31, 2013, the zero cost collars hedged $60.0 million of 2014 expenditures and the Company recognized mark-to-market adjustments in accumulated other comprehensive loss.

Amounts deferred in accumulated other comprehensive loss are reclassified to the production costs line item on the consolidated statements of income (loss) and comprehensive income (loss), as applicable, when the hedged transaction has occurred. Mark-to-market gains (losses) related to foreign exchange derivative financial instruments are recorded at fair value based on broker- dealer quotations that utilize period end forward pricing of the currency hedged.

The Company's other foreign currency derivative strategies in 2013 consisted mainly of writing US dollar call options with short maturities to generate premiums that would, in essence, enhance the spot transaction rate received when exchanging US dollars to Canadian dollars. All of these derivative transactions expired prior to year end such that no derivatives were outstanding as at December 31, 2013. The call option premiums were recognized in the loss (gain) on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss).

Commodity price risk management

The Company uses intra-quarter zinc, copper and silver derivative financial instruments associated with the timing of sales of the related products that were recognized in the (gain) loss on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss). There were no zinc, copper or silver intra-quarter derivative financial instruments outstanding at December 31, 2013 or December 31, 2012.

To mitigate the risks associated with fluctuating diesel fuel prices, the Company uses derivative financial instrument contracts to hedge the price on a portion of diesel fuel costs associated with the Meadowbank mine's diesel fuel exposure as it relates to operating costs. Financial contracts that expired in 2013 and totaled 10.5 million gallons of heating oil were entered into at an average price of $2.99 per gallon, which is approximately 55.0% of the Meadowbank mine's expected 2013 diesel fuel operating costs. These contracts did qualify for hedge accounting and the related market-to-market adjustments prior to settlement were recognized in accumulated other comprehensive loss. All heating oil derivative financial instrument contracts settled in 2013.

Amounts deferred in accumulated other comprehensive loss are reclassified to the production costs line item on the consolidated statements of income (loss) and comprehensive income (loss), as applicable, when the derivative financial instrument has settled. Mark-to-market gains (losses) related to heating oil derivative financial instruments are based on broker-dealer quotations that utilize period end forward pricing to calculate fair value.

As at December 31, 2013 and 2012, there were no metal derivative positions. The Company may from time to time utilize short-term (including intra-quarter) financial instruments as part of its strategy to minimize risks and optimize returns on its byproduct metal sales.

Other required derivative disclosures can be found in note 7(d), accumulated other comprehensive loss.

15. FINANCIAL INSTRUMENTS (Continued)

The following table provides a summary of the amounts recognized in the (gain) loss on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss):

	Year Ended December 31,		
	2013	2012	2011
Premiums realized on written foreign exchange call options	$3,375	$1,505	$4,995
Realized loss on foreign exchange forwards	–	–	(1,407)
Realized gain on zinc derivative financial instruments	60	430	3,419
Realized gain on copper derivative financial instruments	–	63	79
Realized loss on silver derivative financial instruments	–	–	(3,403)
Mark-to-market gain on derivative equity contracts[(i)]	1,389	–	–
Mark-to-market loss on warrants[(i)]	(488)	(1,294)	–
Realized loss on warrants	(2,827)	–	–
Realized loss on heating oil derivative financial instruments	–	(1,523)	–
Gain (loss) on derivative financial instruments	$1,509	$(819)	$3,683

Note:

(i) Mark-to-market gains and losses on financial instruments that did not qualify for hedge accounting are recognized through the (gain) loss on derivative financial instruments line item of the consolidated statements of income (loss) and comprehensive income (loss) and through the other line item of the consolidated statements of cash flow.

Agnico Eagle's exposure to interest rate risk at December 31, 2013 relates to its cash and cash equivalents, short-term investments and restricted cash totaling $170.0 million (2012 – $332.0 million) and the Credit Facility. The Company's short-term investments and cash equivalents have a fixed weighted average interest rate of 0.53% (2012 – 0.47%).

The fair values of Agnico Eagle's current financial assets and liabilities approximate their carrying values as at December 31, 2013.

16. GENERAL AND ADMINISTRATIVE

As a result of a kitchen fire at the Meadowbank mine in March 2011, the Company recognized a loss on disposal of the kitchen of $6.9 million, incurred related costs of $7.4 million and recognized an insurance receivable of $11.2 million. The difference of $3.1 million was recognized in the general and administrative line item of the consolidated statements of income (loss) and comprehensive income (loss) in the first quarter of 2011.

During the subsequent months of 2011, the Company received $2.4 million of insurance proceeds and had a remaining insurance receivable of $8.8 million recorded in the other current assets line item of the consolidated balance sheets as at December 31, 2011. During the year ended December 31, 2012, the Company received $2.2 million of insurance proceeds and had a remaining insurance receivable of $6.6 million as at December 31, 2012. During the year ended December 31, 2013, the Company received $5.2 million of insurance proceeds and had a remaining insurance receivable of $0.7 million as at December 31, 2013.

17. LOSS ON GOLDEX MINE

On October 19, 2011, the Company announced that it was suspending mining operations and gold production at the Goldex mine in Quebec, Canada, effective immediately. This decision followed the receipt of an opinion from a second rock mechanics consulting firm which recommended that underground mining operations be halted. It appeared that a weak volcanic rock unit in the hanging wall above the GEZ of the Goldex mine deposit had failed. This rock failure was thought to extend between the top of the deposit and surface. As a result, this structure allowed an increase in ground water to flow into the mine.

As at September 30, 2011, Agnico Eagle had written off its investment in the Goldex mine (net of expected residual value), written off the underground ore stockpile and recorded a provision for the anticipated costs of environmental remediation. Given the amount of uncertainty in estimating the fair value of the Goldex mine property, plant, and mine development, the Company determined that the fair value was equal to the residual value. All of the remaining 1.6 million ounces of proven and probable mineral reserves at the Goldex mine, other than the ore stockpiled on surface, were reclassified as mineral resources effective September 30, 2011.

The mill processed feed from the remaining surface stockpile at the Goldex mine in October 2011.

Impairment loss on Goldex mine property, plant, and mine development	$237,110
Loss on underground ore stockpile	16,641
Supplies inventory obsolescence provision	1,915
Increase in environmental remediation liability	47,227
Loss on Goldex mine (before income and mining taxes) for the year ended December 31, 2011	$302,893

The environmental remediation liability for the anticipated costs of remediation associated with the suspension of operations at the Goldex mine has required management to make estimates and judgments that affect the reported amount. In making judgments in accordance with US GAAP, the Company uses estimates based on historical experience and various assumptions that are considered reasonable in the circumstances. Actual results may differ from these estimates.

In July 2012, the Company's Board approved the development of the M and E Zones at the Goldex mine. The operations in the GEZ remain suspended indefinitely.

18. IMPAIRMENT LOSS

As at December 31, 2013

As at December 31, 2013, the Company identified the continued decline in the market price of gold as an indicator of potential impairment for the Company's long-lived assets and goodwill. As a result of the identification of this indicator, the Company evaluated its long-lived assets and goodwill for impairment on an asset group and reporting unit basis, respectively, using updated assumptions and estimates.

18. IMPAIRMENT LOSS (Continued)

The following impairment losses were recorded as at December 31, 2013 as a result of the impairment evaluation:

	As at December 31, 2013			
	Pre-impairment Carrying Value	Impairment Loss	Post-impairment Carrying Value	Impairment Loss (net of tax)
Property, plant and mine development:				
Meadowbank mine	$732,499	$(269,269)	$463,230	$(194,511)
Lapa mine	136,766	(67,894)	68,872	(41,687)
	$869,265	$(337,163)	$532,102	$(236,198)
Goodwill:				
Meliadine project	$200,064	$(200,064)	$–	$(200,064)
		$(537,227)		$(436,262)

Estimated fair values for the Meadowbank mine and Lapa mine were calculated by discounting the estimated future net cash flows using discount rates of 6.5% and 5.5% (in nominal terms), respectively, commensurate with their individual estimated levels of risk. These calculations were based on estimates of future production levels applying gold prices of $1,238 to $1,300 per ounce (in real terms), foreign exchange rates of US$0.90:C$1.00 to US$0.93:C$1.00, inflation rates of 2.0% and capital, operating and reclamation costs based on updated life-of-mine plans. Average gold recovery rates applied were 92.3% and 78.3% for the Meadowbank mine and Lapa mine, respectively.

Estimated after-tax discounted future net cash flows of reporting units with goodwill were calculated as at December 31, 2013. These calculations were based on estimates of future production levels applying long-term gold prices of $1,238 to $1,300 per ounce (in real terms), foreign exchange rates of US$0.90:C$1.00 to US$0.93:C$1.00, inflation rates of 2.0% and capital, operating and reclamation costs based on updated life-of-mine plans. The average gold recovery rate applied to the Meliadine project was 95.1%. A discount rate of 8.0% was used to calculate the estimated after-tax discounted future net cash flows of the Meliadine project reporting unit, commensurate with its individual estimated level of risk.

Discount rates were based on each asset group's weighted average cost of capital, of which the two main components are the cost of equity and the after-tax cost of debt. Cost of equity was calculated based on the capital asset pricing model, incorporating the risk-free rate of return based on Government of Canada marketable bond yields as at the valuation date, the Company's beta coefficient adjustment to the market equity risk premium based on the volatility of the Company's return in relation to that of a comparable market portfolio, plus a size premium and Company-specific risk factor. Cost of debt was determined by applying an appropriate market indication of the Company's borrowing capabilities and the corporate income tax rate applicable to each asset group's jurisdiction.

Management's estimate of future net cash flows is subject to risk and uncertainties. Therefore, it is reasonably possible that changes could occur which may affect the recoverability of the Company's long-lived assets and goodwill. This may have a material effect on the Company's consolidated financial statements.

As at December 31, 2011

As at December 31, 2011, the Company performed a full review of the Meadowbank mine operations and updated the related life-of-mine plan. This review considered the exploration potential of the area, the mineral reserves and resources,

18. IMPAIRMENT LOSS (Continued)

the projected operating costs in light of the persistently high operating costs experienced since commencement of commercial operations, metallurgical performance and gold price. These served as inputs into pit optimizations to determine which reserves and resources could be economically mined and be considered as mineable mineral reserves. As a result of these factors, an updated mine plan with a shorter mine life was developed and cash flows calculated, resulting in the following impairment losses being recorded as at December 31, 2011:

	As at December 31, 2011			
	Pre-impairment Carrying Value	Impairment Loss	Post-impairment Carrying Value	Impairment Loss (net of tax)
Property, plant and mine development:				
Meadowbank mine	$1,670,838	$(907,681)	$763,157	$(644,903)

The estimated fair value of the Meadowbank mine was calculated as at December 31, 2011 by discounting the estimated future net cash flows using a 7.0% discount rate (in nominal terms), commensurate with the estimated level of risk. This calculation was based on estimates of future gold production applying long-term gold prices of $1,250 to $1,553 per ounce (in real terms), foreign exchange rates of US$0.92:C$1.00 to US$0.97:C$1.00, an inflation rate of 2.0%, increased cost estimates based on revised operating levels and an average gold recovery of 92.9%. Future expected operating costs, capital expenditures and asset retirement obligations were based on the updated life-of-mine plan.

Management's estimate of future cash flows is subject to risk and uncertainties. Therefore, it is reasonably possible that changes could occur which may affect the recoverability of the Company's long-lived assets and may have a material effect on the Company's consolidated financial statements.

19. SEGMENTED INFORMATION

Agnico Eagle operates in a single industry, namely exploration for and production of gold. The Company's primary operations are in Canada, Mexico and Finland. The Company identifies its reportable segments as those operations whose operating results are reviewed by the Chief Executive Officer and that represent more than 10% of the combined revenue, profit or loss or total assets of all operating segments. Each of the Company's significant operating mines and projects are considered to be separate segments. Certain operating segments that do not meet the quantitative thresholds are still disclosed when the Company believes that the information is useful. Segment results for 2012 and 2011 have been retrospectively revised to reflect organizational changes in 2013 that created three business units consisting of the Northern business unit, the Southern business unit, and the Exploration business unit. However, under this revised organizational structure the Chief Executive Officer also reviews segment income (defined as revenues from mining operations less production costs, exploration and corporate development and impairment losses) on a mine-by-mine basis. The following are the Company's reportable segments organized according to their relationship with the Company's three business units and reflect how the Company manages its business and how it classifies its operations for planning and measuring performance:

Northern Business:	LaRonde mine, Lapa mine, Goldex mine, Meadowbank mine, Meliadine project and Kittila mine
Southern Business:	Pinos Altos mine, Creston Mascota deposit at Pinos Altos and La India project
Exploration:	United States Exploration office, Europe Exploration office, Canada Exploration offices and Latin America Exploration office

The accounting policies of the reportable segments are the same as those described in the accounting policies note. There are no transactions between the reportable segments affecting revenue. Production costs for the reportable segments are net of intercompany transactions.

19. SEGMENTED INFORMATION (Continued)

Corporate and other (including Urastar) assets and specific income and expense items are set out separately below.

The Creston Mascota deposit at Pinos Altos achieved commercial production on March 1, 2011. The LaRonde mine extension achieved commercial production on December 1, 2011. The Goldex mine achieved commercial production on October 1, 2013.

Year ended December 31, 2013	Revenues from Mining Operations	Production Costs	Exploration and Corporate Development	Impairment Loss	Segment Income (Loss)
Northern Business:					
LaRonde mine	$ 329,900	$(229,911)	$ —	$ —	$ 99,989
Lapa mine	141,167	(69,532)	—	(67,894)	3,741
Goldex mine	21,418	(13,172)	—	—	8,246
Meadowbank mine	591,473	(363,894)	—	(269,269)	(41,690)
Meliadine project	—	—	—	(200,064)	(200,064)
Kittila mine	209,723	(98,446)	—	—	111,277
Total Northern Business	$1,293,681	$(774,955)	$ —	$(537,227)	$ (18,501)
Southern Business:					
Pinos Altos mine	$ 303,203	$(130,129)	$ —	$ —	$ 173,074
Creston Mascota deposit at Pinos Altos	41,522	(19,843)	—	—	21,679
Total Southern Business	$ 344,725	$(149,972)	$ —	$ —	$ 194,753
Exploration	$ —	$ —	$(44,236)	$ —	$ (44,236)
Segment income (loss)	$1,638,406	$(924,927)	$(44,236)	$(537,227)	$ 132,016

Segment income	$ 132,016
Corporate and other:	
Foreign currency translation gain	7,188
Amortization of property, plant and mine development	(296,078)
Interest and sundry expense	(8,824)
Gain on sale of available-for-sale securities	74
Gain on derivative financial instruments	1,509
General and administrative	(115,800)
Impairment loss on available-for-sale securities	(34,272)
Provincial capital tax	1,504
Interest expense	(57,999)
Loss before income and mining taxes	$(370,682)

19. SEGMENTED INFORMATION (Continued)

Year ended December 31, 2012	Revenues from Mining Operations	Production Costs	Exploration and Corporate Development	Segment Income (Loss)
Northern Business:				
LaRonde mine	$ 399,243	$(225,647)	$ —	$173,596
Lapa mine	173,753	(73,376)	—	100,377
Goldex mine	—	—	(37,627)	(37,627)
Meadowbank mine	609,625	(347,710)	—	261,915
Kittila mine	284,429	(98,037)	—	186,392
Total Northern Business	$1,467,050	$(744,770)	$ (37,627)	$684,653
Southern Business:				
Pinos Altos mine	$ 363,113	$(128,618)	$ —	$234,495
Creston Mascota deposit at Pinos Altos	87,551	(24,324)	—	63,227
Total Southern Business	$ 450,664	$(152,942)	$ —	$297,722
Exploration	$ —	$ —	$ (71,873)	$ (71,873)
Segment income (loss)	$1,917,714	$(897,712)	$(109,500)	$910,502

Segment income	$ 910,502
Corporate and other:	
Foreign currency translation loss	(16,320)
Amortization of property, plant and mine development	(271,861)
Interest and sundry expense	(2,389)
Gain on sale of available-for-sale securities	9,733
Loss on derivative financial instruments	(819)
General and administrative	(119,085)
Impairment loss on available-for-sale securities	(12,732)
Provincial capital tax	(4,001)
Interest expense	(57,887)
Income before income and mining taxes	$ 435,141

19. SEGMENTED INFORMATION (Continued)

Year ended December 31, 2011	Revenues from Mining Operations	Production Costs	Exploration and Corporate Development	Loss on Goldex Mine	Impairment Loss	Segment (Loss) Income
Northern Business:						
LaRonde mine	$ 398,609	$(209,947)	$ —	$ —	$ —	$ 188,662
Lapa mine	167,536	(68,599)	—	—	—	98,937
Goldex mine	217,662	(56,939)	—	(302,893)	—	(142,170)
Meadowbank mine	434,051	(284,502)	—	—	(907,681)	(758,132)
Kittila mine	225,612	(110,477)	—	—	—	115,135
Total Northern Business	$1,443,470	$(730,464)	$ —	$(302,893)	$(907,681)	$(497,568)
Southern Business:						
Pinos Altos mine	$ 321,074	$(131,044)	$ —	$ —	$ —	$ 190,030
Creston Mascota deposit at Pinos Altos	57,255	(14,570)	—			42,685
Total Southern Business	$ 378,329	$(145,614)	$ —	$ —	$ —	$ 232,715
Exploration	$ —	$ —	$(75,721)	$ —	$ —	$ (75,721)
Segment income (loss)	$1,821,799	$(876,078)	$(75,721)	$(302,893)	$(907,681)	$(340,574)

Segment loss	$(340,574)
Corporate and other:	
Foreign currency translation gain	1,082
Amortization of property, plant and mine development	(261,781)
Interest and sundry expense	(5,188)
Gain on sale of available-for-sale securities	4,907
Gain on derivative financial instruments	3,683
General and administrative	(107,926)
Impairment loss on available-for-sale securities	(8,569)
Provincial capital tax	(9,223)
Interest expense	(55,039)
Loss before income and mining taxes	$(778,628)

19. SEGMENTED INFORMATION (Continued)

	Total Assets as at December 31,	
	2013	**2012**
Northern Business:		
LaRonde mine	$ 878,719	$ 849,304
Lapa mine	78,293	168,712
Goldex mine	120,601	56,819
Meadowbank mine	711,387	1,005,890
Meliadine project	877,923	1,015,485
Kittila mine	870,332	837,002
Total Northern Business	$3,537,255	$3,933,212
Southern Business:		
Pinos Altos mine	$ 537,560	$ 610,217
Creston Mascota deposit at Pinos Altos	86,185	68,735
La India project	512,450	377,049
Total Southern Business	1,136,195	1,056,001
Exploration	19,838	19,225
Corporate and other	266,071	247,681
Total	$4,959,359	$5,256,119

19. SEGMENTED INFORMATION (Continued)

	Capital Expenditures Year Ended December 31,		
	2013	**2012**	**2011**
Northern Business:			
LaRonde mine	$ 84,292	$ 75,214	$ 90,735
Lapa mine	22,738	18,475	18,397
Goldex mine	65,063	26,822	42,232
Meadowbank mine	76,811	105,095	116,860
Meliadine project	61,412	83,343	73,944
Kittila mine	83,770	60,036	86,514
Total Northern Business	$394,086	$368,985	$428,682
Southern Business:			
Pinos Altos mine	$ 42,835	$ 24,212	$ 32,407
Creston Mascota deposit at Pinos Altos	17,582	5,777	7,559
La India project	116,786	39,236	—
Total Southern Business	$177,203	$ 69,225	$ 39,966
Exploration	$ —	$ 55	$ 8,561
Corporate and other	$ 6,500	$ 7,285	$ 5,622
Total	$577,789	$445,550	$482,831

19. SEGMENTED INFORMATION (Continued)

The following table sets out the changes in the carrying amount of goodwill by segment:

	Meliadine project	La India project	Corporate and other	Total
Cost				
Balance at January 1, 2013	$ 200,064	$ 29,215	$ –	$ 229,279
Purchase of Urastar Gold Corporation (note 10)	–	–	9,802	9,802
Balance at December 31, 2013	$ 200,064	$ 29,215	$ 9,802	$ 239,081
Accumulated impairment				
Balance at January 1, 2013	$ –	$ –	$ –	$ –
Impairment loss	(200,064)	–	–	(200,064)
Balance at December 31, 2013	$(200,064)	$ –	$ –	$(200,064)
Carrying amount	$ –	$ 29,215	$ 9,802	$ 39,017

20. SUBSEQUENT EVENTS

On January 13, 2014, the Company executed an Asset Purchase Agreement with Alexandria Minerals Corporation ("AMC") to purchase the Akasaba West Property in Quebec, Canada for cash consideration of C$5.0 million. Agnico Eagle assumes pre-existing underlying royalty obligations under the Asset Purchase Agreement relating to specific Akasaba West Property mining claims ranging from a 2% net smelter returns production royalty to a 20% net proceeds of production royalty. The Company also entered into a 2% Net Smelter Return Royalty ("Royalty") Agreement with AMC on January 13, 2014 relating to all Akasaba West Property mineral and metal production after 210,000 ounces of gold has been produced. The Company has the right to purchase one-half of the Royalty from AMC at any time for cash consideration of C$7.0 million.

On January 28, 2014, the Company purchased common shares and warrants in a mining industry entity for total consideration of C$9.3 million.

On February 12, 2014, Agnico Eagle announced that the Board approved the payment of a quarterly cash dividend of $0.08 per common share, payable on March 17, 2014 to holders of record of the common shares of the Company on March 3, 2014.

21. SECURITIES CLASS ACTION LAWSUITS

On November 7, 2011 and November 22, 2011, the Company and certain current and former senior officers, some of whom also are or were directors of the Company, were named as defendants in two putative class action lawsuits, styled *Jerome Stone v. Agnico-Eagle Mines Ltd.*, et al., and *Chris Hastings v. Agnico-Eagle Mines Limited, et al.*, respectively, which were filed in the United States District Court for the Southern District of New York. On February 6, 2012, the Court ordered that the two complaints be consolidated under the caption *In re Agnico-Eagle Mines Ltd. Securities Litigation*, and lead counsel was appointed. On April 6, 2012, a Consolidated Complaint was issued against the Company and certain of its current and former senior officers and directors. The Consolidated Complaint alleges that the Company had violated

21. SECURITIES CLASS ACTION LAWSUITS (Continued)

federal securities law in connection with its disclosure related to the Goldex mine. The Consolidated Complaint seeks, among other things, damages on behalf of persons who purchased or acquired securities of the Company during the period July 28, 2010 to October 19, 2011. The Consolidated Complaint has not been certified as a class action, and the Company intends to vigorously defend it. On January 14, 2013, Judge Oetken granted the Company's motion to dismiss the Consolidated Complaint and all claims therein and denied the plaintiffs' request for leave to amend the Consolidated Complaint. On February 12, 2013, the plaintiffs filed a Notice of Appeal to the United States Court for Appeals for the Second Circuit. The appeal was heard on September 23, 2013, and on October 3, 2013 the Court of Appeals for the Second Circuit affirmed the decision below dismissing the Consolidated Complaint. The time for the plaintiffs to file a petition for a writ of certiorari, requesting a review by the United States Supreme Court, has expired and the judgment dismissing the plaintiffs' Consolidated Complaint is now final and no longer appealable.

On March 8, 2012 and April 10, 2012, a Notice of Action and Statement of Claim (collectively, the "Ontario Claim") were issued by William Leslie, AFA Livforsakringsaktiebolag and certain other entities against the Company and certain of its current and former officers, some of whom also are or were directors of the Company. On September 27, 2012, the plaintiffs issued a Fresh as Amended Statement of Claim. The Fresh as Amended Statement of Claim alleges that the Company's public disclosure concerning water flow issues at its Goldex mine was misleading. The Ontario Claim was issued by the plaintiffs on behalf of all persons and entities who acquired securities of the Company during the period March 26, 2010 to October 19, 2011, excluding persons resident or domiciled in the Province of Quebec at the time they purchased or acquired such securities. The plaintiffs seek, among other things, damages of C$250.0 million and to certify the Ontario Claim as a class action. On April 17, 2013 an Order was granted on consent certifying a class action proceeding and granting leave for the claims under Section 138 of the *Securities Act* (Ontario) to proceed. The Company intends to vigorously defend the action on the merits.

On April 12, 2012, two senior officers of the Company, who also are or were directors of the Company, were served with a Motion for Leave to Institute a Class Action and for the Appointment of a Representative Plaintiff (the "Quebec Motion"). The action is on behalf of all persons and entities with fewer than 50 employees resident in Quebec who acquired securities of the Company between March 26, 2010 and October 19, 2011. The proposed class action is for damages of C$100.0 million arising as a result of allegedly misleading disclosure by the Company concerning its operations at the Goldex mine. On October 15, 2012, the plaintiffs served an amended Quebec Motion seeking leave to commence an action under the *Securities Act* (Quebec) in addition to seeking authorization to institute a class action. On October 1, 2013, the Quebec court certified the class action on terms identical to those set out in the consent Order granted in Ontario on April 17, 2013. No date has been set for the hearing to argue the class action on the merits. The Company intends to vigorously defend the action on the merits.

APPENDIX 1-B

List of Permits, Licenses, and Authorizations

Table 1-B-1: List of Permits and Licenses for the Project

Permit/License	Type	Licensor	Approved Ops	Status	Begin of Term	End of Term	Comments
66A/8-71-2	Land Lease	INAC	All Weather Private Access Road construction, operation, maintenance and reclamation	Active	01-Jan-07	31-Dec-21	
66A/8-72-2	Land Lease	INAC	Quarrying for the AWPAR	Active	01-Jan-07	31-Dec-16	
08-HCAA-CA7-00039	Freshwater Intake Pipe Screen Approval	DFO	Freshwater Intake Pipe at Exploration Camp	Active	06-Jan-09		No obligations or renewal deadlines. Approval does not have expiry date.
08-HCAA-CA7-00040 (NU-08-0040)	Freshwater Intake Pipe Screen Approval	DFO	Freshwater Intake Pipe at Meadowbank Camp	Active	06-Jan-09		No obligations or renewal deadlines. Approval does not have expiry date.
NU 03-191 s30	Freshwater Intake	DFO	Freshwater Intake at Emulsion plant	Active	16-Nov-09		No obligations or renewal deadlines. Approval does not have expiry date.
FWISL-ACC-07-08-056	Animal Use Protocol	DFO		Expired		31-Mar-08	
FWI-ACC-2009-027	Animal Use Protocol	DFO		Expired	04-Jun-09	31-Dec-09	
FWI-ACC-2008-2009-054	Animal Use Protocol	DFO		Expired	07-Jul-08	31-Mar-09	
FWI-ACC-2008-2009-064	Animal Use Protocol	DFO		Expired	31-Jul-08	31-Mar-09	
FWI-ACC-2010-022	Animal Use Protocol	DFO		Expired	09-Jun-10	31-Dec-10	
FWI-ACC-2011-025	Animal Use Protocol	DFO		Expired	17-Jun-11	31-Dec-11	
FWI-ACC-2012-038	Animal Use Protocol	DFO		Expired	13-Jun-12	01-Oct-12	
FWI-ACC-2013-033	Animal Use Protocol	DFO		Expired	11-Jun-13	01-Nov-13	
FWI-ACC-2015-021	Animal Use Protocol	DFO		Expired	11-Jun-15	01-Dec-15	
S-08/09-1042-NU	Licence to fish for scientific purposes	DFO		Expired	11-Aug-08	31-Oct-08	
S-08/09-1040	Licence to fish for scientific purposes	DFO		Expired	14-Jul-08	30-Sep-08	
S-09/10-1027-NU	Licence to fish for scientific purposes	DFO		Expired	24-Jun-09	30-Sep-09	
S-10/10-1011-NU	Licence to fish for scientific purposes	DFO		Expired	17-Jun-10	15-Oct-10	

Table 1-B-1: List of Permits and Licenses for the Project

Permit/License	Type	Licensor	Approved Ops	Status	Begin of Term	End of Term	Comments
S-11/12-1015-NU	Licence to fish for scientific purposes	DFO		Expired	15-Jun-11	15-Oct-11	
S-11/12-1042-NU	Licence to fish for scientific purposes	DFO		Expired	10-Aug-11	31-Aug-11	
S-12/13-1023-NU	Licence to fish for scientific purposes	DFO		Expired	15-Jun-12	30-Sep-12	
S-13/14-1010-NU	Licence to fish for scientific purposes	DFO	AWPAR and on-site fisheries monitoring including CREMP	Expired	15-Jun-13	15-Oct-13	
S-13/14 3018-YK	Licence to fish for scientific purposes	DFO	Vault Fishout	Expired	15-Jul-13	31-Mar-13	
S-15/16-1012-NU	Licence to fish for scientific purposes	DFO	AWAR and habitat compensation work	Expired	30-Jun-15	31-Jan-16	
NU-03-0190	HADD Authorization - AWPAR (amendment #1 and #2)	DFO	AWPAR - Infilling of fish habitat as a result of water crossing construction affecting a total of 0.53 HU / 2,793 m^3 of fish habitat	Expired	02-May-07	31-Dec-08	
NU-03-0191	HADD Authorization - Mine Site. *Fisheries Act* Authorization	DFO	Infilling of fish habitat as a result of infilling and dewatering of Second and Third Portage Lakes - dikes and pits + airstrip extension	Expired	30-Jul-08	15-Dec-15	
NU-03-0191.02	s.32 *Fisheries Act* Authorization - Meadowbank Dewatering Bay Goose	DFO	Authorization for the fish destruction by means other than fishing during the dewatering of Bay Goose impoundment area in Third Portage Lake	Expired	22-Feb-11	31-Jul-12	
NU-03-0191.03	Portage Pit and Bay Goose *Fisheries Act* Authorization	DFO	Second Portage Lake: Dewatering, excavation, dike and road footprint (east and central dikes) and in water placement of coarse material Third Portage Lake : Dewatering, excavation, road footprint, Bay Goose and South Camp Dike	Active	05-Mar-13	31-Dec-17	

Table 1-B-1: List of Permits and Licenses for the Project

Permit/License	Type	Licensor	Approved Ops	Status	Begin of Term	End of Term	Comments
			footprints and in water placement of coarse material				
NU-03-0191.04	Vault *Fisheries Act* Authorization	DFO	Dewatering, excavation, dike construction and placement of course material in Vault Lake basin	Active	02-Apr-13	31-Dec-17	
NU-08-0013	HADD Authorization - Western Channel	DFO	Infilling of fish habitat as a result of a temporary culvert installation affecting 1.01 HU on the westernmost channel connecting 2PL and 3PL	Expired	28-May-08	13-Jun-08	
NU-08-0052	Authorization for destruction of fish	DFO	*Fisheries Act* Sec.32 - destruction of fish arising from dewatering of NW arm of 2PL	Expired	02-Mar-09	31-Dec-10	
NU-10-0049	Vault Culvert Crossing	DFO	Vault Culvert Crossing	Active	25-Jan-11		No end term
MMER Sec 27.1 Approval TIA (08-HCAA-CA7-00191)	Letter of Approval	DFO	Authorization for deposition of tailings in TIA. Approval of Compensation Plan.	Active	14-Jan-10		TIA Habitat Compensation Plan
DvlptPA	Development Partnership Agreement	GN	700,000 m^3/annually - mining, milling & associated activities, operation of Baker Lake Facilities, operation of AWPAR	Active	17-Feb-07	17-Feb-22	As per article 11.1, Agreement remains in force until completion of Closure and Reclamation
L-51260	Baker Lake Marshalling Area	GN	Marshalling Facility; tank farm, explosive area, access road.	Active	01-Mar-10	01-Mar-13	Permit renewal on going
L-51261	Baker Lake Marshalling Area, Land Lease	GN	Baker Lake Spud Barge	Active	01-Mar-10	01-Mar-20	
L-51262	Baker Lake All Weather Private Access Road Section	GN	Municipal Lands portion of Tahek Lake AWPAR, Baker Lake, Nunavut	Active	01-Mar-10	01-Mar-20	
LUP-06-603-001 (a)	Land use permit	GN	AWPAR construction	Expired			
QP-06-603-001 (a)	Quarry Permit	GN	AWPAR Quarry 1 : authorization to take 85,388m3 of quarries bedrock - granite	Expired			

Table 1-B-1: List of Permits and Licenses for the Project

Permit/License	Type	Licensor	Approved Ops	Status	Begin of Term	End of Term	Comments
603-0-LUP-07-001	Land use permit	GN	Baker Lake Marshalling Area	Expired	01-May-07	01-May-08	
WL-2012-050	Wildlife Research Permit	GN	Ground survey of birds, nest, raptors, other animals, and wildlife signs. Must submit report at end of study	Expired	01-Jun-12	31-May-12	
WL-2014-055	Wildlife Research Permit	GN	Ground survey of birds, nest, raptors, other animals, and wildlife signs. Must submit report at end of study	Expired	1-Aug-14	31-Jul-15	
WL-2015-058	Wildlife Research Permit	GN	Ground survey of birds, nest, raptors, other animals, and wildlife signs. Must submit report at end of study	Active	1-Jun-15	1-Jun-16	
Memorandum of Understanding	Wildlife Research	GN	GN has requested that the Proponent participate in the Kivalliq Ungulate Monitoring Program and the Proponent desires to work collaboratively and in good faith to increase the common knowledge of caribou and muskoxen for mutual benefit.	Active	11-Sep-13	11-Sep-16	
IIBA	Inuit Impact Benefit Agreement	KIA	Inuit Impact Benefit Agreement	Expired	25-Mar-06	23-Jun-11	Reviewed every third year for material change and automatically renewed for a subsequent 3 year term
IIBA	Inuit Impact Benefit Agreement	KIA	Inuit Impact Benefit Agreement	Expired	23-Jun-11	23-Jun-14	Reviewed every third year for material change and automatically renewed for a subsequent 3 year term
IIBA	Inuit Impact Benefit Agreement	KIA	Inuit Impact Benefit Agreement	Active	23-June-14	23-June-17	Reviewed every third year for material change and automatically renewed for a subsequent 3 year term

Table 1-B-1: List of Permits and Licenses for the Project

Permit/License	Type	Licensor	Approved Ops	Status	Begin of Term	End of Term	Comments
KVCA06Q11	Quarry Permit - AWPAR	KIA	Quarrying for All Weather Private Access Road, 254,546 m^3 of material	Active	02-Feb-07	31-Dec-21	Permit expires in 2022 or when the specified amount of material has been quarried
KVCA09Q09	Quarry Permit	KIA	Removal of 50,000 m^3 of gravel material - sand quarry for concrete production	Expired	03-Mar-09	03-Mar-11	Expires within 24 months or when material has been quarried
KVCA08Q10	Quarry Permit	KIA	Removal of 250,000 m^3 of gravel, sand, loam, mining backfill or shot rock from the land	Expired	15-May-08	15-May-12	Expires 12 months from the date hereof or when material has been quarried
KVPL08D280	Surface Production Lease (Amendment #1 and #2)	KIA	Surface Production Lease: Construction, operation and closure of the mine on Inuit owned land	Active	24-Jul-08	31-Dec-27	Production Lease Amended #1 Feb. 9th, 2009 ; Production Lease Amended #2 May 2, 2013
KVRW06F04	Right of Way Agreement - AWPAR (amendment #1)	KIA	All Weather Private Access Road (and Quarry - KVCA06Q11)	Active	01-Jan-07	31-Dec-21	
KVRW09F05	Right of Way Authorization	KIA	Winter Access Road for sand quarry	Expired	03-Mar-09	31-May-11	ROW expires one year before the sand quarry
Mine Water Comp Agrmt	Water Compensation Agreement - Mine	KIA	Compensation for water consumption at Meadowbank site and any changes in water quality, quantity or flow due to project activities	Active	14-Apr-08		Agreement terminates with C&R when KIA provides a letter of clearance
Road Water Comp Agrmt	Water Compensation Agreement - Road (amendment #1)	KIA	Compensation where development and operation of AWPAR has substantial effect on water quality, quantity or flow	Active	29-Jan-08		Agreement terminates following C&R of the road and all IOL affected by road
PC_NIRB-004	Project Certificate + modification condition 32	NIRB	Approval for the Meadowbank Project to proceed subject to its Terms & Conditions	Active	30-Dec-06	31-Dec-21	change in Condition 32 in September 15, 2010 (ATV access on AWPAR) Removal of condition 48 and changes to condition

Table 1-B-1: List of Permits and Licenses for the Project

Permit/License	Type	Licensor	Approved Ops	Status	Begin of Term	End of Term	Comments
							49 and 53 related to Phaser Lake (NIRB decision on April 18, 2016)
03-023-10N-M	Scientific Research License	NRI	Wind Data Collection	Expired	01-Jan-10	31-Dec-10	Multi-year license for January 1, 2010 - October 29, 2011 but needs to renewed each year
BL14-001-PL Vault	Subsurface Production Lease	NTI	Vault	Active	01-Jul-12	01-Jul-17	
2AM-MEA0815	Water License + Modification East Dike + Modification Airstrip + Amendment Fuel Tank Baker Lake	NWB	700,000 m^3 annually - Milling, mining and associated activities at the Meadowbank Project site Amendment freshwater use permit – 1,870,000 m^3 in 2013 and 1,150,000 m^3 thereafter	Expired	10-Jul-08	31-May-15	Approved by the Minister on July 10, 2008 Modification East Dike approve on July 3, 2013 Modification Airstrip approved in 2012 Amendment Fuel Tank Baker Lake on May 5, 2010
2AM-MEA0815	Short Term Water Licence	NWB	Same conditions as the approved 2008 water licence and amendment	Expired	20-April-15	27-Nov-15	Short term licence while waiting for the water licence renewal
2AM-MEA1525	Renewed Water Licence	NWB	2,350,000 m^3 annually up to December 31 2017 and 4,935,000 m^3 annually starting in 2018 through to the Expiry of the License- Milling, mining and associated activities at the Meadowbank Project site	Active	23-Jul-15	22-Jul-25	

INAC = Indigenous and Northern Affairs Canada (formally Aboriginal Affairs and Northern Development Canada); DFO = Fisheries and Oceans Canada; GN = Government on Nunavut; KIA = Kivalliq Inuit Association; NRI = Nunavut Research Institute; NTI = Nunavut Tunngavik Incorporated; NWB = Nunavut Water Board; m^3 = cubic metres.

Table 1-B-2: List of Authorizations

Authorization	Authority	Basis
Conformity determination with Keewatin Regional Land Use Plan	Nunavut Planning Commission	Allows Project to proceed to screening
Article 12, Environmental Screening/ Assessment	Nunavut Impact Review Board	Allows Project to proceed to authorizations to build and operate the road
Type B Water License	Nunavut Water Board	Allows for use of water and disposal of waste in constructing, operating and closing the road
Water Compensation Agreement	Kivalliq Inuit Association	Compensation for Inuit Water Rights under NLCA Section 20
Land Use Permit	Kivalliq Inuit Association	Allows construction of the road on IOL
Right-of-way Lease	Kivalliq Inuit Association	Allows lease right-of-way for completed and surveyed road across IOL
Quarry Permit	Kivalliq Inuit Association	Borrow pits proximal to the right-of-way for obtaining material to build the road.
Land Use Permit	Formerly, Aboriginal Affairs and Northern Development Canada, now INAC	Allows construction of the road across crown land
Right-of-way Lease	Aboriginal Affairs and Northern Development Canada	Allows lease right-of-way for completed and surveyed road across Crown Land.
Quarry Permit	Aboriginal Affairs and Northern Development Canada	Various borrow pit sites proximal to the right-of-way for obtaining material to build the road.
Fisheries Authorization	Department of Fisheries and Oceans	A Project Authorization will not be required as there is no harm to fish or fish habitat. Agnico Eagle intends to follow DFO operational statements for the installation of clear span bridges and culverts.
Navigable Waters Determinations	Transport Canada	The determination by Agnico Eagle if streams and rivers crossed by the Road are navigable. The report on navigability will be sent to Transport Canada.
Explosive Magazine Permit Renewal	Workers' Safety and Compensation Commission	Permits an explosive magazine on-site and at other approved locations
Class 2 Permit for Heritage Sites (obtained by qualified professional archaeologist)	Department of Culture and Heritage, Government of Nunavut	Unavoidable impacts of the road on heritage sites have been mitigated

Table 1-B-3: Primary Project Approval Requirements

Permit/Approval Legislation	Administering Agency	Project Activity
Project Certificate NLCA (Article 12)	NIRB	Project approval
Inuit Impact and Benefit Agreement NLCA (Article 26)	KIA	Project commencement
Mineral Production Lease	Nunavut Tunngavik Inc.	Required for mineral production
Inuit Water Rights Compensation Agreement NLCA (Article 20)	KIA	May be required
Water Licence *Nunavut Waters and Nunavut Surface Rights Tribunal Act*	NWB	Required for water use and waste disposal
Class 1/Class 2 Archaeology Permit *Nunavut Archaeological and Paleontological Sites Regulations*	Government of Nunavut Department of Culture, Language, Elders and Youth (CLEY)	Required to conduct archaeology research and to mitigate archaeological sites to allow development to occur
IOL – Commercial Land Use Lease or Right of Way NLCA	KIA	Long-term land tenure required for land use on Inuit Owned Lands; land required for infrastructure, roads and activities associated with construction, operations, and closure phases
IOL – Quarry Lease/Permit NLCA	KIA	Required for quarrying of material on Inuit Owned Lands during construction, operation and closure
Crown Land – Lease/Land Use Permit *Territorial Lands Act* *Territorial Land Use Regulations*	INAC	Required for quarrying of material on Crown land during construction, operation and closure
Approval and/or Exemption *Navigable Waters Protection Act* (sections 5, 22 and 23)	Transport Canada	Construction of works in navigable waters. Prescriptions of Sections 22 and 23 of the Navigable Waters Protection Act will be followed as necessary.
Fisheries Authorization for Harmful Alteration Disruption or Destruction (HADD) of Fish or Fish Habitat *Fisheries Act* (section 35)	Fisheries and Oceans Canada (DFO)	Required if HADD cannot be avoided; if HADD can be avoided, DFO may provide a letter of advice outlining best management practices
Licence for a Factory and Magazine *Explosives Act and Regulations*	Natural Resources Canada	Required for construction of explosives factories and magazine(s) and storage of explosives

Table 1-B-3: Primary Project Approval Requirements

Permit/Approval Legislation	Administering Agency	Project Activity
Permit to Store Detonators *Explosives Use Act* *Mine Health and Safety Act and Regulations*	Nunavut Mine Health and Safety Nunavut Workers Compensation Board	Required to store detonators in a magazine
Explosive Use Permit *Explosives Use Act* *Mine Health and Safety Act* and *Regulations*	Nunavut Mine Health and Safety Nunavut Workers Compensation Board	A permit is required to use explosives unless used in accordance with the regulations
Spill Contingency Plan Approval *Environmental Protection Act* *Spill Contingency Planning and Reporting Regulations*	Nunavut Department of Environment (DoE)	A Spill Contingency Plan must be filed with the Chief Environmental Protection Officer to store fuel in an above-ground facility with a 20,000 L capacity or greater
Assorted Scientific Research Permits *Scientist Act* *Wildlife Act*	Nunavut Research Institute	Required to conduct some of the environmental monitoring activities

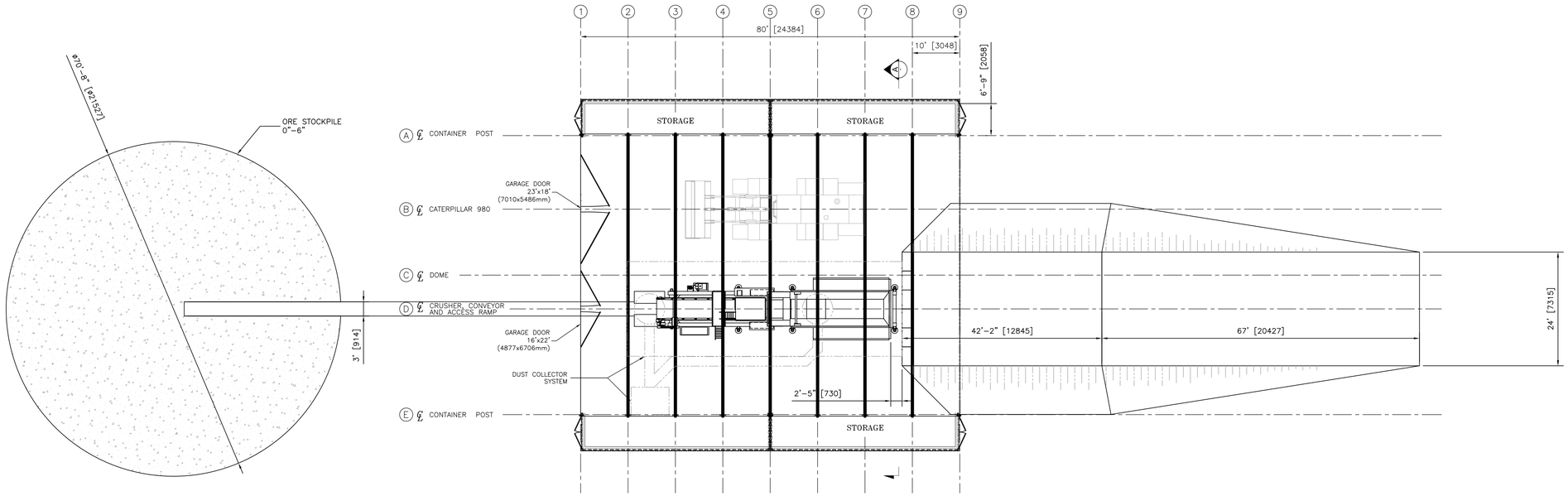
APPENDIX 1-C

Design Drawings / Conceptual Layouts

Description
General Arrangement: Ore Crushing – Surface Crusher Arrangement
Typical cross-section of the Whale Tail Waste Rock Storage Facility
Typical cross-section and Plan View of Freshwater Intake
Typical cross-section road widening
Typical cross-section of culvert installation details
Quarry site location plan
Cross-section Whale Tail Dike
Cross-section Whale Tail Diversion Channel
Typical cross-section and layout Whale Tail Landfill
Typical cross-section layout Whale Tail Fuel System
Conceptual Layout Water Treatment Plant
Actiflo Water Treatment Plant Schematic
Typical cross-section and layout Ore Stockpile

NO. DESSIN
DRAWING NO. 6108-554-210-001_R0

FORMAT ARCHD



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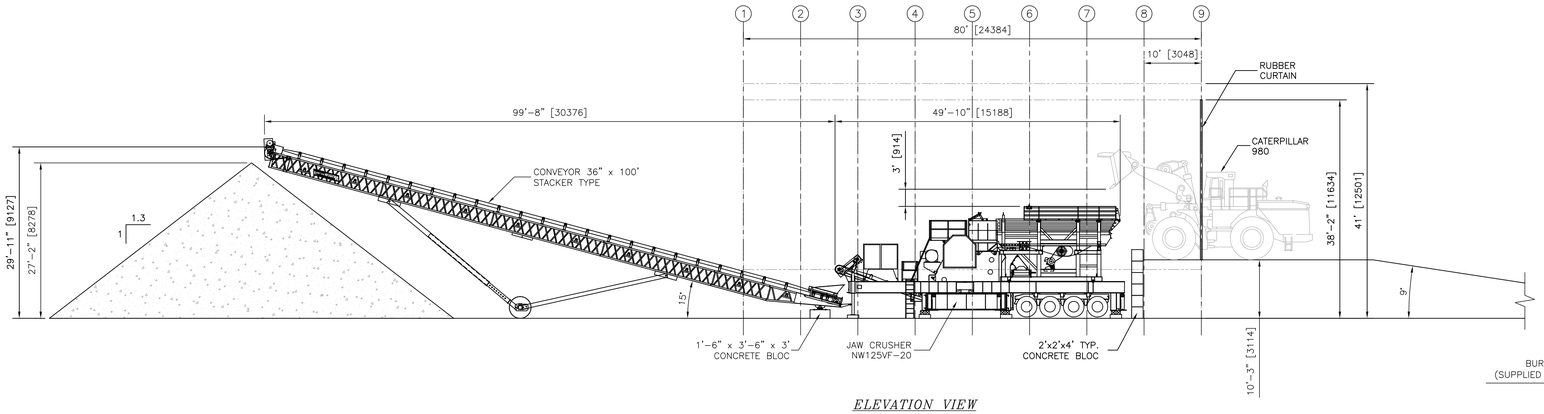

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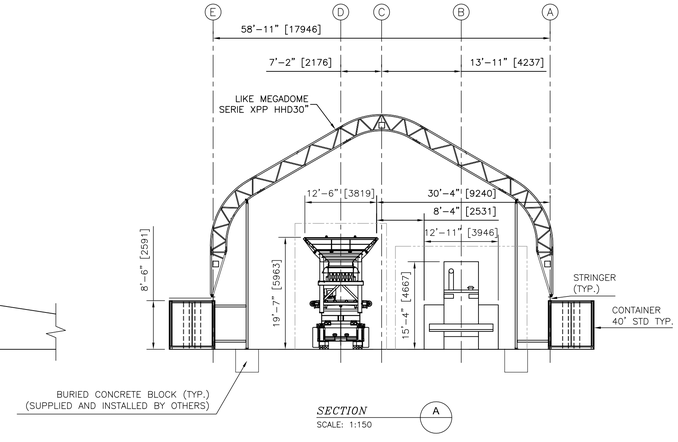

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PLAN CLÉ
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

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FINAL ISSUE
NOT TO BE USED FOR CONSTRUCTION
AGNICO EAGLE DATE : 2015-12-04

ÉVALUATION BUDGÉTAIRE CONCEPTUELLE
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CONCEPTUAL BUDGETARY EVALUATION
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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT

REVISIONS

AMARUQ
PROJECT

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
AMARUQ MINE PROJECT
554-CRUSHIN
210 GENERAL ARRANGEMENT
ORE CRUSHING – SURFACE
CRUSHER ARRANGEMENT

DESSINÉ PAR / DRAWN BY	JOCELYN CRETE	DATE 2015-12-04
VÉRIFIÉ PAR / CHECKED BY	DANY LAFLAMME	2015-12-04
APPROUVÉ PAR / APPROVED BY		
ÉCHELLE / SCALE	N/A	DATE 2015-01-20

NO. DESSIN / DRAWING NO. 6108-554-210-001

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6108	0	- / -

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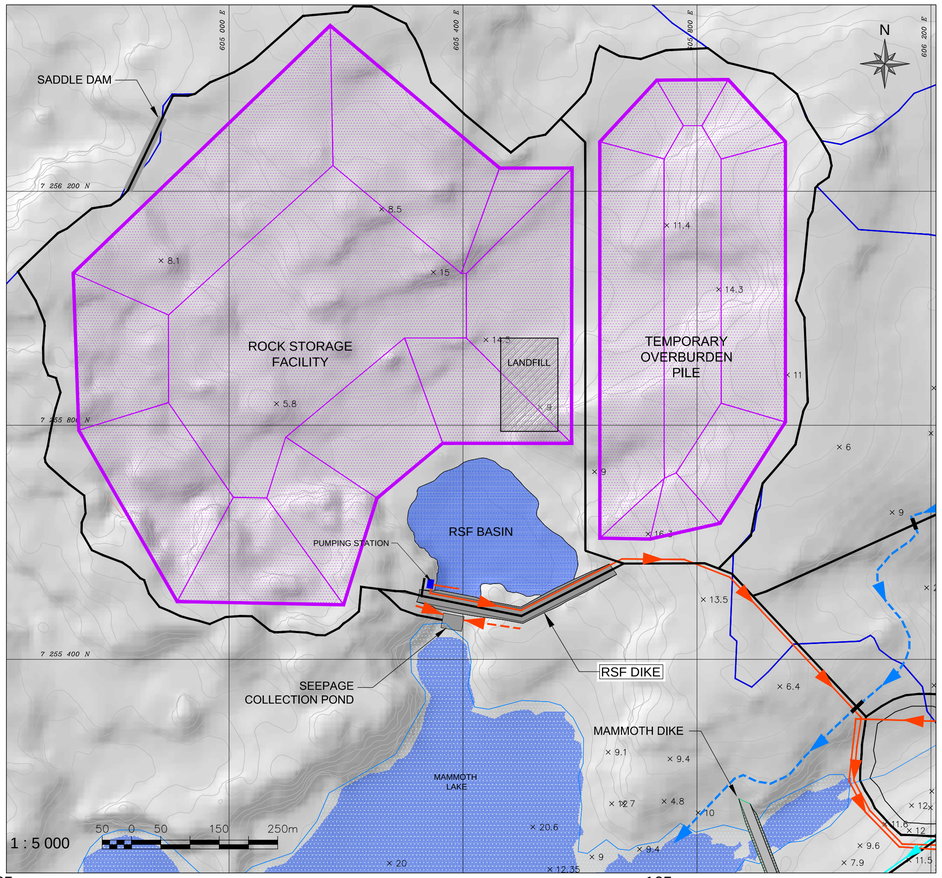

RSF DIKE - PLAN VIEW

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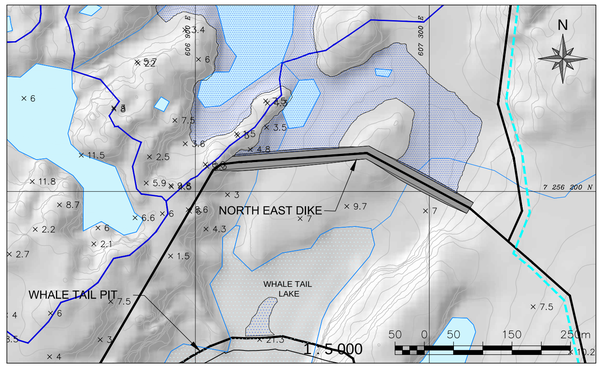

NORTH EAST DIKE - PLAN VIEW

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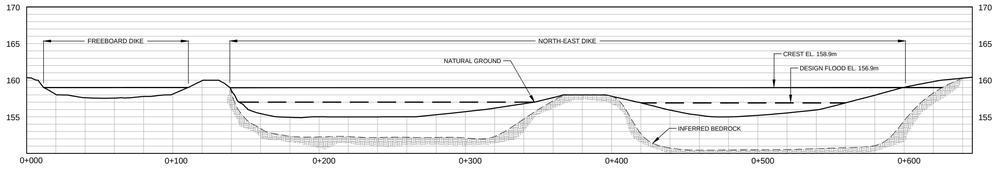

NORTH-EAST DIKE PROFILE

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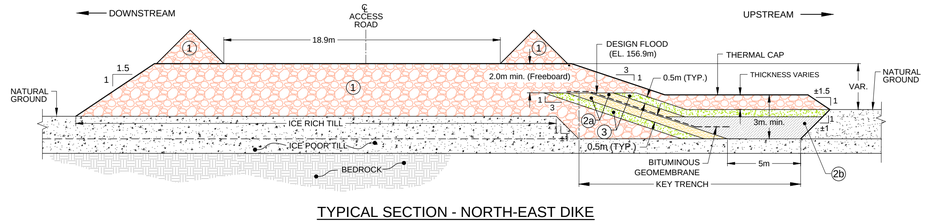
VER. 1: 400



TYPICAL SECTION - NORTH-EAST DIKE

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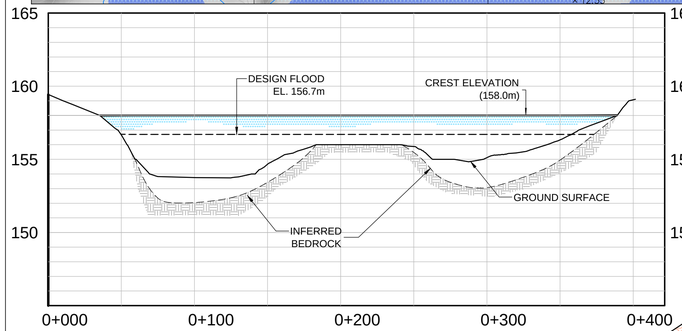

PROFILE OF RSF DIKE

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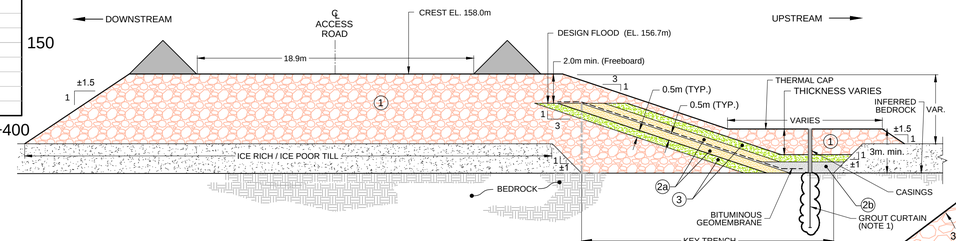

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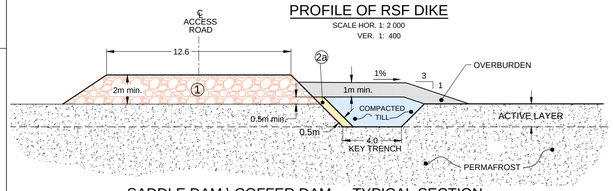

SADDLE DAM \ COFFER DAM - TYPICAL SECTION

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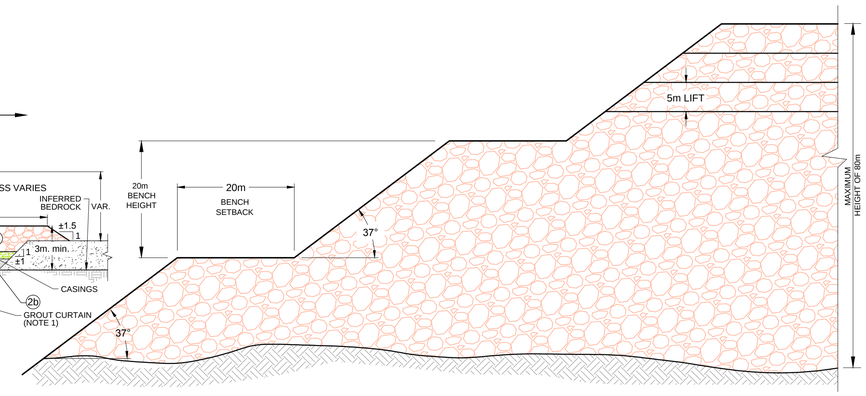

RSF CROSS SECTION

SCALE 1: 500

LEGEND

- DIVERSION CHANNEL
- COLLECTION CHANNEL
- PIPELINE CONTACT WATER
- PIPELINE CLEAN WATER
- TEMPORARY ROAD
- ACCESS ROAD
- WATERSHED
- CULVERT
- ×13.5 EXPLORATION BOREHOLE (ice water and overburden thickness)
- MD-01 INVESTIGATION BOREHOLE (may, 215)
- BASIN

FILL MATERIAL

- (1) ROCKFILL
- (2a) FINE FILTER
- (2b) F. F. AMENDED WITH BENTONITE
- (3) COARSE FILTER

NOTE 1 : GROUT CURTAIN WOULD BE IMPLEMENTED DURING THE OPERATION, IF REQUIRED.

ISSUE No	REV.	DATE (Y/M/D)	PURPOSE OF ISSUE
01	00	2015-12-09	ISSUED WITH ENGINEERING REPORT

ISSUE REGISTER

ISSUE REGISTER

No	REVISION DESCRIPTION	DATE (Y/M/D)	*	**

INITIALS: * DESIGNED ** APPROVED

REVISION REGISTER

No	REVISION DESCRIPTION	DATE (Y/M/D)	*	**

INITIALS: * DESIGNED ** APPROVED

REVISION REGISTER

REFERENCE DRAWINGS

PROFESSIONAL SEAL

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DRAWN E. RODRIGUEZ / J. SIMARD	PROJECT ENGINEERING MANAGER Y. JALBERT, ING.
CHECKED Y. JALBERT, ING.	CLIENT
DATE 2015-10-01	
SCALE AS SHOWN	

NOT FOR CONSTRUCTION

CLIENT AGNICO EAGLE

PROJECT
AGNICO EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT

TITLE
RSF AND NORTH EAST DIKES
PLAN VIEW & TYPICAL SECTIONS

PROJECT No	SUBDIVISION	SUBJECT	SERIAL	REV.
627215	1000	4G|DD	0006	00

A1-HOR-FRAME-EN (SI)

LAST SAVE: 2015/12/09 - 9:33am
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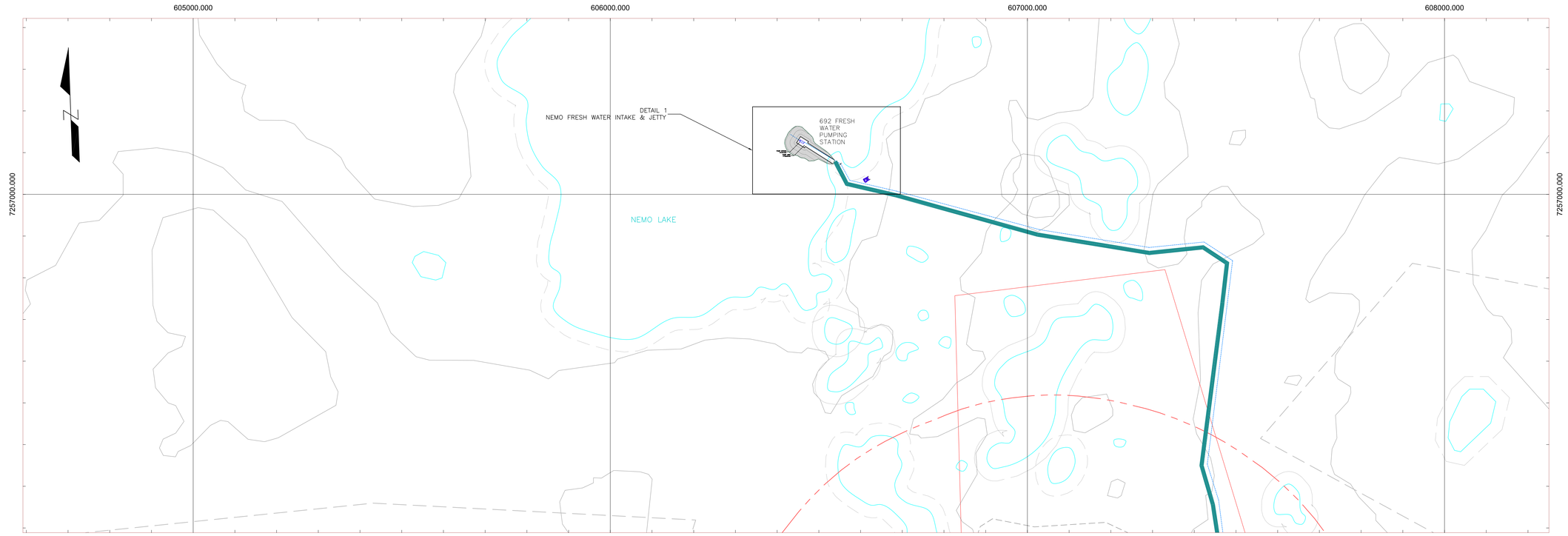
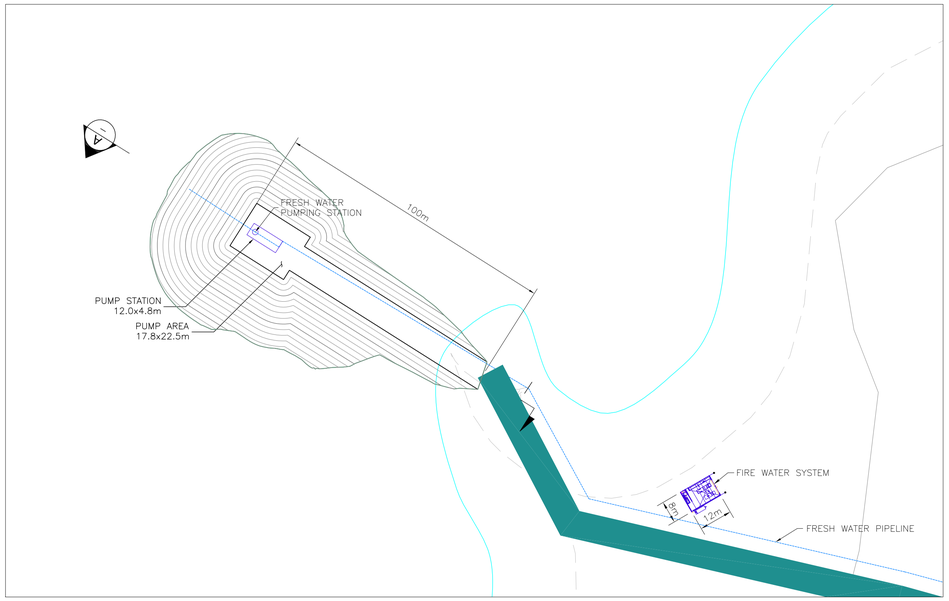
NO. DESSIN
DRAWING NO. 6108-692-210-001_R2

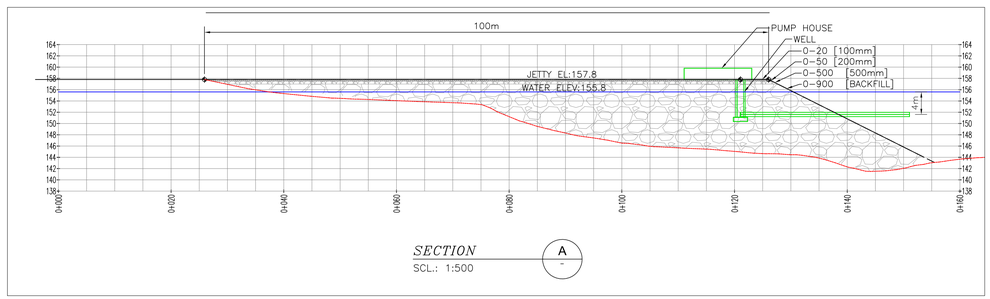
FORMAT ARCHD



NEMO FRESH WATER INTAKE
SCL.: 1:5000



DETAIL 1
SCL.: 1:1000



SECTION A
SCL.: 1:500

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 2016-05-04

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
2	2016-05-04	ISSUED FOR PERMITTING	J.C.	S.O.	
0	2015/07/08	FOR INFORMATION	KPM	DL	

REVISIONS

Golder Associates

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT
NEMO FRESH WATER INTAKE
210 GENERAL ARRANGEMENT
MINE SITE GENERAL VIEW

DESSINÉ PAR / DRAWN BY	KEVEN PLANTE-MARQUIS	DATE 2015/07/08
VÉRIFIÉ PAR / CHECKED BY	DANY LAFLAMME	2015/07/08
APPROUVÉ PAR / APPROVED BY	SERGE OUELLET	2016/05/05
ÉCHELLE / SCALE	INDICATED	DATE 2015/07/08
NO. DESSIN / DRAWING NO.	6108-692-210-001	
NO. PROJET / PROJECT NO.	6108	REVISION 2 / FEUILLE / SHT 1 / 1

AE-CART-ARCH D

N:\Projet\Amaruq\050 Studies\6108 Permitting Concepts\010 Info by area\692 Fresh Water Pumping Station\00 Drawings\6108-692-210-001_R2.dwg

NO. DESSIN
DRAWING NO. 6103-117-230-271_A

FORMAT ARCHD

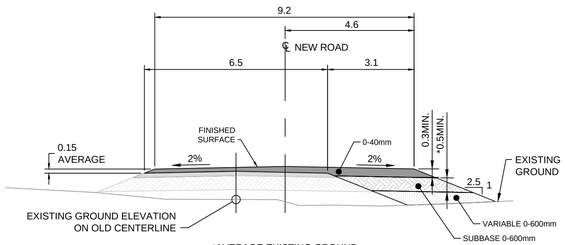
NOTES:

1. SOILS VERY SUSCEPTIBLE TO FREEZE AND THAW INDUCED SETTLEMENT WHERE THAWING OF THE NEAR-SURFACE SUB-GRADE IS EXPECTED TO RESULT IN SIGNIFICANT STRENGTH LOSS AND EXCESSIVE SETTLEMENTS.

2. SOILS RELATIVELY SUSCEPTIBLE TO FREEZE AND THAW INDUCED SETTLEMENT WHERE THAWING OF THE NEAR-SURFACE SUB-GRADE IS EXPECTED TO RESULT IN SIGNIFICANT STRENGTH LOSS AND EXCESSIVE SETTLEMENTS.

3. SOILS RELATIVELY UNSUSCEPTABLE TO FREEZE AND THAW SETTLEMENT WHERE THAWING OF THE NEAR-SURFACE SUB-GRADE IS EXPECTED TO RESULT IN MINIMAL STRENGTH LOSS AND TOLERABLE SETTLEMENTS.

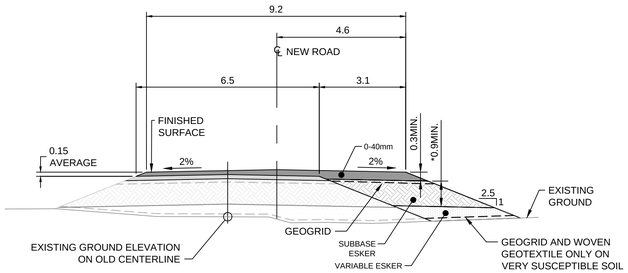
4. ALL DIMENSIONS IN METERS, UNLESS NOTED OTHERWISE.



*AVERAGE EXISTING GROUND

TYPICAL SECTION TYPE 1
ROC SOIL
(SEE NOTE 3)

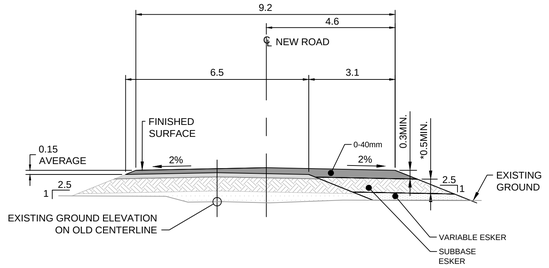
HOR. 1:100
VERT. 1:100



*AVERAGE EXISTING GROUND

TYPICAL SECTION TYPE 2
TUNDRA SOIL
(SEE NOTE 2)

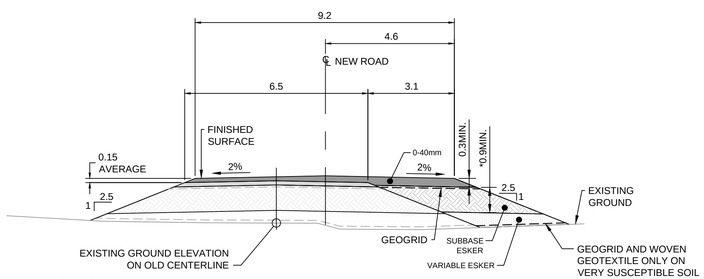
HOR. 1:100
VERT. 1:100



*AVERAGE EXISTING GROUND

TYPICAL SECTION TYPE 3
ROC SOIL
(SEE NOTE 3)

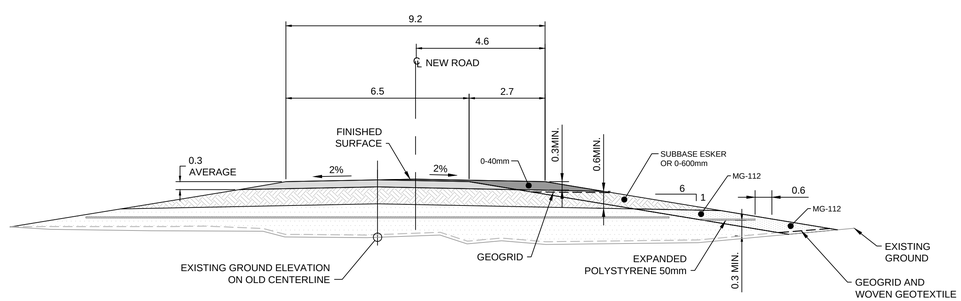
HOR. 1:100
VERT. 1:100



*AVERAGE EXISTING GROUND

TYPICAL SECTION TYPE 4
THAW SUSCEPTIBLE SOIL
(SEE NOTE 2)

HOR. 1:100
VERT. 1:100



TYPICAL SECTION 5
ICE WEGDE AND VERY THAW SUSCEPTIBLE SOIL
(SEE NOTE 1)

HOR. 1:100
VERT. 1:100

PLAN CLÉ
KEY PLAN

NOTE GÉNÉRALE / GENERAL NOTE

DEMANDE DE PERMIS
ISSUED FOR PERMITTING
AGNICO EAGLE DATE : 26/04/2016

NE PAS UTILISER
POUR CONSTRUCTION
NOT FOR CONSTRUCTION
AGNICO EAGLE DATE : 26/04/2016

WSP

#141-21815-00

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
A	2016-04-26	ISSUED FOR PERMITTING	S.D.	S.D.	

REVISIONS

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
117-ROAD, YARDS, FENCES AND OTHER
230-GENERAL EARTH WORK
TYPICAL SECTION & ROAD WIDENING

DESSINÉ PAR / DRAWN BY	SYLVIE DUFOUR.	DATE 2016/04/26
VÉRIFIÉ PAR / CHECKED BY	ÉRIC TRUDEL, P.Eng.	2016/04/26
APPROUVÉ PAR / APPROVED BY	STEPHAN DUPUIS, P.Eng.	2016/04/26
ÉCHELLE / SCALE: INDICATED		DATE 2016/04/07

NO. DESSIN / DRAWING NO. 6103-117-230-271

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6103	A	1 / 1

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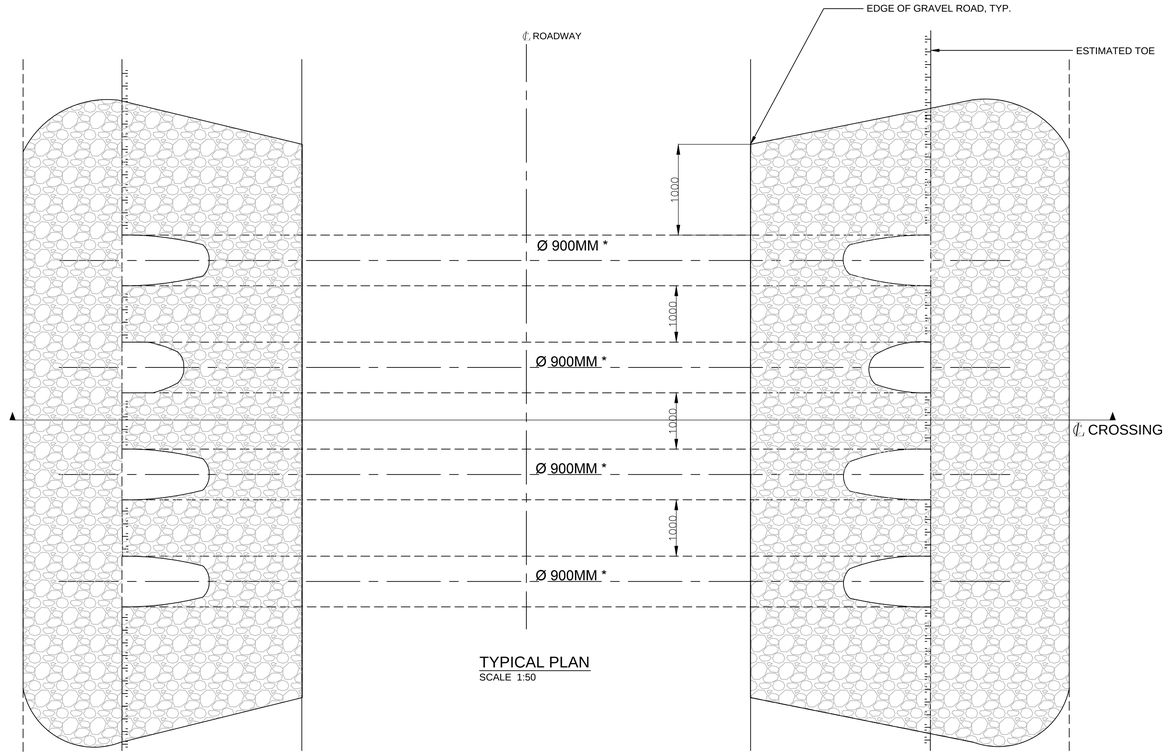
FILE NO. 6103-117-230-271_A.dwg

NO. DESSIN
DRAWING NO. 6103-117-230-270

FORMAT ARCHD



TYPICAL PLAN
SCALE 1:50

GENERAL

- ANY DESIGN CHANGES PROPOSED DURING CONSTRUCTION SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE COORDINATING REGISTERED PROFESSIONAL.

HYDROLOGY AND HYDRAULIC ASSESSMENT

- THE EXTENT OF THE RIP RAP IS BASED ON AVAILABLE INFORMATION, THE EXTENTS SHOULD BE ADJUSTED IN THE FIELD TO ENSURE ADEQUATE SCOUR PROTECTION IS PROVIDED TO THE BRIDGE SUBSTRUCTURE AND ABUTMENTS.

CULVERT DESIGN

- CONFORM TO CAN/CSA-S6-06 (MODIFIED)

- DESIGN LIFE IS 45 YEARS

CULVERTS

- THE DESIGN SHOWS THE MINIMUM REQUIRED LENGTH & OPENING SIZE.

- THE CULVERT INSTALLATION, BEDDING & BACKFILL SHALL BE ADEQUATELY PROTECTED TO PREVENT SEEPAGE THAT WAY RESULT IN FAILURE OF THE ROAD EMBANKMENT.

- THE CULVERT INSTALLATION AND BACKFILL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

- LOCATION TO BE CONFIRMED IN FIELD WITH COORDINATING REGISTED PROFESSIONAL.

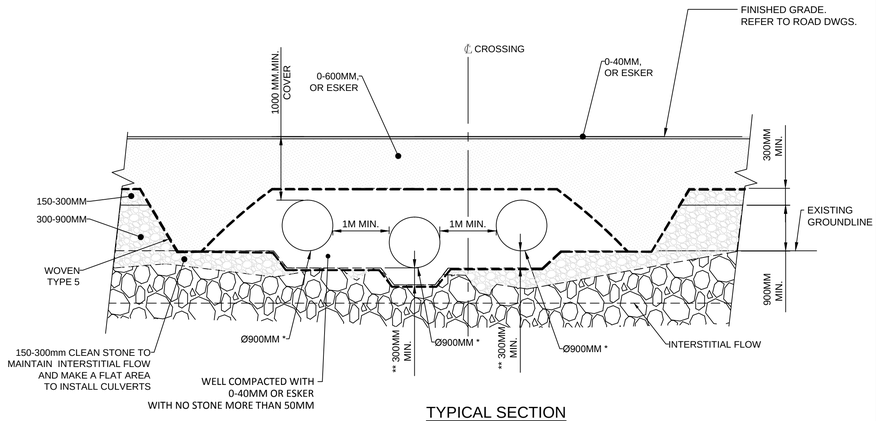
- D: DIAMETER

** WHERE GRAMINOID WATERCOURSES THAT ARE FISH HABITAT ARE CONVEYED SOLELY BY CULVERTS (I.E. THERE IS NO BRIDGE) , THE LOWEST CULVERT WILL BE EMBEDDED 300MM BELOW THE STREAM INVERT AND ADDITIONAL CULVERTS, IF REQUIRED, WILL BE EMBEDDED BY 10% OF THEIR DIAMETER.
WHERE CULVERTS ARE PLACED ON TOP OF BOULDER WATERCOURSES THAT ARE FISH HABITAT AND THERE IS NO BRIDGE, INTERSTITIAL FLOW WILL BE MAINTAINED AND THE LOWEST CULVERT WILL BE EMBEDDED 300MM BELOW THE TOP OF THE BOULDERS AND ADDITIONAL CULVERTS, IF REQUIRED, WILL BE PLACED ON TOP OF THE BOULDERS.
CULVERT WHERE THERE IS NOT FISH WILL BE EMBEDDED BY 10% OF THEIR DIAMETER FOR THE LOWEST.

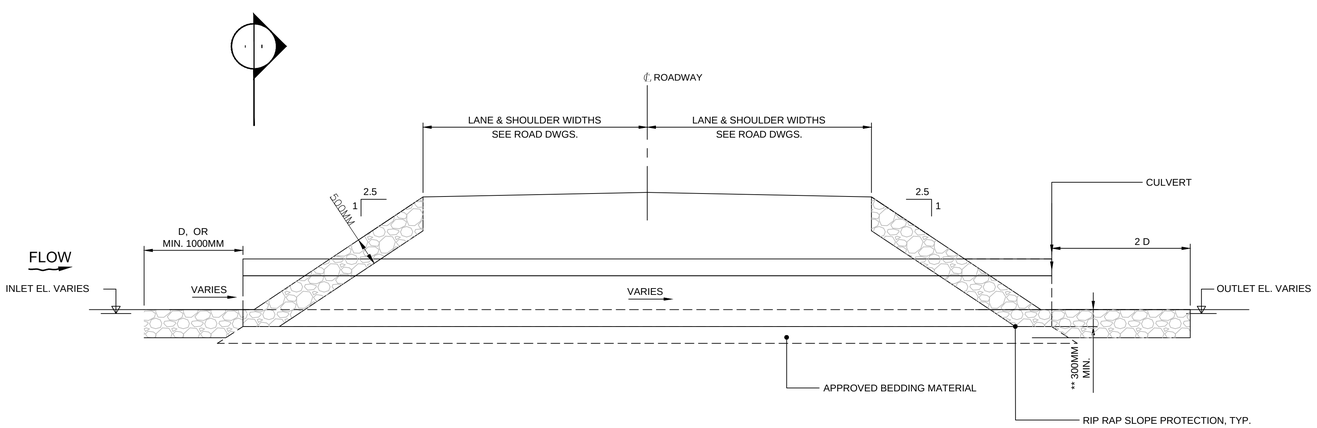
* FOR CULVERTS DIAMETER AND QUANTITY : SEE PLAN AND PROFILE DRAWINGS.

MATERIALS

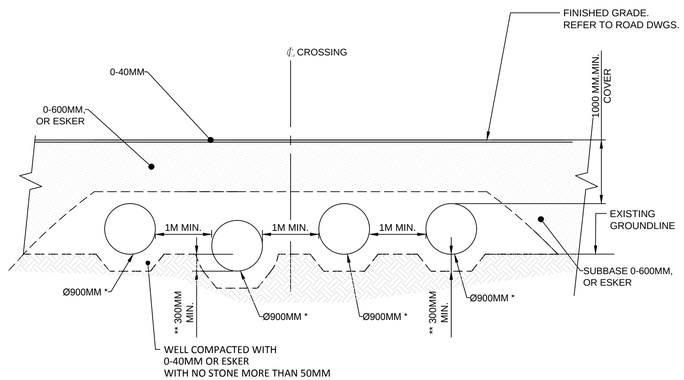
- CORRUGATED STEEL PIPE: CONFORM TO CSA G40.21M
PLATE: GRADE 350A (OTHER STRUCTURAL STEEL)



TYPICAL SECTION
SCALE 1:50
BOULDER CROSSING



TYPICAL ELEVATION
SCALE 1:50



TYPICAL SECTION
SCALE 1:50
GRAMINOID CROSSING

PLAN CLÉ
KEY PLAN

NOTE GÉNÉRALE / GENERAL NOTE

UTM ZONE 14 NAD 83 (SCRS)

WSP

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TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	2015/11/23	ISSUED FOR CONSTRUCTION	S.D.	S.D.	E.T.
0	2015/10/08	ISSUED FOR CONSTRUCTION	S.D.	P.C.	E.T.

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
117-ROAD, YARDS, FENCES AND OTHER
VAULT TO AMARUQ
230-GENERAL EARTH WORK ROAD
CULVERT
INSTALLATION DETAILS

DESSINÉ PAR DRAWN BY	SYLVIE DUFOUR.	DATE 2015/11/23
VERIFIÉ PAR CHECKED BY	ERIC TRUDEL, P.Eng.	2015/11/23
APPROUVÉ PAR APPROVED BY	STEPHANE DUPUIS, P.Eng.	2015/11/23
ÉCHELLE SCALE	1 : 1000	DATE 2015/04/28

NO. DESSIN DRAWING NO. 6103-117-230-270

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
6103	1	1 / 1

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FILE NO. 6103-610-230-270_R1.dwg
6103-117-230-270.dwg

NO. DESSIN
DRAWING NO. 6103-117-230-200

FORMAT ARCHD

LEGEND

BRIDGES:
3.4km, 6M –DRAWING #212
10.7km, 6M –DRAWING #217
16.0KM; 40M –DRAWING #221
20.0km, 6M –DRAWING #224
23.9KM; 60M –DRAWING #227
26.1km, 6M –DRAWING #228
32.3KM; 40M –DRAWING #233
43.5km, 6M –DRAWING #241
44.8KM; 40M –DRAWING #241

SECTION 1 = 16.8 km VAULT TO ESKER #1 (CH:16+800)

SECTION 2 = 8.2 km ESKER #1 TO ESKER #2 (CH:25+000)

SECTION 3 = 10 km ESKER #2 TO (CH:35+000)

SECTION 4 = 11 km 35+000 TO ESKER #3 (CH:46+000)

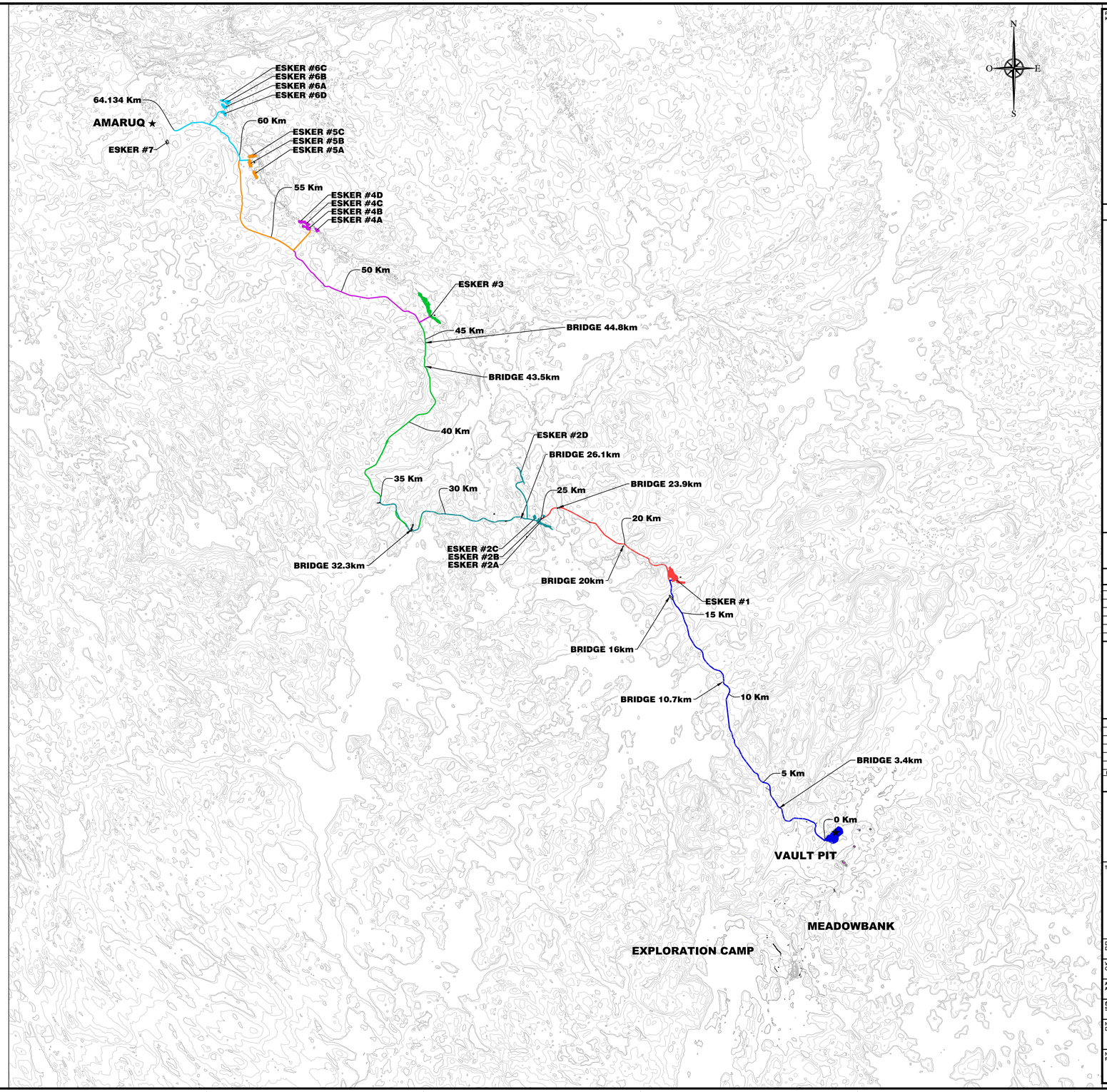
SECTION 5 = 7.7 km ESKER #3 TO ESKER #4 (CH:53+700)

SECTION 6 = 6.1 km ESKER #4 TO ESKER #5 (CH:59+800)

SECTION 7 = 4.334 km ESKER #5 TO AMARUQ (CH:64+134)

ESKERS Quantities		
Esker	Surface exploited (m^2)	2 strips x 1 m (m^3)
1	180 725	361 450
2A	84 985	169 970
2B	5 144	10 288
2C	24 745	49 490
2D	43 089	86 178
3	178 542	357 084
4A	17 434	34 868
4B	35 860	71 720
4C	32 933	65 866
4D	16 998	33 996
5A	41 140	82 280
5B	35 458	70 916
5C	34 591	69 182
6A	25 827	51 654
6B	32 637	65 274
6C	10 263	20 526
6D	22 922	45 844

	Granular materials for road construction (m^3)					
Sections	From	0-40 mm	0-300 mm**	0-600 mm**	From	MG-112**
1	Vault	18 735	154 091	174 957		
2	Vault	9 078		N/A	Esker 1	183 722
3	Vault	3 928		N/A	Esker 2	489 115
4	Vault	21 726		N/A	Esker 3	108 650
5	Vault	8 656		N/A	Esker 4	70 368
6	Vault	6 920		N/A	Esker 5	34 467
7	Vault	5 257		N/A	Esker 6	34 492
Total m^3		74 301	154 091	174 957		920 814
** Increase of 0-300, 0-600 and MG-112 of 20%						



PLAN CLÉ
KEY PLAN

WSP

#141-21815-00

NOTE GÉNÉRALE / GENERAL NOTE

UTM ZONE 14 NAD 83 (CSRS)

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	2015/11/23	ISSUED FOR CONSTRUCTION	S.D.	S.D.	
0	2015/10/08	ISSUED FOR CONSTRUCTION	S.D.	S.D.	

REVISIONS

AMARUQ EXPLORATION ACCESS ROAD

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
117–ROAD, YARDS, FENCES AND OTHER
230 EARTH WORK
PLAN
ROAD VAULT TO AMARUQ

DESSINÉ PAR DRAWN BY	SYLVIE DUFOUR	DATE 2015/11/23
VERIFIÉ PAR CHECKED BY	ÉRIC TRUDEL, P.Eng.	2015/11/23
APPROUVÉ PAR APPROVED BY	STEPHAN DUPUIS, P.Eng.	2015/11/23
ÉCHELLE SCALE	1 : 100 000	DATE 2014/07/07

NO. DESSIN DRAWING NO. 6103-117-230-200

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
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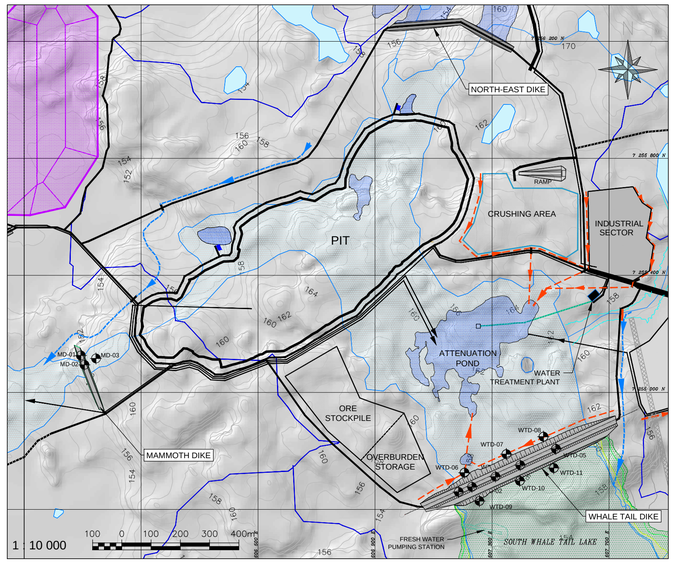
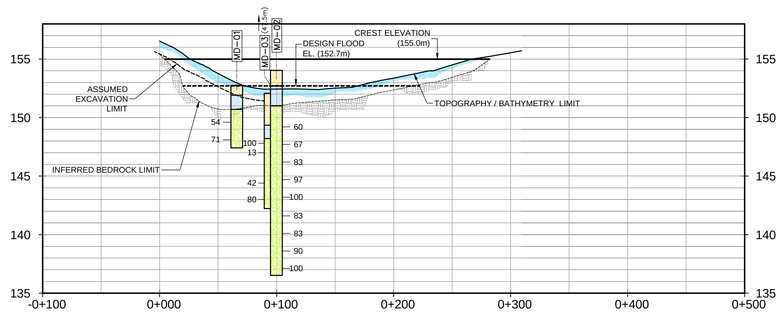
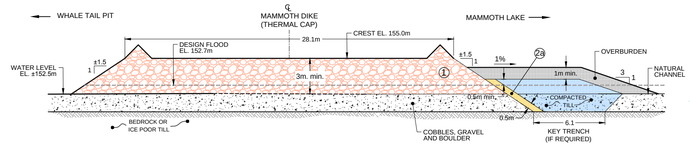
FILE NO. 6103-117-230-200_R1.dwg
6103-610-230-200 .DWG



MAMMOTH, WHALE TAIL AND NORTH EAST DIKE
PLAN VIEW
SCALE 1: 10 000



PROFILE OF MAMMOTH DIKE
SCALE HOR. 1: 2 500
VER. 1: 250



MAMMOTH DIKE - TYPICAL SECTION
SCALE 1: 250

LEGEND

Plan View

- PIPELINE
- DIVERSION CHANNEL
- COLLECTION CHANNEL
- TEMPORARY ROAD
- ROAD
- WATERSHED
- CULVERT
- ×13.5 — EXPLORATION BOREHOLE (ice water and overburden thickness)
- MD-01 — INVESTIGATION BOREHOLE (may, 2015)
- BASIN

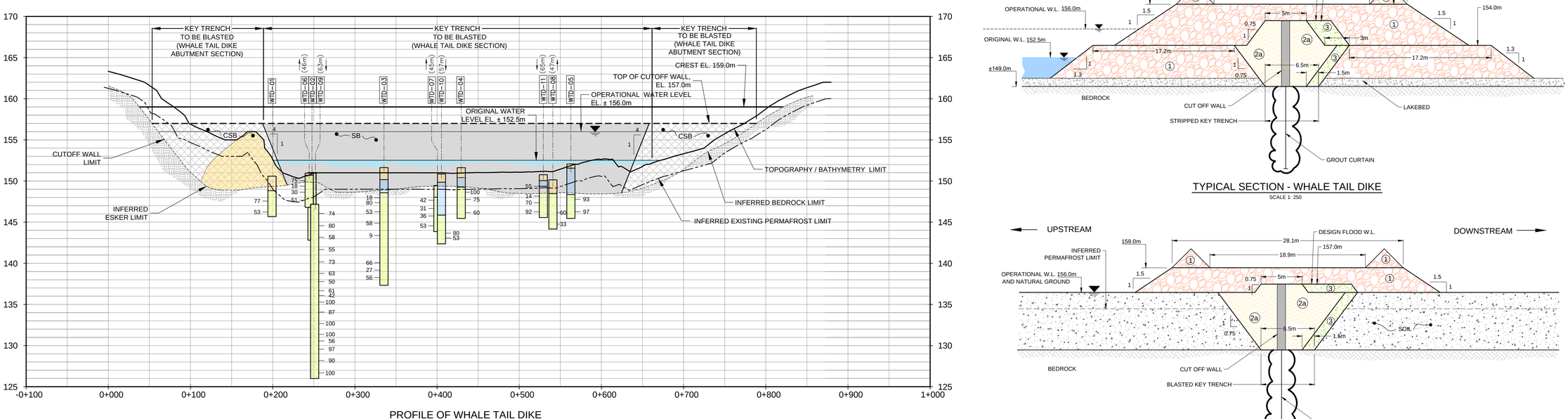
Profile View

- WTD-10 (57m) — DISTANCE FROM ℄
- NAME
- COBBLES, GRAVEL, BOULDER
- TILL
- BEDROCK
- 92 — RQD

FILL MATERIAL

1	ROCKFILL
2a	FINE FILTER
2b	F. F. AMENDED WITH BENTONITE
3	COARSE FILTER

CSB	CEMENT SOIL BENTONITE
SB	SOIL BENTONITE



PROFILE OF WHALE TAIL DIKE
SCALE HOR. 1: 2 500
VER. 1: 250

TYPICAL SECTION - WHALE TAIL DIKE
SCALE 1: 250

TYPICAL SECTION - WHALE TAIL DIKE ABUTMENT
SCALE 1: 250

NOT FOR CONSTRUCTION

ISSUE No	REV.	DATE (Y/M/D)	PURPOSE OF ISSUE
01	00	2015-12-09	ISSUED WITH ENGINEERING REPORT

ISSUE REGISTER

ISSUE REGISTER

REVISION REGISTER (INITIALS: * DESIGNED ** APPROVED)

No	REVISION DESCRIPTION	DATE (Y/M/D)	*	**

REVISION REGISTER (INITIALS: * DESIGNED ** APPROVED)

No	REVISION DESCRIPTION	DATE (Y/M/D)	*	**

REFERENCE DRAWINGS

PROFESSIONAL SEAL

SNC·LAVALIN
Mining & Metallurgy
5500, des Galeries Blvd., bur. 200, Quebec (Quebec), Canada G2K 2E2
Telephone: (418) 621-5500, Fax: (418) 621-8887

PREPARATION	APPROVAL
DESIGNED: M-H. PICARD, ING.	PROJECT DISCIPLINE ENGINEER: D. LEAHY, ING.
DRAWN: E. RODRIGUEZ	PROJECT ENGINEERING MANAGER: Y. JALBERT, ING.
CHECKED: Y. JALBERT, ING.	CLIENT
DATE: 2015-10-01	
SCALE: AS SHOWN	

CLIENT: AGNICO EAGLE

PROJECT: AGNICO EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT

TITLE: DEWATERING DIKES
PLAN VIEW, PROFILES AND TYPICAL SECTIONS

PROJECT No	SUBDIVISION	SUBJECT	SERIAL	REV.
627215	1000	4G | DD	0005	00

A1-HOR-FRAME-EN (SI)

LAST SAVE: 2015/12/09 - 9:30am
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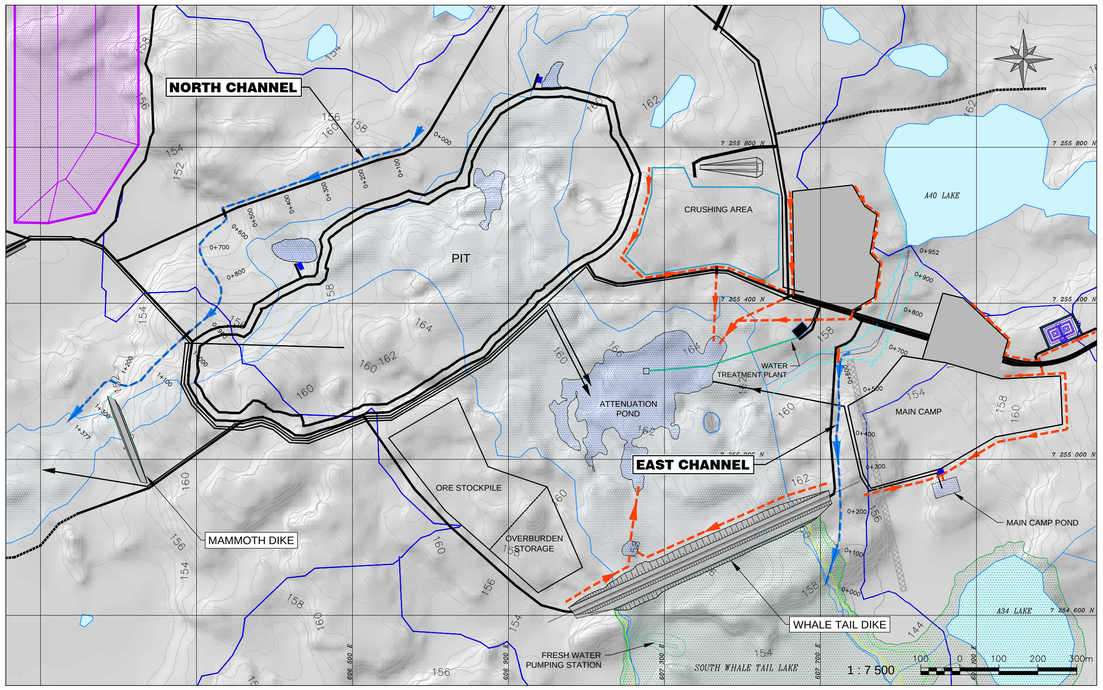
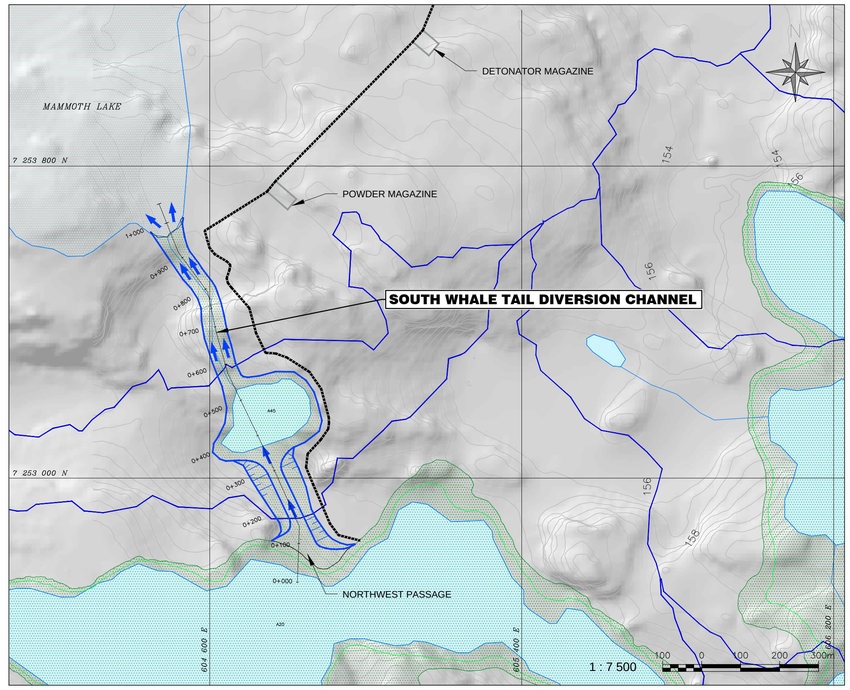


EAST SECTOR, MAIN CAMP & INDUSTRIAL SECTORS CHANNELS PLAN VIEW
SCALE 1: 7 500



SOUTH WHALE TAIL DIVERSION CHANNEL - PLAN VIEW
SCALE 1: 7 500

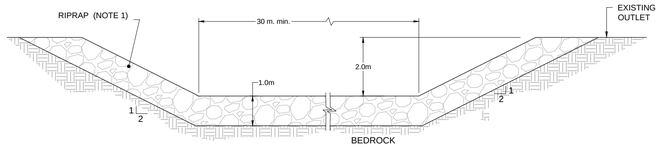
LEGEND

- PIPELINE
- DIVERSION CHANNEL
- COLLECTION CHANNEL
- TEMPORARY ROAD
- ROAD
- WATERSHED
- CULVERT
- ×13.5 EXPLORATION BOREHOLE (ice water and overburden thickness)
- MD-01 INVESTIGATION BOREHOLE (may, 2015)
- BASIN

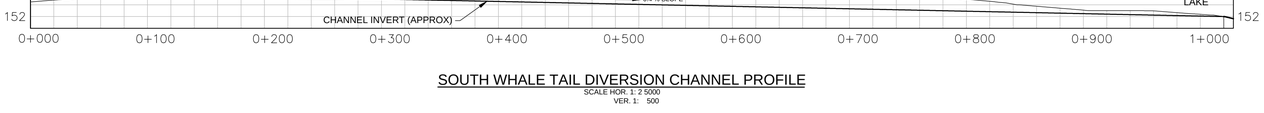
FILL MATERIAL

- 1 ROCKFILL
- 2a FINE FILTER
- 2b F. F. AMENDED WITH BENTONITE
- 3 COARSE FILTER

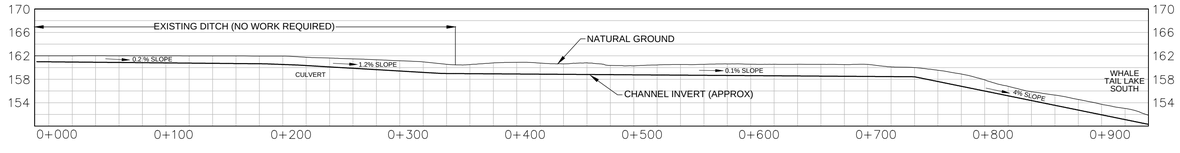
NOTE 1 : RIPRAP NOT REQUIRED IF BEDROCK IS ENCOUNTERED.



TYPICAL SECTION - SOUTH WHALE TAIL DIVERSION CHANNEL
SCALE 1: 100



SOUTH WHALE TAIL DIVERSION CHANNEL PROFILE
SCALE HOR. 1: 2 5000
VER. 1: 500



EAST CHANNEL PROFILE
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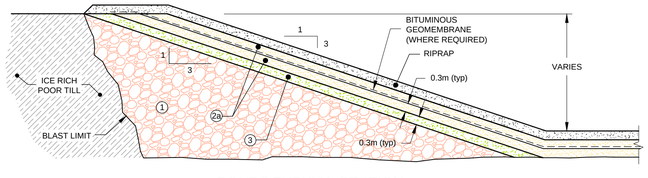
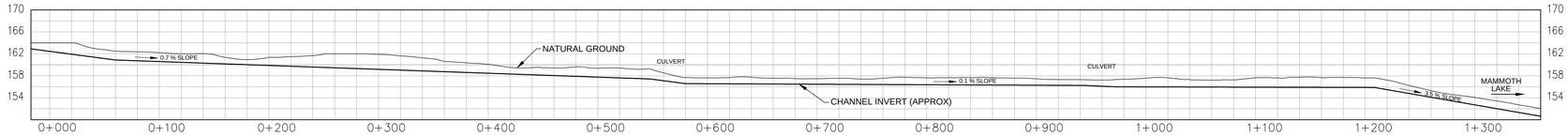
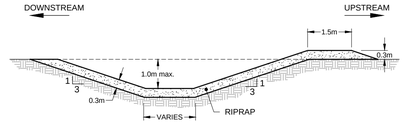
VER. 1: 500



PONDS TYPICAL SECTION
SCALE 1:100



NORTH CHANNEL PROFILE
SCALE HOR. 1: 2 500
VER. 1: 500



CHANNEL TYPICAL SECTION
SCALE 1:100

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01	00	2015-12-09	ISSUED WITH ENGINEERING REPORT

ISSUE REGISTER

ISSUE No	REV.	DATE (Y/M/D)	PURPOSE OF ISSUE

ISSUE REGISTER

No	REVISION DESCRIPTION	DATE (Y/M/D)	*	**

INITIALS: * DESIGNED ** APPROVED

REVISION REGISTER

No	REVISION DESCRIPTION	DATE (Y/M/D)	*	**

INITIALS: * DESIGNED ** APPROVED

REVISION REGISTER

No

REFERENCE DRAWINGS

PROFESSIONAL SEAL

SNC·LAVALIN
Mining & Metallurgy
5500, des Galeries Blvd., bur. 200, Quebec (Quebec), Canada G2K 2E2
Telephone: (418) 621-5500, Fax: (418) 621-8887

PREPARATION	APPROVAL
DESIGNED M-H. PICARD, ING.	PROJECT DISCIPLINE ENGINEER D. LEAHY, ING.
DRAWN E. RODRIGUEZ	PROJECT ENGINEERING MANAGER Y. JALBERT, ING.
CHECKED Y. JALBERT, ING.	CLIENT
DATE 2015-10-01	
SCALE AS SHOWN	

NOT FOR CONSTRUCTION

CLIENT
AGNICO EAGLE

PROJECT
AGNICO EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT

TITLE
CHANNELS AND PONDS
PLAN VIEW, PROFILES AND SECTIONS

PROJECT No	SUBDIVISION	SUBJECT	SERIAL	REV.
627215	1000	4G | DD	0007	00

A1–HOR–FRAME–EN (SI)

LAST SAVE: 2015/12/09 - 9:47am
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NO. DESSIN DRAWING NO. 6108-697-210-001-R0

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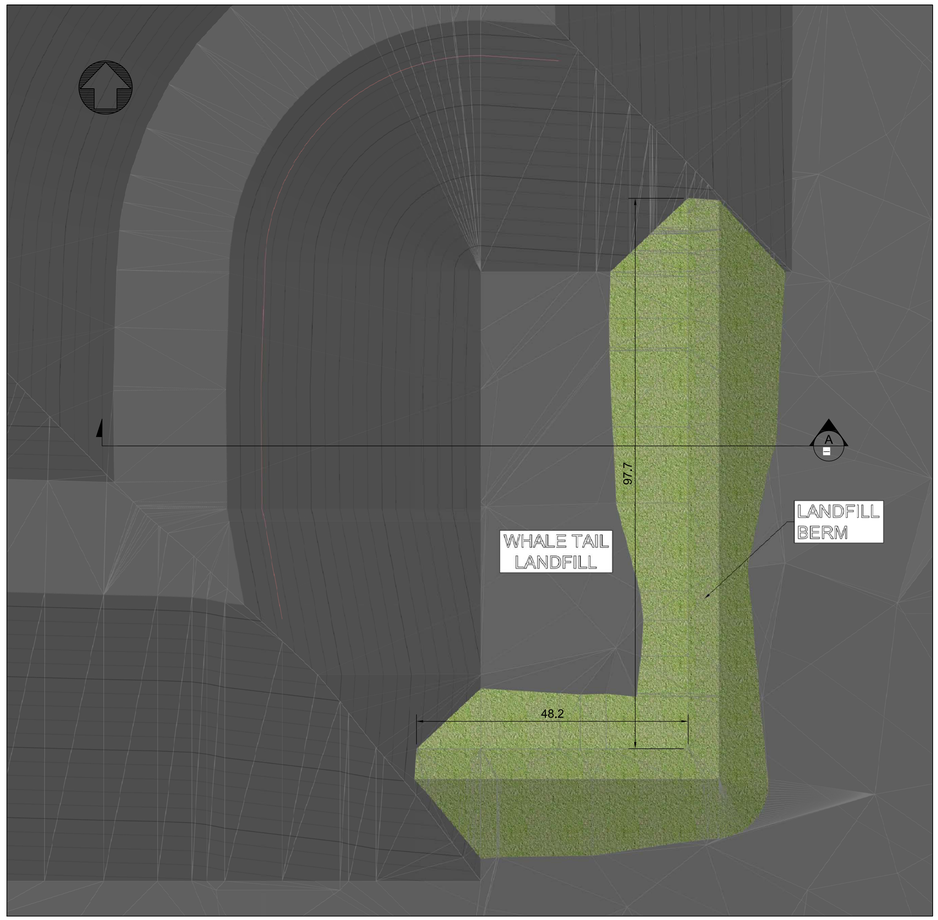
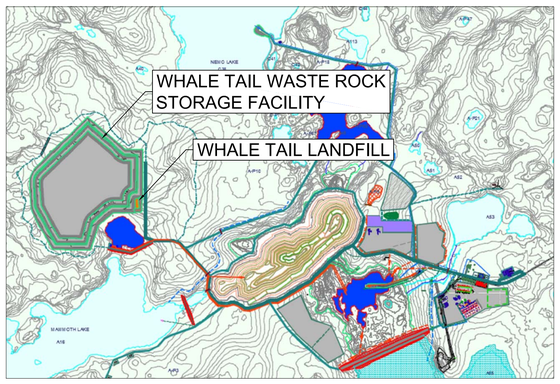
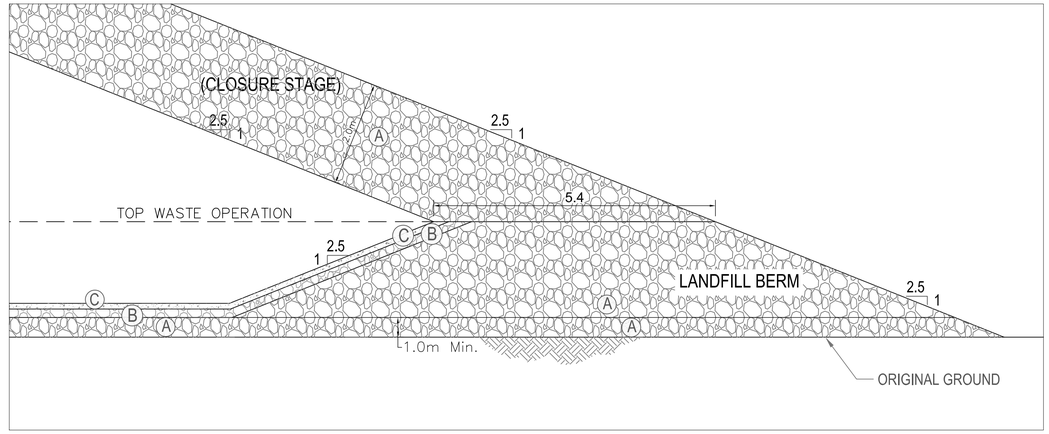


LANDFILL PLAN VIEW
SCL: 1:500



WHALE TAIL LANDFILL LOCATION
NTS / KEY PLAN



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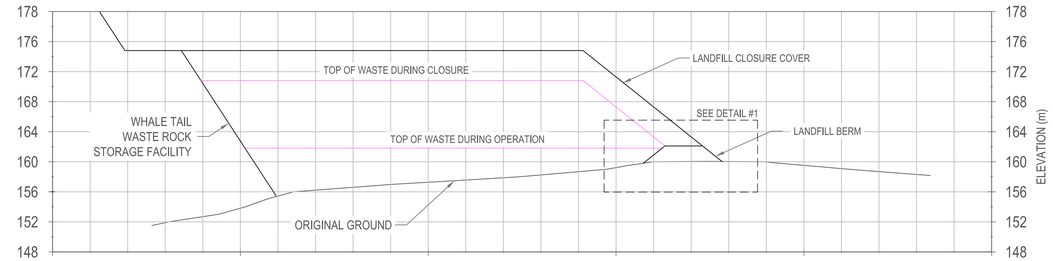

SECTION A
THROUGH LANDFILL (CLOSURE)
NOT TO SCALE

DESCRIPTION:

(A) –PIT RUN : 0–600 MM NON POTENTIALLY ACID GENERATING OR METAL LEACHING WASTE ROCK
(B) –TRANSITION ROCKFILL : 0–150 MM NON POTENTIALLY ACID GENERATING OR METAL LEACHING WASTE ROCK
(C) –LINER BEDDING TILL : 0–20 MM NON POTENTIALLY ACID GENERATING OR METAL LEACHING WASTE ROCK

ISSUED FOR PERMITTING
AGNICO EAGLE DATE : 2016-05-04

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

L'INFORMATION CI-CONTENUE EST LA PROPRIÉTÉ DE AGNICO-EAGLE LTÉE ET DOIT ÊTRE RETOURNÉE SUR DEMANDE. SANS AUTORISATION ÉCRITE PRÉALABLE, TOUTE TRANSMISSION DE COPIE(S) À AUTRUI ET TOUTE UTILISATION AUTRE QUE CELLE POUR LAQUELLE L'INFORMATION EST PRÊTÉE SONT INTERDITES. (C) AGNICO-EAGLE LTÉE

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TITRE / TITLE	# DWG
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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2016-05-04	ISSUED FOR PERMITTING	J.C.	S.O.	

REVISIONS

Golder Associates

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT
WHALE TAIL LANDFILL
PLAN VIEW, SECTION & DETAIL
WHALE TAIL LANDFILL ARRANGEMENT
STAGE DESIGN

DESSINÉ PAR DRAWN BY	J.CRETE	DATE 2016-01-27
VÉRIFIÉ PAR CHECKED BY	F.PETRUCCI	2016-01-27
APPROUVÉ PAR APPROVED BY	S.OUELLET	2016-05-05
ÉCHELLE SCALE	N/A	DATE 2016-01-26

NO. DESSIN DRAWING NO. 6108-697-210-001

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
6108	0	1 / 1

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NO. DESSIN
DRAWING NO. 6108-403-210-001_R0

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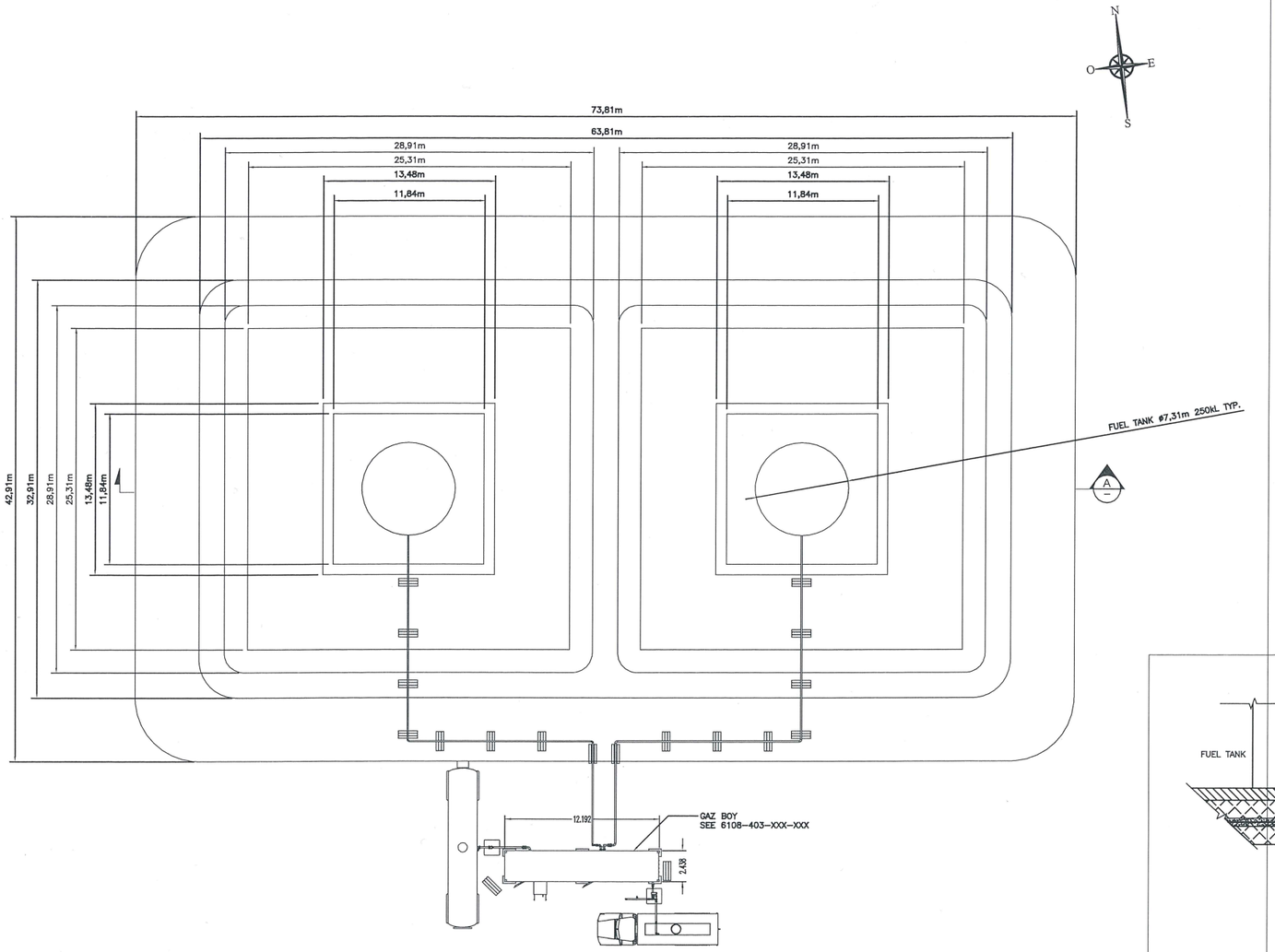
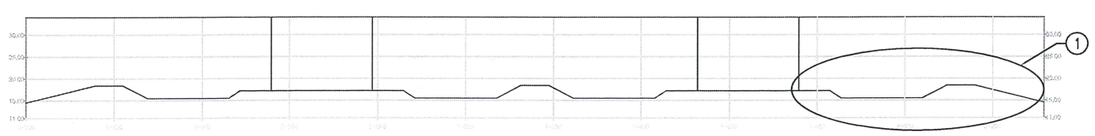
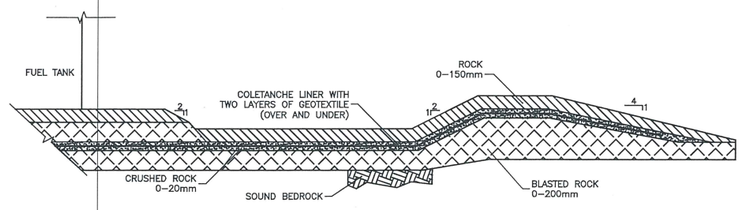


FUEL TANK FARM
SCL.: 1:200
2 x 250,000L FUEL TANK
PLAN VIEW



COUPE A
SCL.: 1:200
CONTAINMENT DIKE ELEVATION



DETAIL 1
SCL.: 1:75
CONTAINEMENT DIKE COMPOSITION

REGISTERED PROFESSIONAL ENGINEER
E. LAVOIE
LICENSEE
NT/NU
2016-05-06
R.1

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 2016-05-06

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
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0	2015/07/09	FOR INFORMATION	KPM	DL	

REVISIONS

AMARUQ PROJECT

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
AMARUQ MINE PROJECT
403 – FUEL SYSTEM AND OIL STORAGE
210 GENERAL ARRANGEMENT
2 x 250kL FUEL TANK

DESSINÉ PAR / DRAWN BY	KEVEN PLANTE-MARQUIS	DATE 2015/07/09
VÉRIFIÉ PAR / CHECKED BY	DANY LAFLAMME	2016/05/06
APPROUVÉ PAR / APPROVED BY	ÉRIC LAVOIE	2016/05/06
ÉCHELLE / SCALE	AS SHOWN	DATE 2015/07/09

NO. DESSIN / DRAWING NO.
6108-403-210-001

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6108	1	1 / 1

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NO. DESSIN
DRAWING NO. 6108-693-210-001_R0

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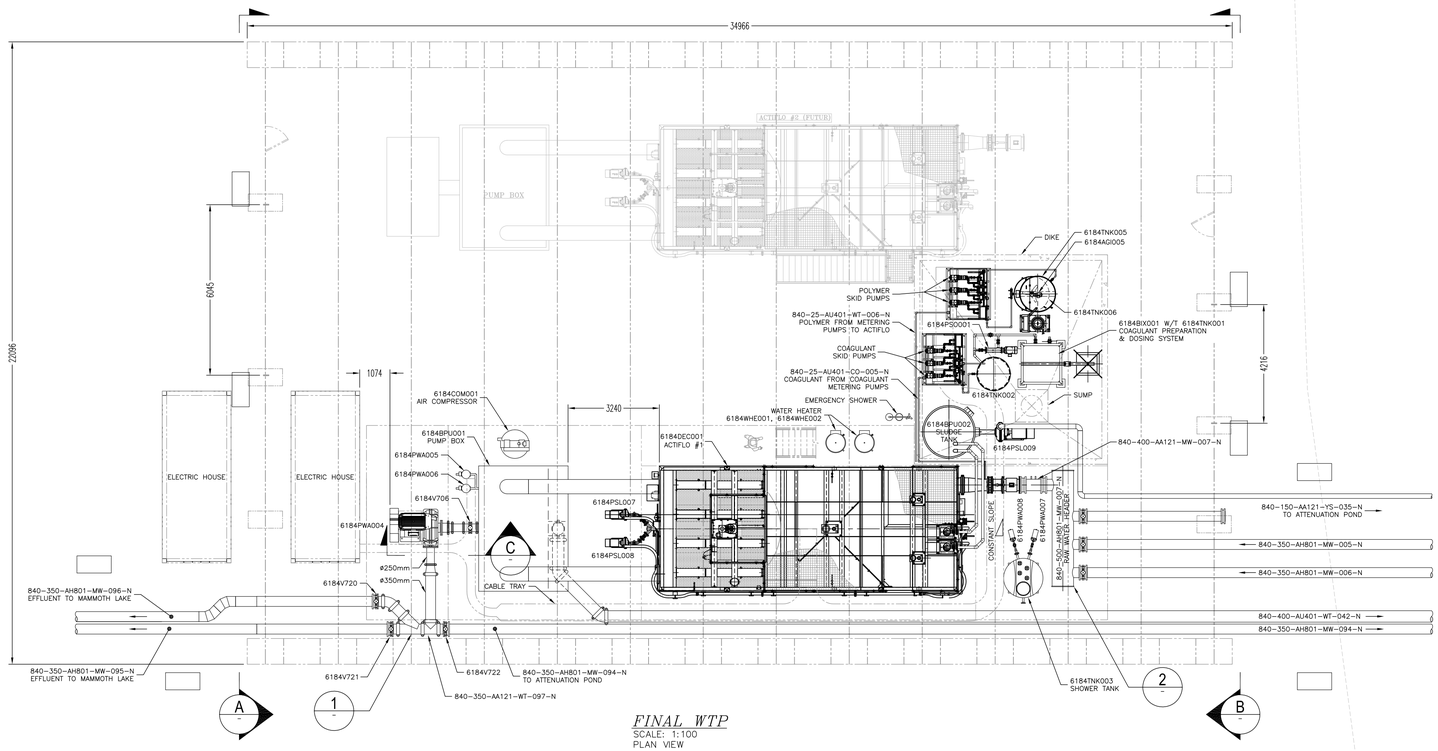
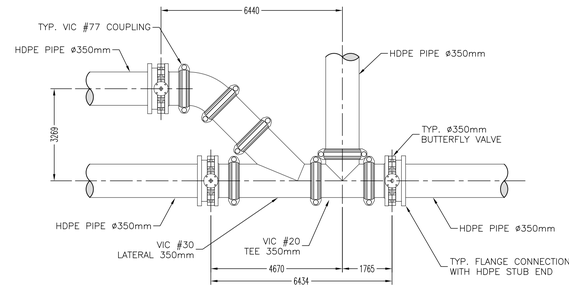
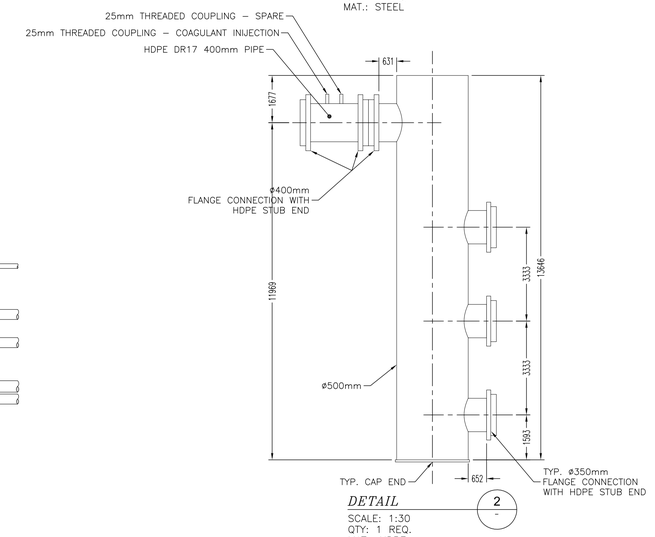


FINAL WTP
SCALE: 1:100
PLAN VIEW



DETAIL 1
SCALE: 1:30
QTY: 1 REQ.
MAT.: STEEL



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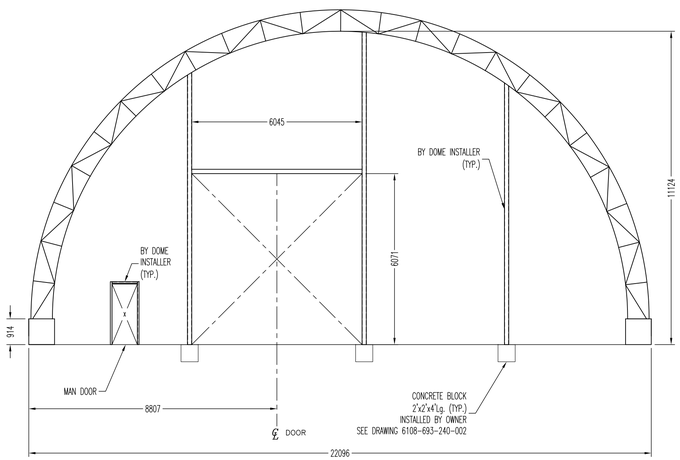
MAT.: HDPE



SECTION A
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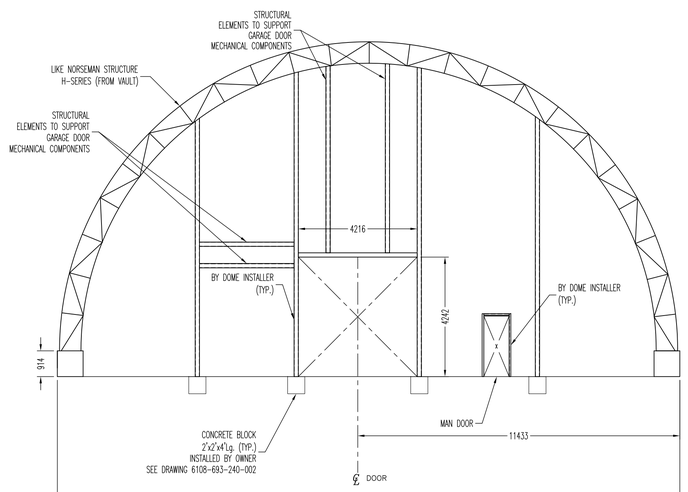

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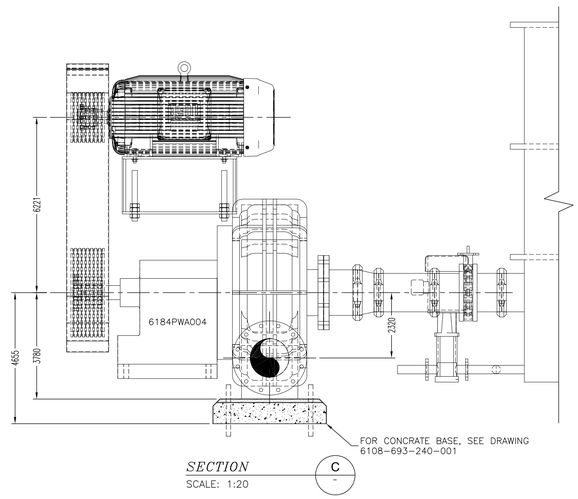
SCALE: 1:100



SECTION C
SCALE: 1:20

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

CONCEPTUAL DESIGN
AGNICO EAGLE DATE : 2016-05-04

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TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2015/07/20	FOR INFORMATION	KPM	DL	DL

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT
WATER TREATMENT PLANT
210 – GENERAL ARRANGEMENT
VIEW, SECTION AND DETAIL
CONCEPTUAL DESIGN

DESSINÉ PAR / DRAWN BY	KEVEN PLANTE-MARQUIS	DATE 2015/07/20
VERIFIÉ PAR / CHECKED BY	DANY LAFLAMME	2015/07/20
APPROUVÉ PAR / APPROVED BY	DANY LAFLAMME	2015/07/20
ÉCHELLE / SCALE	INDICATED	DATE 2015/07/20

NO. DESSIN / DRAWING NO. 6108-693-210-001

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6108	0	1 / 1

AE-CART-ARCH D

FILE NO.

NO. DESSIN
DRAWING NO. 6108-693-210-002_R0

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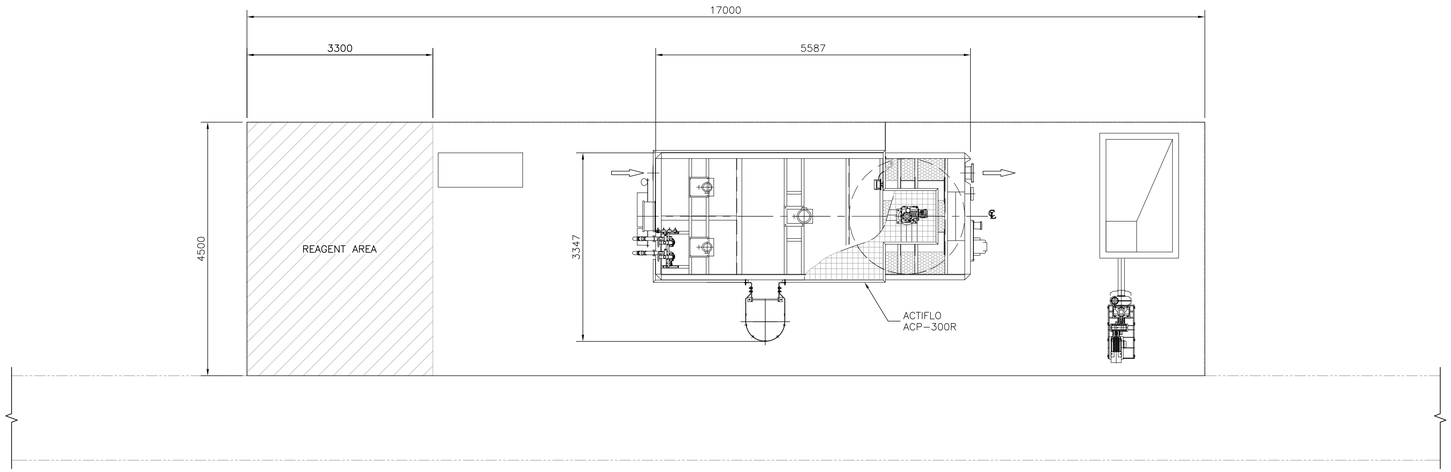
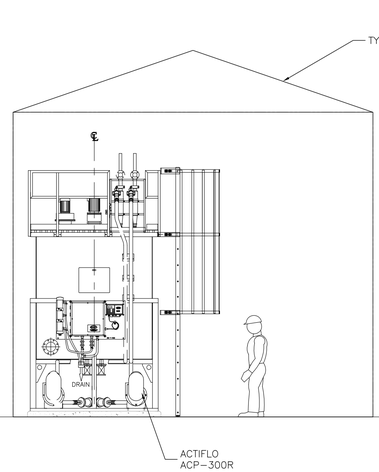
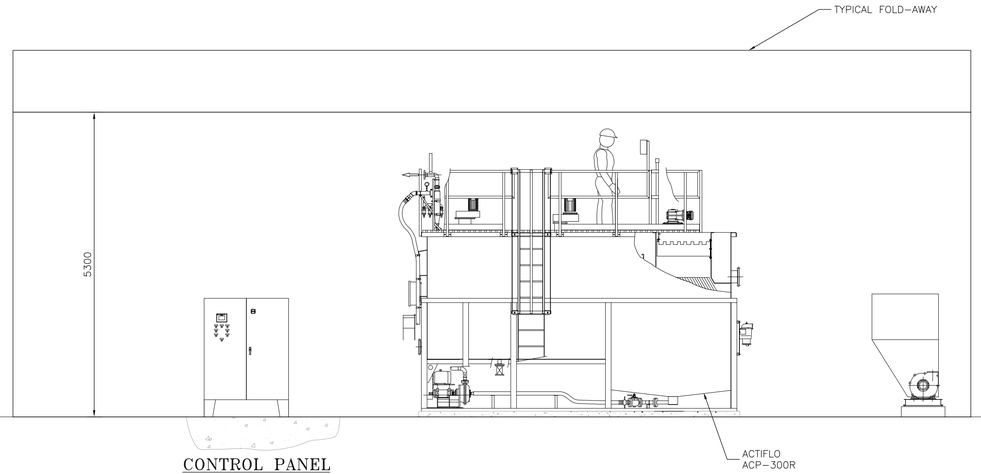


PLAN VIEW

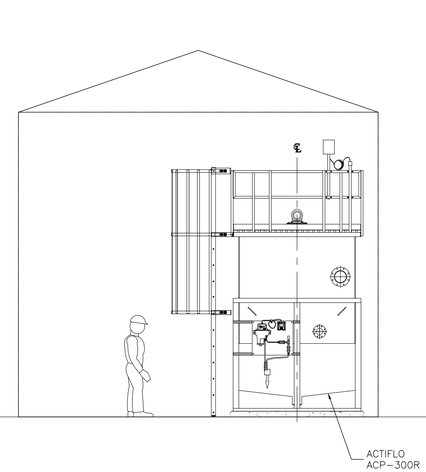


LEFT SIDE VIEW



CONTROL PANEL

ELEVATION



RIGHT SIDE VIEW

PLAN CLÉ
KEY PLAN

BBA

5287063-100650-45-D20-0001-R00

NOTES GÉNÉRALES / GENERAL NOTES

CONCEPTUAL DESIGN
AGNICO EAGLE DATE : 2016-05-04

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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2014-08-29	FINAL ISSUE	SL	EF	
A	2014-07-24	FOR COMMENTS	E.F.	E.F.	

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT
CONSTRUCTION WATER TREATMENT PLANT
PLAN & ELEVATION
CONCEPTUAL DESIGN
WTP ACTIFLO

DESSINÉ PAR / DRAWN BY	S. SCHULTZ	DATE 2014-07-18
VÉRIFIÉ PAR / CHECKED BY	E. FORGET, Eng.	2014-07-22
APPROUVÉ PAR / APPROVED BY	E. FORGET, Eng.	2014-07-22

ÉCHELLE / SCALE	DATE
1:50	2014-07-18

NO. DESSIN / DRAWING NO. 6108-693-210-002

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6108	0	1 / 1

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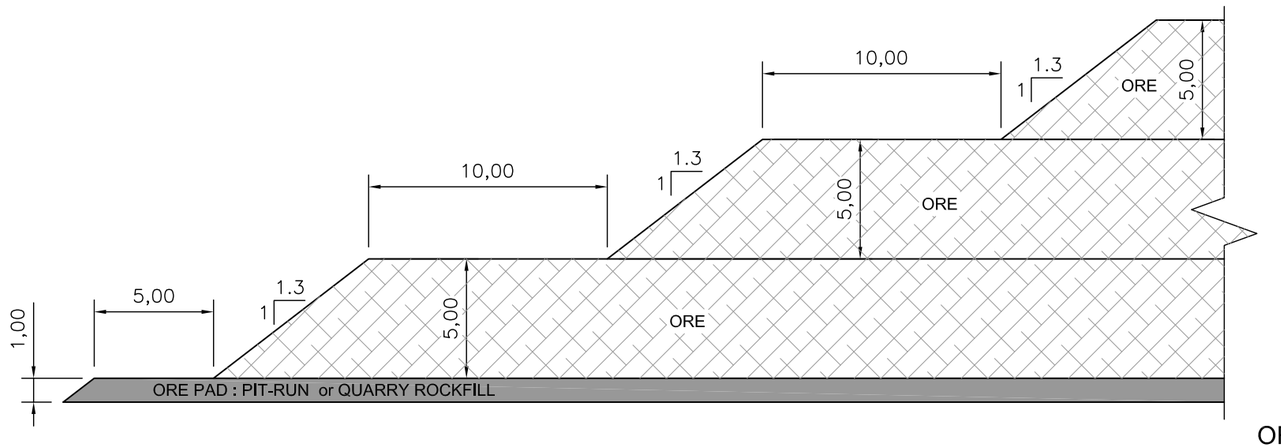

TYPICAL SECTION
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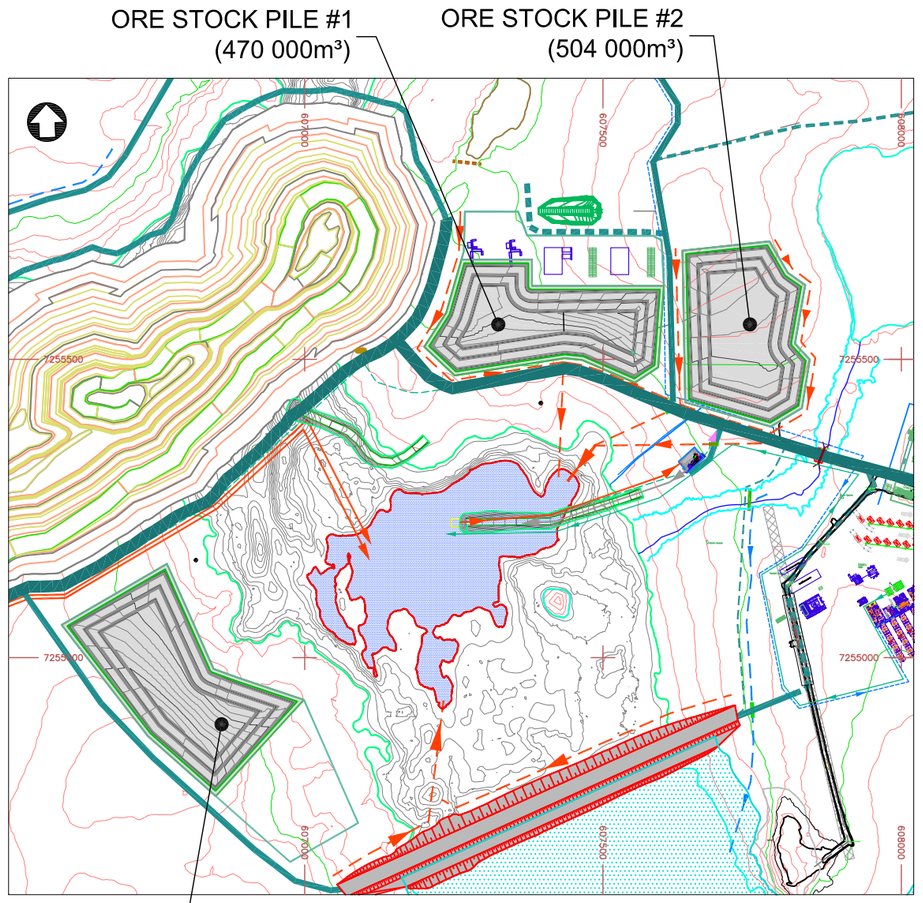

PLAN VIEW
SCL 1:10000

ISSUED FOR PERMITTING
AGNICO EAGLE
DATE : 2016-05-03

_	_				
_	_				
_	_				
_	_				
_	_	0	ISSUED FOR PERMITTING	2016-05-03	J.C.
TITRE / TITLE	# DWG	REV	DESCRIPTION	DATE	PAR BY
DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS		REVISIONS			

AGNICO EAGLE

Golder Associates

DESSINÉ PAR DRAWN BY	J.CRETE	DATE 2016-05-02
VÉRIFIÉ PAR CHECKED BY	F.PETRUCCI	2016-05-03
APPROUVÉ PAR APPROVED BY	S. OUELLET	2016-05-03
No. PROJET PROJECT No.	6108	
DATE	2016-05-02	

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TITRE / TITLE
AGNICO–EAGLE – MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT
ORE STOCK PILE #1, #2, #3
ORE PAD MAXIMUM CAPACITY
PLAN VIEW & TYPICAL SECTION

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APPENDIX 1-D

Scoping Level Open Pit Slope Design

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT



6108-MEM-001_R1 UPDATED
SCOPING LEVEL OPEN PIT SLOPE DESIGN (REVISED)

PREPARED FOR:

Agnico Eagle Mines Ltd. Meadowbank Division
Baker Lake, Nunavut, X0C 0A0

PREPARED BY:

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NB101-622/3-3
Rev 0
April 29, 2016

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CONSULTING
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FS 64925
EMS 550121
OHS 550122

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

6108-MEM-001_R1 UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN (REVISED)
NB101-622/3-3

Rev	Description	Date
0	Issued in Final	April 29, 2016

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EXECUTIVE SUMMARY

INTRODUCTION

Agnico Eagle Mines Ltd. Meadowbank Division (AEM) is currently evaluating the potential for mining the satellite Whale Tail deposit using open pit mining methods. The Whale Tail Pit Study Area is located approximately 50 km northwest from AEM's Meadowbank Mine and 160 northwest of Baker Lake in Nunavut, Canada.

In early 2015, Knight Piésold Ltd. (KP) provided conceptual open pit slope recommendations for the Whale Tail Pit. Shortly thereafter, KP was engaged by AEM to complete the geomechanical and hydrogeological work needed to support pre-feasibility level open pit slope design and to provide updated scoping level open pit slope recommendations.

The work completed included:

- A review of all available geological, structural and hydrogeological information
- A geomechanical and hydrogeological site investigation program
- Domain definition and characterization of the rock mass quality and discontinuity orientations in the vicinity of the Whale Tail Pit
- Slope stability analyses
- The development of slope recommendations for the final pit walls

This report summarizes the completed work and presents the updated scoping level final pit slope recommendations for the Whale Tail Pit.

ROCK MASS CHARACTERIZATION

The data collected from the geomechanical site investigations and laboratory strength testing was used to define geomechanical domains on the basis of both lithology and spatial variation in the discontinuity orientation data. A summary of the rock mass characteristics for each domain is included below:

- **Diorite (I2) -** The Diorite is characterized by an average UCS of 125 MPa. A m_i value of 20 was assigned based on published values (Hoek et. al., 2002). It is classified as GOOD quality rock with a RMR_{89} design value of 70.
- **Greywacke (S3, S6 & V3) -** This domain consists of the greywacke, mafic volcanics, and mudstone lithologies. It is characterized by an average UCS value of 65 MPa and a m_i of 28. It is classified as GOOD quality rock with a RMR_{89} design value of 65.
- **Chert (S10, S10E, S10mSi & S10sSi) -** The Chert domain consists of the chert, graphitic chert, and moderately and significantly silica flooded chert lithologies. It is characterized by an average UCS of 135 MPa. A m_i value of 20 was assigned based on published values (Hoek et. al., 2002). It is classified as GOOD quality rock with a RMR_{89} design value of 65.
- **Altered Ultramafics (V3F & V4Amph) -**The Altered Ultramafics is characterized by an average UCS of 90 MPa and a m_i of 4. It is classified as FAIR to GOOD quality rock with a RMR_{89} design value of 65.

- **Ultramafics-North Limb (V4a) & Ultramafics-South Limb (V3-V4 & V4bio) -** This domain is characterized by variable and locally reduced rock mass quality. It is characterized by an average UCS value of 50 MPa and a m_i of 10. The North Limb is classified as FAIR to GOOD quality rock with a RMR_{89} design value of 55. The South Limb is classified as POOR to GOOD quality rock with a RMR_{89} design value of 50.

STABILITY ANALYSES AND PIT SLOPE DESIGN

Based on the location and characteristics of the geomechanical domains, and the open pit design provided by AEM, eight (8) design sectors were identified. Slope stability analyses were undertaken on each sector to evaluate achievable slope configurations. These analyses included Kinematic and Limit-Equilibrium analyses. The results from these analyses provide guidance on achievable bench and inter-ramp geometries.

A slope design summary is included below:

- Design BFA: 65 to 75°
- Design Bench Width: 10 to 14.4 m
- Bench Height: 21 m
- IRA: 41 to 53° (for heights up to 100 m)

The maximum inter-ramp height is set to 100 m, after which a ramp or geotechnical step-out should be included to limit the slope height and provide greater operational flexibility. In general, the potential for planar failures is expected to limit the achievable slope geometry in the East-North, Central-North, West-North and Central-South sectors.

The provided pit slope design recommendations are based upon the geological, structural, geomechanical and hydrogeological data. The completed stability analyses and a review of practices at other operations suggest that the recommended geometries are reasonable and appropriate. To achieve these slope angles, the design assumes that controlled blasting and geotechnical monitoring will be undertaken, along with an on-going commitment to geomechanical data collection and analysis. Maintaining flexibility in the mine plan will be important to accommodate any slope stability issues.

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FIGURES

APPENDICES

The following appendices were previously issued with the KP Report NB101-622/3-2 Rev 1 entitled “6108-MEM-001_R0 Updated Scoping Level Open Pit Slope Design”, dated December 11, 2015.

ABBREVIATIONS

AEM ..... Agnico-Eagle Mines Ltd.: Meadowbank Division
AMEC ..... AMEC Foster Wheeler PLC
BFA ..... bench face angle
CFF ..... cumulative frequency of failures
D ..... Disturbance Factor
DS ..... direct shear
FoS ..... Factor of Safety
IRA ..... inter-ramp angle
KP ..... Knight Piésold Ltd.
L-E ..... limit-equilibrium
NGI-Q ..... Norwegian Geological Institute Tunneling Index
OSA ..... overall slope angle
RMR_{89} ..... Rock Mass Rating (1989)
RQD ..... Rock Quality Designation
the Project ..... Whale Tail Pit
UCS ..... uniaxial compressive strength

1 – INTRODUCTION

1.1 PROJECT DESCRIPTION

Agnico Eagle Mines Ltd. Meadowbank Division (AEM) is developing the Whale Tail Pit (the Project) in Nunavut, Canada. The Project is located 50 km northwest of AEM's Meadowbank Mine and 160 km northwest of Baker Lake. AEM is currently evaluating the potential for mining the satellite Whale Tail deposit using open pit mining methods. Figure 1.1 shows the location of the Project.

1.2 SCOPE OF WORK

In early 2015, Knight Piésold Ltd. (KP) provided conceptual open pit slope recommendations for the Whale Tail Pit based on the results of a desktop study. Shortly thereafter, KP was engaged by AEM to complete the geomechanical and hydrogeological work needed to support pre-feasibility level open pit slope design and to provide an updated scoping level open pit slope design.

The work completed included:

- A review of all available geological, structural and hydrogeological information
- A geomechanical and hydrogeological site investigation program
- Domain definition and characterization of the rock mass quality and discontinuity orientations in the vicinity of the Whale Tail Pit
- Slope stability analyses
- The development of slope recommendations for the final pit walls

1.3 AVAILABLE INFORMATION

Knight Piésold has completed the following reports and letters relevant to this study:

- Geomechanical and Hydrogeological Site Investigation Summary (KP, 2015a)
- Open Pit Groundwater Inflow Assessment (KP, 2015b)
- Permafrost and Talik Characterization (KP, 2015c)

The information provided by others for this study included:

- 3D lithological model (AEM, February 2015; updated July 2015 and September 2015)
- 3D structural model (AEM, August 2015; updated September 2015)
- Topography and bathymetry of Whale Tail Lake (AEM, February 2015; updated September 2015)
- Exploration drillhole database including Rock Quality Designation (RQD) (AEM, February 2015)
- Open pit mine design (AEM, February 2015; updated March 2015 and September 2015)

LEGEND:

- COMMUNITY
- MINE SITE LOCATION

NOTES:

1. BASE MAP: © ESRI DATA AND MAPS (ONLINE) SERVICE LAYERS (2015). REDLANDS, CA: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE. ALL RIGHTS RESERVED.
2. COORDINATE GRID IS IN METRES. COORDINATE SYSTEM: NAD 1983 UTM ZONE 14N.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	29APR'16	ISSUED WITH REPORT	MJR	AS	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

PROJECT LOCATION MAP

Knight Piésold CONSULTING

P/A NO. NB101-622/3

REF NO. 3

FIGURE 1.1

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2 – BACKGROUND

2.1 GENERAL

Background information on the deposit geology and the completed site investigation activities is summarised in this section. The hydrogeology and permafrost conditions were discussed in detail in KP, 2015c.

2.2 GEOLOGY

The geological setting of the ore body is important for open pit slope design. Background information on the main lithologies, alteration and large-scale features is provided below. Unless otherwise noted, the information is summarised from data provided by AEM (2015a).

2.2.1 Main Lithologies

The main lithologies encountered at the Project are summarized below:

- **Overburden -** The overburden layer in the vicinity of the pit is generally expected to be thin, with observed thicknesses typically less than 10 m.
- **Greywacke (S3) -** The Greywacke is the most common lithology at the Project. This unit hosts the deposit and is also internal to it. The Greywacke is fine to medium grained and can be altered and/or deformed in the vicinity of the mineralized zones.
- **Mafic Volcanics (V3) -** The Mafic Volcanics are present along the southern limit of the deposit and primarily consist of basalt. This package has been heavily folded and is characterized by a schistose or chaotic texture. Biotite and chlorite alteration are common within the Mafic Volcanics. The Mafic Volcanics are a relatively minor unit within the Whale Tail Pit Study Area.
- **Ultramafics (V4A & V3-V4) -** The ultramafic volcanic unit, or Komatiite, comprises a North and a South limb. These limbs bound the northern and southern limits of the deposit. The Ultramafics are commonly altered to a chlorite-talc-carbonate schist (soapstone) with chaotic carbonate veining. The Ultramafics are characterised by variable rock mass quality and can be faulted. The Ultramafics can be locally altered with biotite (V4Bio unit).
- **Altered Ultramafics (V3F & V4Amph) -** The Ultramafics can be locally altered and deformed, notably along the contact with the sedimentary units. The Altered Ultramafics are more competent and have more consistent rock mass quality than the Komatiite. The unit is often mineralized with disseminated sulphides and is one of the primary mineralized zones identified within the deposit.
- **Chert (S10) -** A sedimentary unit consisting of interbedded bands of Chert, sediments and thin beds of iron formation. The Chert is associated with many of the mineralized zones identified within the deposit. The Chert can be flooded with silica (S10mSi and S10sSi units) and has been locally heavily folded.
- **Graphitic Chert (S10E) -** In some areas, the Chert has been interlayered with graphitic mudstone, resulting in a unit known as the Graphitic Chert. The Graphitic Chert has been intensely deformed causing it to appear chaotic and brecciated.

- **Mudstone (S6) -** Well-banded fine grained sedimentary rock. This unit is often transitional with the Chert and Graphitic Chert.
- **Diorite (I2) -** The Diorite is an intrusive unit located to the south of the Whale Tail deposit. The diorite is unmineralized.

A typical cross section of the deposit is shown on Figure 2.1.

2.2.2 Alteration

Alteration associated with the hydrothermal fluids is expected to have a significant local impact on the rock mass characteristics and performance. Field observations suggest that the Ultramafics are the most influenced and experience the most variability in rock mass quality as a result of alteration.

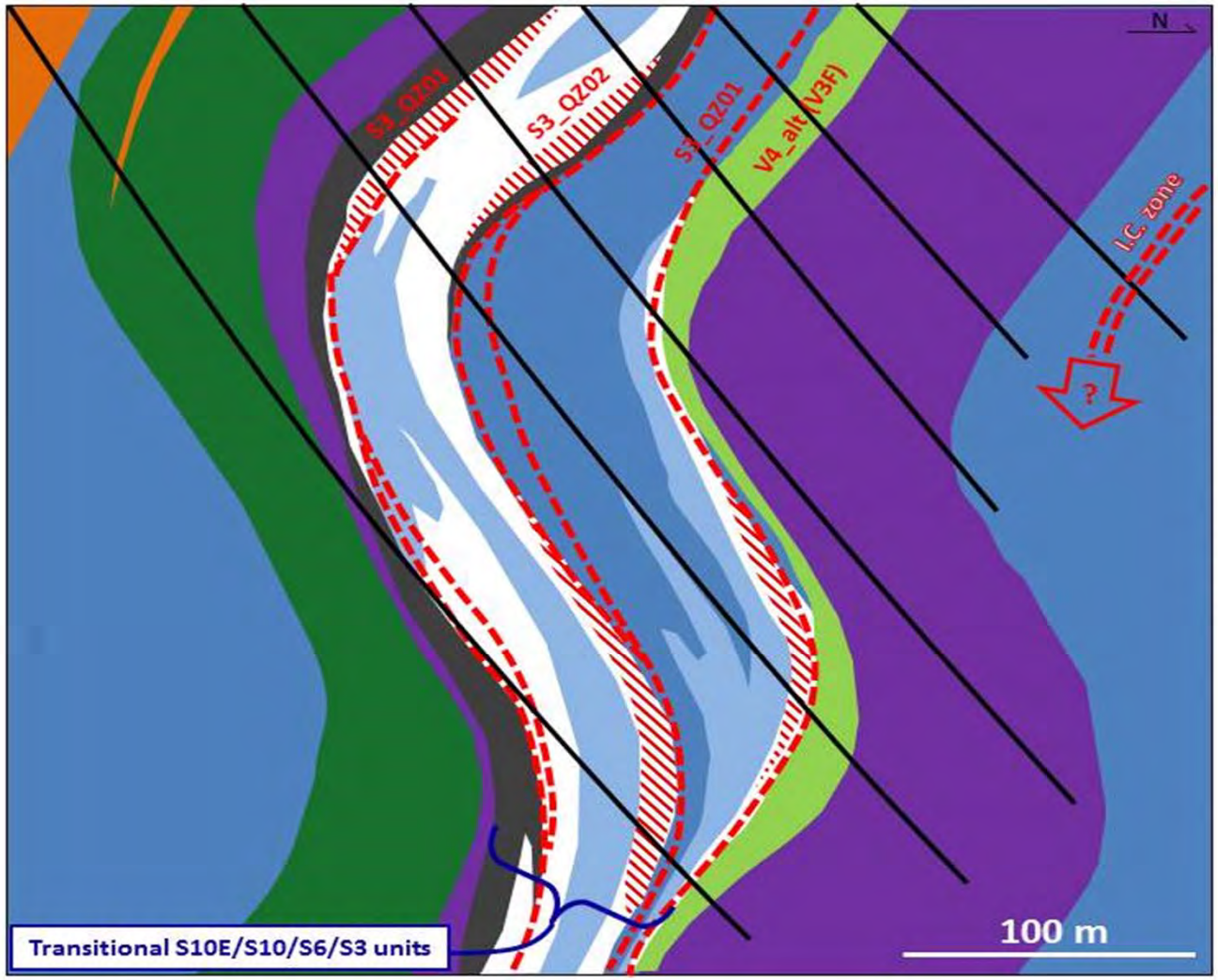
The main types of alteration that have been observed at the Project are as follows:

- **Talc -** Characteristic of the Ultramafics. Increasing intensity of the talcose alteration may correspond to a reduction in rock mass quality.
- **Biotite -** This type of alteration occasionally occurs in the Ultramafics, particularly in the southern limb. The biotite alteration generally results in a local improvement in rock mass quality.
- **Amphibolite -** This type of alteration is common in the Altered Ultramafics.
- **Chlorite -** Chloritization is present to a great or lesser extent in most of the lithologies, but is most common in the Greywacke and Ultramafics. Chlorite typically results in a reduction in rock mass quality.
- **Carbonate -** Carbonate veining is common within the deposit rock masses and often occurs as a chaotic stockwork of veinlets.
- **Graphite -** Characteristic of the Graphitic Chert. The graphitic alteration is typically of relatively low intensity and only locally present in fracture planes.
- **Silica -** Silica flooding events have locally improved the rock mass quality of the Chert and Greywacke units. Silification also occurs in the Ultramafics and Altered Utlramafics along the margins of the quartz veins.

2.2.3 Mineralization

The gold mineralization at the Project is associated with a system of quartz veins. Four main mineralized zones have been identified and are described below.

- Three of the mineralized zones are associated with quartz veining and silica flooding within the Chert and other sediments internal to the deposit. These zones are identified as S3_QZ01, 02 and 03 and are generally located within the southern half of the proposed pit. The mineralization is characterized by arsenopyrite.
- One of the zones is associated with the Altered Ultramafics along the contact between the Ultramafics and the sediment package internal to the deposit. This zone is generally located within the northern half of the proposed pit and is thought to be associated with a regional structure. Replacement mineralization has occurred within the Altered Ultramafics and is characterized by pyrrhotite.



- Diorite (I2)
- Mafic volcanic/Intrusive (V3/I3)
- Graphitic Chert (S10E)
- Chert (S10)
- Mudstone (S6)
- Greywacke (S3)
- Ultramafic Volcanic (V4)
- Altered and mineralized ultramafic (V4_alt or V3F)
- Quartz Vein
- Chert silica flooded (S10 Si+)

NOTES:
1. CROSS SECTION PROVIDED BY AEM (MARCH 5, 2015).

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29APR'16	ISSUED WITH REPORT	ATJ	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

TYPICAL DEPOSIT CROSS SECTION

Knight Piésold CONSULTING

P/A NO. NB101-622/3

REF. NO. 3

FIGURE 2.1

REV 0

2.2.4 Large-Scale Structures

Evidence of large-scale structures has been observed at the Project (AEM, 2014 and 2015b). The large-scale structures have been identified based on the results of geophysical surveys, exploration drilling, surface mapping and topographic interpretation completed by AEM. The dominant large scale structural orientations identified at the deposit are as follows:

- **ENE-WSW -** The contacts between the lithologies, and the foliation within the lithologies, are generally along this structural orientation. It generally is moderately to steeply dipping to the south-southeast, but rotates to dip to the north-northwest near the base of the proposed pit.
- **NE-SW -** A series of diffuse ductile structures that offset the lithologies and mineralization. The structures are present at a regional scale and are steeply to moderately dipping to the south. The quartz veins are parallel to these structures and likely formed along them. This structural orientation is predominantly within the northeastern portion of the deposit.

The structural analysis completed to date has focussed on identifying brittle structures rather than more ductile structures. The primary brittle structures identified at the Project to date are as follows:

- **RQD Corridor -** Continuous zones of low RQD have been identified from exploration drilling and are thought to represent a plane of brittle deformation. The faults of the RQD Corridor strike southwest-northeast and dip moderately to the southeast. The quartz veins are parallel to these structures and may have formed along them.
- **Northwest Fault -** A brittle fault that expresses on surface along the eastern edge of Whale Tail Lake. The Northwest fault strikes southeast-northwest and dips shallowly to the northeast.
- **GP Fault -** A brittle fault that intersects the Northwest fault. The GP fault strikes southwest-northeast and dips steeply to the southeast.
- **Flat Faults -** A series of three, flat-lying faults that lie over top one-another. The Flat Faults dip at a shallow angle to the southeast and strike southwest-northeast.

The faults are typically less than 1 m thick (though some may be more than 10 m thick) and consist of zones of broken rock and fault gouge.

2.3 SITE INVESTIGATION PROGRAM

A geomechanical and hydrogeological site investigation program was completed between June and September 2015 at the Project in order to support the permitting and mine design process. The program was intended to improve the understanding and characterization of the rock masses at the Project. The site investigations included 11 geomechanical drillholes, 3,240 m of oriented core drilling and 3,440 m of detailed geomechanical logging. Multi-point thermistors, vibrating wire piezometers and an electrical conductivity logger were also installed in select drillholes. Packer hydraulic conductivity testing was completed within areas of potential unfrozen ground. The drillholes associated with the geomechanical and hydrogeological site investigations are shown on Figure 2.2. Additional details on the 2015 site investigations are provided in KP (2015a).

606 000 E
606 200 E
606 400 E
606 600 E
606 800 E
607 000 E
607 200 E
7 255 800 N
7 255 600 N
7 255 400 N
7 255 200 N
7 255 000 N

AMQ15-452
AMQ15-316
AMQ15-306
AMQ15-499
AMQ15-326
AMQ15-326A
AMQ15-332
AMQ15-271
AMQ15-481
AMQ15-337
AMQ15-307A
AMQ15-324
AMQ15-288
AMQ15-294
AMQ15-349
AMQ15-349A
AMQ15-421
WHALE TAIL LAKE
WHALE TAIL PIT OUTLINE

LEGEND:

- BATHYMETRY (SHALLOW / DEEP)
- GEOMECHANICAL DRILLHOLE FOR OPEN PIT
- GEOMECHANICAL DRILLHOLE FOR UNDERGROUND
- EXPLORATION DRILLHOLE
- EXPLORATION DRILLHOLE WITH GEOMECHANICAL LOGGING
- INSTRUMENTATION INSTALLED IN DRILLHOLE
- 30 m BUFFER FROM WHALE TAIL LAKE
- ULTIMATE PIT BOUNDARY

NOTES:

1. COORDINATE GRID IS UTM NAD83 ZONE 14N.
2. PIT DESIGN, TOPOGRAPHY AND BATHYMETRY PROVIDED BY AEM (SEPTEMBER, 2015).
3. CONTOUR INTERVAL IS 1 METRE.
4. DIMENSIONS AND ELEVATIONS ARE IN METRES, UNLESS NOTED OTHERWISE.

SCALE A: 40 20 0 40 80 120 160 200 m

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AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

GEOMECHANICAL AND HYDROGEOLOGICAL SITE INVESTIGATION PLAN

Knight Piésold CONSULTING

P/A NO.	REF NO.
NB101-622/3	3

FIGURE 2.2 REV 0

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XREF FILE(S): X_C_TOPO_WATR X_C_SR---2015-07-28 X_C_SR---2015-07-29_GW X_C_SR---2015-08-29_UG IMAGE FILE(S):

3 – ROCK MASS CHARACTERISTICS

3.1 GENERAL

Rock mass characteristics are divided between intact material properties and the characteristics of the discontinuities. This section describes the work completed to characterize the geomechanical properties of the domains in the vicinity of the proposed open pit.

3.2 INTACT ROCK PROPERTIES

The following intact rock properties have been characterized for each rock type:

- Unconfined Compressive Strength (UCS)
- Triaxial Compressive Strength
- Brazilian Tensile Strength
- Unit weight
- Young's Modulus
- Poisson's Ratio

The intact rock properties were obtained from laboratory strength testing completed during the 2015 site investigation program. The laboratory testing was completed by the Hamilton office of AMEC Foster Wheeler PLC (AMEC) and is discussed in further detail in KP (2015a). The results of the UCS and Triaxial compressive strength testing are summarised by rock type in Appendix A1.

3.3 ROCK MASS QUALITY

The rock mass quality of each encountered rock mass has been characterized using the Rock Mass Quality (RMR_{89}) (Bieniawski, 1989) and NGI-Q rock mass classification systems. The characterization is based upon the detailed geomechanical logging and field UCS estimates completed during the 2015 site investigation program.

The rock mass quality of the Greywacke, Diorite, Chert and Altered Ultramafics domains are typically of GOOD quality (*i.e.,* RMR_{89} values typically ranging from 60 to 80). While the rock mass quality of the Ultramafics in the north and south limb ranges from FAIR to GOOD (*i.e.,* RMR_{89} values typically ranging from 45 to 75). Discontinuities typically have rough to smooth surfaces spaced 60 to 600 mm apart. Most have no infill or a thin infill (commonly carbonate, chlorite or talc), and show slight to no weathering. Aperture typically ranges from <0.1 mm to 1.0 mm.

3.4 DISCONTINUITY ORIENTATIONS

3.4.1 Oriented Core Drillholes

Prior to analysis, the drillhole orientation data collected during the site investigation program were corrected for any significant drillhole deviation (>5°) using the results of the gyroscopic surveys completed by AEM at or near the completion of each drillhole. The drillhole orientation data were filtered to exclude discontinuities from runs with run-on-run consistency in the FAIR (20 to 35°) or POOR (>35°) ranges. In addition, all discontinuities logged as a vein or veinlet, or flagged as possible breaks were removed from the data set based on a review of their impact on the results.

3.4.2 Dominant Discontinuity Orientations

Four main joint sets and one minor set have been identified in the orientation data from the Project.

- **Joint Set A -** A joint set striking southwest-northeast and moderately dipping to the southeast. This is the dominant structural orientation and corresponds to the foliation. The foliation is generally sub-parallel to the large-scale orientation of the lithologies.
- **Joint Set B (& B') -** A joint set striking northeast-southwest and dipping moderately to steeply to the northwest. This is a secondary, dominant structural orientation, but is only observed in drillhole AMQ15-306 and at the base of drillhole AMQ15-349A. In some instances, the dip of the discontinuities varies through vertical, resulting in pole concentrations on both sides of the stereonet (B and B', respectively).
- **Joint Set C -** A flat-lying joint set.
- **Joint Set D (& D') -** A joint set striking southeast-northwest and steeply-dipping. The dip of the discontinuities often varies through the vertical, resulting in pole concentrations on both sides of the stereonet (D and D', respectively). This joint set corresponds to the orientation of the lamprophyre dykes, but it is not well defined in each drillhole due to directional bias in the drilling.
- **Joint Set E -** A minor joint set striking northeast-southwest and moderately dipping to the northwest. This is essentially a minor version of Joint Set B and was only observed in the western end of the deposit.

A review of the drillhole stereonets suggests that the discontinuity orientations are closely related to the large-scale orientation of the lithologies. The small-scale discontinuity orientations were found to vary along the strike and dip of the ore body. After the evaluation of a number of possible alternatives, it was decided to group the discontinuity orientation data into four structural regions:

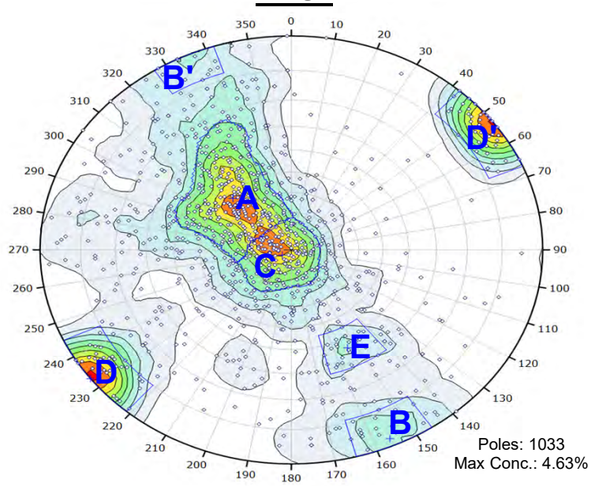
- West Region
- Central-A Region
- Central-B Region
- East Region

The data was grouped by drillhole. The position of each drillhole relative to the current open pit design was also reviewed, and only data from portions of the drillholes in close proximity to the pit and above the base elevation of the pit were included.

Due to observational bias in the orientation data, Joint Set D (& D') was only observed in the Central-A region. However, this joint set is thought to be ubiquitous throughout the deposit and has been added to the stereonets for the other regions. For the East Region, the orientation of Joint Set D was rotated to match the change in the strike of the foliation. Subsequent to the issuing of this report, AEM provided additional data that suggests that the orientation of the lamprophyre dykes to the northeast of the deposit is consist with the orientation of Joint Set D (& D') observed in the Central-A region. As a result, the rotation of Joint Set D for the East Region is no longer considered appropriate. The rotation applied is not expected to meaningfully affect the open pit slope design recommendations and will not be applied to the data in the next level of study. The dominant discontinuity orientations observed within each region are shown on Figure 3.1. All orientation data has been summarized and presented using DIPS (Rocscience Inc., 2012).

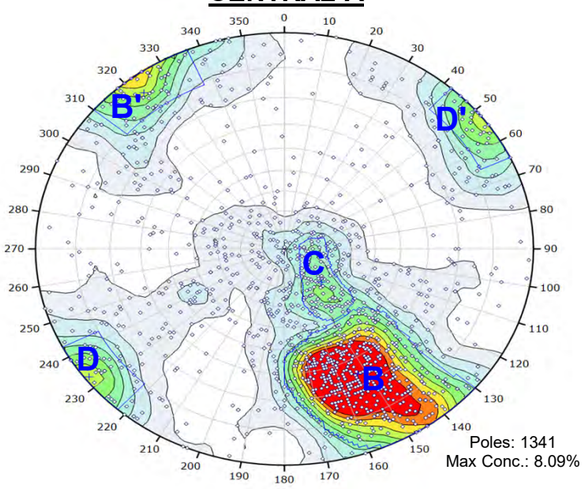
A) ORIENTATION DATA BY REGION

WEST



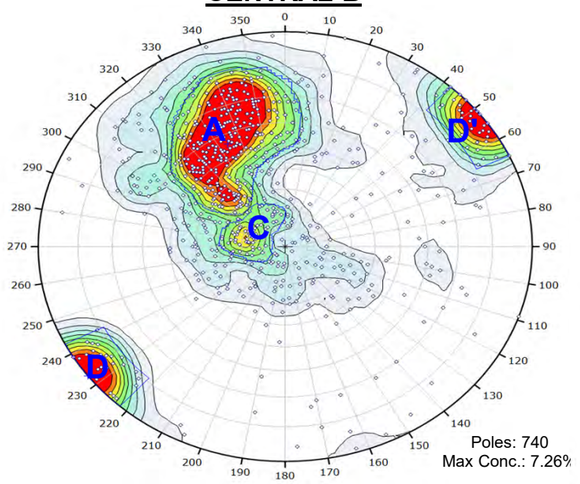
Joint Set	Dip (°)	Dip Direction (°)
A	37	136
B/B'	88	336
C	5	65
D/D'	90	53
E	54	334

CENTRAL-A



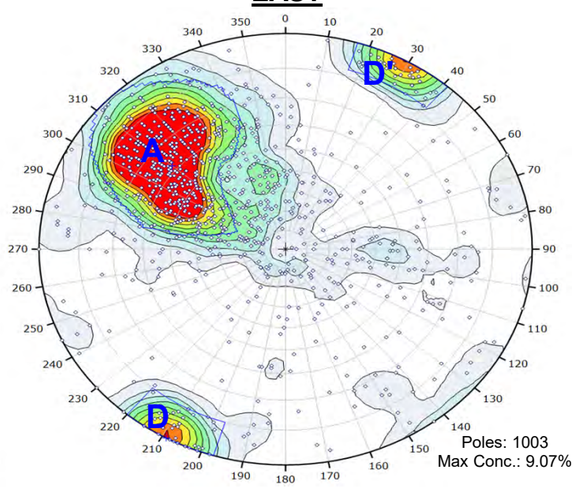
Joint Set	Dip (°)	Dip Direction (°)
B	66	333
B'	85	142
C	24	316
D	89	53

CENTRAL-B



Joint Set	Dip (°)	Dip Direction (°)
A	56	154
C	17	113
D/D'	90	53

EAST

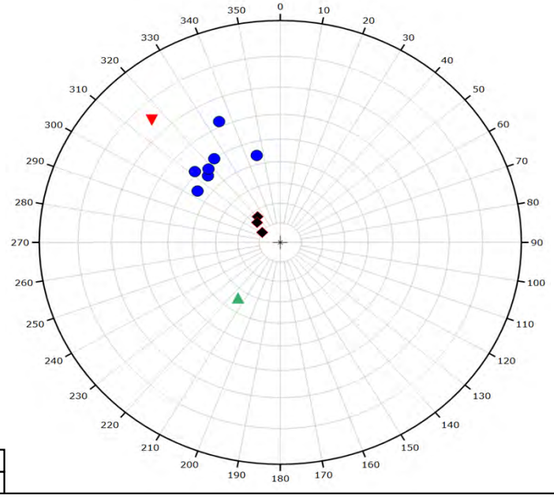


Joint Set	Dip (°)	Dip Direction (°)
A	62	130
D/D'	90	29

B) LARGE-SCALE STRUCTURES

Structure	Dip (°)	Dip Direction (°)
Flat1	17	141
Flat2	14	134
Flat3	9	121
GP	74	136
NW	33	36
RQD1	44	167
RQD2	45	135
RQD3	45	125
RQD4	50	145
RQD5	47	138
RQD6	62	155
RQD7	51	132

ORIENTATION OF LARGE SCALE STRUCTURES



CONTOUR LEGEND

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

STRUCTURAL LEGEND

Symbol	FAULT GROUP	Quantity
◆	Flat	3
▼	GP	1
▲	NW	1
●	RQD Corridor	7

NOTES:

1. STEREONETS ARE EQUAL ANGLE LOWER HEMISPHERE PROJECTIONS.
2. DATA CORRECTED FOR DRILLHOLE DEVIATION.
3. ORIENTATION DATA HAS BEEN FILTERED TO EXCLUDE MECHANICAL BREAKS, VEINS/VEINLETS, AND DATA OF FAIR OR POOR QUALITY.
4. ONLY DATA RELEVANT TO OPEN PIT SHOWN BY EXCLUDING DATA BEYOND A CERTAIN DOWNHOLE DEPTH.
5. LARGE-SCALE STRUCTURE MODEL PROVIDED BY AEM (SEP 29, 2015). INDIVIDUAL PLANE NAMES GIVEN BY KP.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29APR'16	ISSUED WITH REPORT	MJR	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

ORIENTATION DATA SUMMARY

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P/A NO. NB101-622/3

REF. NO. 3

FIGURE 3.1

REV 0

3.5 STRENGTH OF DISCONTINUITIES

Estimates of the strength of the discontinuities were based on direct shear (DS) laboratory test results for samples from the Greywacke, Chert and Altered Ultramafics lithologies. These rock types were selected as they are expected to form the majority of the open pit slopes. The DS testing was also completed by AMEC and is discussed in detail in KP (2015a). The results of the DS lab testing are summarised by rock type in Appendix A2.

A 30° friction angle was selected as the design discontinuity strength. This value is expected to represent the strength of the discontinuities in the Ultramafics, which is considered to be a limiting case. The discontinuities have been assumed to be cohesionless for the purposes of the completed analyses.

3.6 GEOMECHANICAL DOMAIN DEFINITION

3.6.1 General

The encountered rock masses are grouped into geomechanical domains in order to simplify the open pit stability analyses. Each domain contains rock masses with similar engineering characteristics and that are expected to perform similarly within the final pit walls.

The overburden in the vicinity of the proposed pit is expected to be relatively shallow (*e.g.,* typically < 10 m). As such, the overburden is expected to form only a minor part of the pit slopes and was not considered in the domain definition process.

3.6.2 Domain Definition Process

Various possible domain definitions were considered based on lithology, orientation data and spatial position. Each definition was evaluated based on:

- How well the definition limited the variability within the distribution for each engineering characteristic
- Whether the definition respected the geology and geological history of the deposits
- Whether the definition was relevant to the design of the proposed open pit
- The feasibility of implementing the definition (e.g., a definition based on differences in alteration would be of limited value as a 3D alteration model does not currently exist for the Project)

The domain definition that most effectively met these criteria was considered to be the best of the available alternatives. The domain definitions considered are described below:

- **Lithology -** This approach attempted to classify geomechanical domains based on the current lithology model developed by AEM. Several different combinations of lithologies were also considered.
- **Lithology and Variation in Rock Mass Quality -** The potential for variation in rock mass quality within a given lithology was considered. While some variation was observed, it was not possible to associate the variation with any single factor at this stage in the design process. Possible sources of variation include the influence of large-scale structures and/or alteration.
- **Lithology and Spatial Variation in Orientation Data -** The potential for spatial variation in the orientation data was also considered (as noted in Section 3.4.2).

3.6.3 Final Domain Definition

Geomechanical domains were ultimately selected based on the Lithology and Spatial Variation in Orientation definition. The final rock mass domains defined for the Whale Tail Pit include:

- Greywacke (s3) - This also includes the Mafic Volcanics (V3) and mudstone (S6) units
- Chert (s10) - This also includes the graphitic chert (s10e) and silica flooded chert (s10mSi & s10sSi)
- Diorite (I2)
- Altered Ultramafics (V3F, V4bio)
- Ultramafics - North Limb (V4a)
- Ultramafics - South Limb (V3-V4)

The following minor lithological units have been grouped into the above domains due to their limited spatial extents and the limited data available with which to characterize them:

- Lampophyre dykes (I1)
- Quartz vein (Qv)

The final structural domains defined for the Whale Tail Pit include:

- West
- Central-A
- Central-B
- East

Figure 3.2 show the structural domains relative to the proposed Whale Tail Pit.

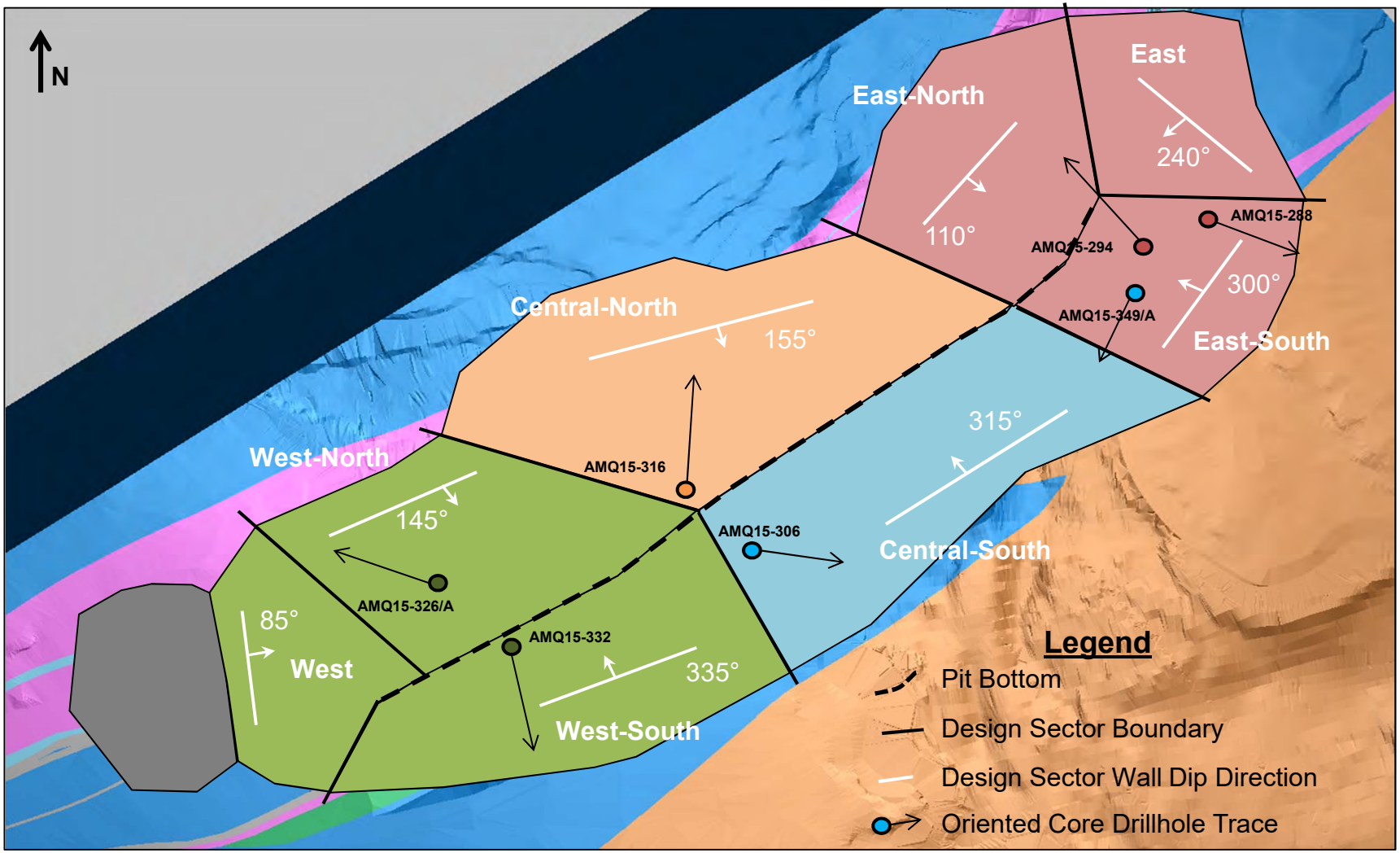
3.6.4 Domain Characterization

The anticipated rock mass quality and strength characteristics of each domain are described below and summarized in Table 3.1. The domains expected to form the ultimate pit walls are shown on Figure 3.3. The design RMR_{89} value for each domain is based on the 30^{th} percentile value using a weighted by length approach of the distribution for each domain. Histograms illustrating the distribution of RMR_{89} values for each rock type are included in Appendix B1 and B2.

- **Diorite -** The Diorite is characterized by an average UCS of 125 MPa. A m_i value of 20 was assigned based on published values (Hoek et. al., 2002). It is classified as GOOD quality rock with a RMR_{89} design value of 70.
- **Greywacke -** This domain consists of the greywacke, mafic volcanics, and mudstone lithologies. It is characterized by an average UCS value of 65 MPa and a m_i of 28. It is classified as GOOD quality rock with a RMR_{89} design value of 65.
- **Chert -** The Chert domain consists of the chert, graphitic chert, and moderately and significantly silica flooded chert lithologies. It is characterized by an average UCS of 135 MPa. A m_i value of 20 was assigned based on published values (Hoek et. al., 2002). It is classified as GOOD quality rock with a RMR_{89} design value of 65.
- **Altered Ultramafics -**The Altered Ultramafics is characterized by an average UCS of 90 MPa and a m_i of 4. It is classified as FAIR to GOOD quality rock with a RMR_{89} design value of 65.

- **Ultramafics (North and South Limbs) -** This domain is characterized by variable and locally reduced rock mass quality. It is characterized by an average UCS value of 50 MPa and a m_i of 10. The North Limb is classified as FAIR to GOOD quality rock with a RMR_{89} design value of 55. The South Limb is classified as POOR to GOOD quality rock with a RMR89 design value of 50.

The domain definition is based upon the available rock mass data and the current geological understanding of the deposit and should be re-evaluated when more data becomes available.



STRUCTURAL DOMAIN LEGEND

- Not Evaluated
- West Structural Domain
- Central-A Structural Domain
- Central-B Structural Domain
- East Structural Domain

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29APR'16	ISSUED WITH REPORT	ATJ	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

STRUCTURAL DOMAINS

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P/A NO. NB101-622/3

REF. NO. 3

FIGURE 3.2

REV 0

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TABLE 3.1

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN (REVISED)
TYPICAL RMR_{89} CHARACTERISTICS FOR EACH DOMAIN

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Typical RMR_{89} Parameter	DOMAIN																	
	Diorite (I2)			**Greywacke** (S3, S6 & V3)			**Chert** (S10, S10E, S10mSi & S10sSi)			**Altered Ultramafics** (V3F & V4Amph)			**Ultramafics - North Limb** (V4a)			**Ultramafics - South Limb** (V3-V4 & V4Bio)		
RMR_{89} Classification	GOOD			GOOD			GOOD			FAIR to GOOD			FAIR to GOOD			POOR to GOOD		
RMR_{89} Rating 10th / 30th / 50th Percentile	65	70	71	52	64	67	55	65	67	53	63	67	41	56	61	37	48	59
Mean UCS (MPa) (Typical Range)	125 (100 - 170)			65 (50 - 80)			135 (75 - 160)			90 (60 - 110)			50 (30 - 90)			50 (30 - 90)		
Mean RQD (%) (Typical Range)	96 (95 - 100)			92 (90 - 100)			89 (85 - 100)			93 (90 - 100)			72 (80 - 100)			58 0 - 5; 95 -100		
Joint Spacing (mm) Typical Range (See Note 5)	200 - 600			60 - 600			60 - 600			60 - 600			0 - 600			0 - 600		
Aperture (mm)	0.1 - 1.0			0.1 - 1.0			0.1 - 1.0			0.1 - 1.0			0.1 - 1.0			0.1 - 1.0		
Roughness	Slightly Rough			Smooth to Rough			Slightly Rough to Rough			Slightly Rough to Rough			Slightly Rough to Rough			Slightly Rough to Rough		
Infill	None			None			None			None			None			None		
Weathering	Slightly Weathered to Fresh			Fresh			Fresh			Slightly Weathered to Fresh			Slightly Weathered to Fresh			Slightly Weathered to Fresh		

I:\1\01\00622\03\A\Report\Report 3 Rev 0 Updated Open Pit Scoping Study\Tables\[Table 3.1 - Typical RMR Characteristics for Each Domain.xlsx]Table 3.1

NOTES:
1. REPORTED VALUES BASED ON DATA COLLECTED DURING THE 2015 SITE INVESTIGATION PROGRAM.
2. ALL REPORTED VALUES ARE TYPICAL VALUES OR RANGES FOR EACH DOMAIN.
3. RMR89 RATINGS HAVE BEEN WEIGHTED BY LENGTH TO ACCOUNT FOR VARIATIONS IN THE LENGTH OF LOGGING RUNS.
4. MEAN UCS AND TYPICAL RANGE BASED ON LABORATORY TESTING.
5. JOINT SPACING S DOWNHOLE DISTANCE BETWEEN ADJACENT DISCONTINUITIES.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29APR'16	ISSUED WITH REPORT NB101-622/3-3	ATJ	BDP

606 000 E
606 200 E
606 400 E
606 600 E
606 800 E
607 000 E
607 200 E
7 255 800 N
7 255 600 N
7 255 400 N
7 255 200 N
7 255 000 N

EAST-NORTH
EAST
CENTRAL-NORTH
EAST-SOUTH
WEST-NORTH
CENTRAL-SOUTH
WEST
NOT EVALUATED
WEST-SOUTH
WHALE TAIL PIT OUTLINE
WHALE TAIL LAKE

LEGEND:

- WATER
- OVERBURDEN
- GREYWACKE
- ULTRAMAFICS (NORTH LIMB)
- ULTRAMAFICS (SOUTH LIMB)
- ALTERED ULTRAMAFICS
- MAFIC VOLCANICS
- CHERT
- DIORITE
- FAULT
- DESIGN SECTOR BOUNDARY
- DESIGN SECTOR BOUNDARY CONTROLLED BY PIT GEOMETRY

NOTES:

1. COORDINATE GRID IS UTM NAD83 ZONE 14N.
2. PIT DESIGN, TOPOGRAPHY AND BATHYMETRY PROVIDED BY AEM (SEPTEMBER, 2015).
3. CONTOUR INTERVAL IS 1 METRE.
4. DIMENSIONS AND ELEVATIONS ARE IN METRES, UNLESS NOTED OTHERWISE.

SCALE A: 40 20 0 40 80 120 160 200 m

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AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

PIT WALL GEOLOGY AND OPEN PIT DESIGN SECTORS

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P/A NO.	REF NO.
NB101-622/3	3

FIGURE 3.3 REV 0

SAVED: I:\1\01\00622\03\A\acad\FIGS\B12_r0_4/29/2016 9:43:59 AM_ASIMPSON PRINTED: 4/29/2016 9:45:15 AM_FIG_3.3_ASIMPSON
XREF FILE(S): X_C_TOPO_WATR; X_C_SI—2015-07-28; X_C_SI—2015-07-29_GW; X_C_SI—2015-09-29_UG; X_C_OPIT_WALLITH_IMAGE FILE(S):

4 – PIT SLOPE DESIGN CONCEPTS

4.1 GENERAL

The overall objective of pit slope design is to determine the steepest practical slope angles in order to maximize resource extraction and minimize waste stripping. Balanced against this, is the increased likelihood of slope stability issues associated with steeper slopes that could impact worker safety, mine productivity and profitability. The approach adopted here is to base the pit slope design on achieving an acceptable level of risk. These risk limits are accounted for in the stability analyses by incorporating target Factors of Safety (FoS). Note that pit slopes are generally considered to be overly conservative if no instabilities occur during operation. As such, instabilities should be expected and accommodated during pit development.

The following section briefly introduces pit slope terminology and discusses the slope stability techniques utilized to develop the final slope recommendations.

4.2 PIT SLOPE CONFIGURATION

The relationship between bench geometry, inter-ramp slope angle and the overall slope angle is illustrated in Figure 4.1 and described below.

- **Bench Geometry -** The achievable bench geometry was evaluated using Kinematic analyses and the following considerations:
  - The bench height is typically determined by the size of the shovel chosen for the mining operation. AEM has specified a bench height of 7 m in a triple-bench configuration (21 m effective bench height).
  - The bench face angle (BFA) is generally controlled by the structure of the rock mass. The design BFA used in this study were limited to a range of 65° to 75° based on experience and pre-shear blasting practices achievable at the Meadowbank Mine.
  - The bench width considered in this study is based on a combination of local regulations, experience at the Meadowbank Mine and the empirical criterion developed by Ritchie (1963). The Nunavut Mine Health and Safety Regulations specify a minimum final bench width of 8 m (Mine Health and Safety Act, 2011). A minimum bench width of 9.5 m was used for this study. The design bench width was increased to accommodate the expected back-break in cases where the rock mass structure is expected to result in a BFA shallower than the design BFA.
- **Inter-Ramp Slope Geometry -** The achievable inter-ramp slope geometry was evaluated as follows:
  - The maximum inter-ramp angle (IRA) is typically dictated by the bench geometry. The potential for multiple bench-scale instabilities on large-scale structural features (e.g., faults, shears, bedding planes, foliation etc.) is also evaluated, when required. In some cases, these persistent features may control the achievable IRAs and the slope may have to be flattened to account for their presence. In this design, the potential for multi bench instabilities was evaluated using Kinematic and Limit-Equilibrium (L-E) analyses. The IRA was also limited to a maximum of 53° at the request of AEM in order to accommodate some of the uncertainties inherent in scoping level design.

- The inter-ramp slope height was limited to 100 m in order to restrict the potential influence of inter-ramp-scale instabilities.

- **Overall Slope Angle -** The overall slope angle (OSA) that is achieved in a pit is typically flatter than the IRA due to the inclusion of haulage ramps, buttresses and/or geotechnical step-outs. In this design, L-E analyses were undertaken to confirm that the OSAs were achievable. The haulage ramps were assumed to have a width of 28 m, based on previous practices at the Meadowbank Mine. The geotechnical step-outs are intended to limit the inter-ramp slope height in sectors without a ramp, and were assumed to have the same width as the ramps.

4.3 OPEN PIT DESIGN SECTORS

The proposed open pit was divided into eight (8) design sectors to support the stability analyses. The location of each of these sectors can be seen relative to the spatial extents of the domains within the pit wall on Figures 3.2 and 3.3. Sectors are chosen on the basis of consistent slope geometry/orientation, geomechanical domain, structure and expected slope performance. The achievable bench geometry, inter-ramp angles and overall slope angles are evaluated for each sector.

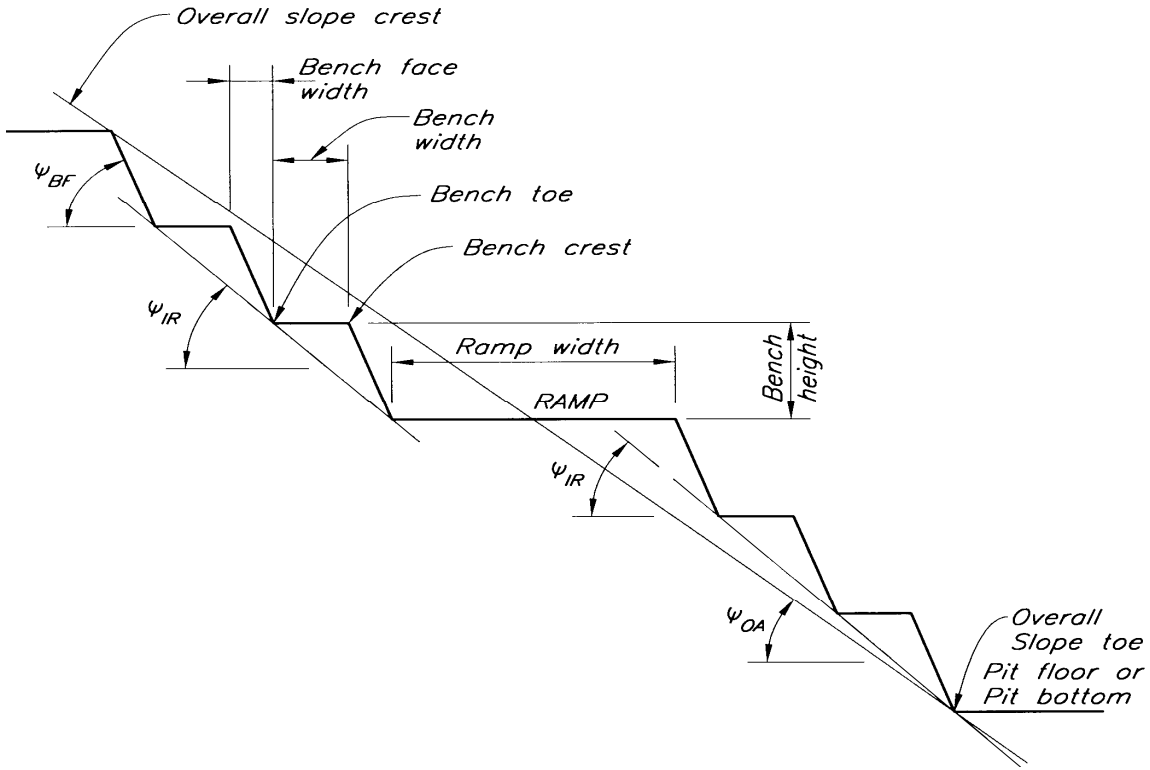
4.4 KINEMATIC AND STRUCTURAL ANALYSES

4.4.1 General

Kinematic analyses were undertaken to identify kinematically possible rock mass failure modes. These analyses were based upon the dominant small-scale structural trends identified at the Project. Achievable BFAs and IRAs were selected based on the structure of the rock mass. The potential for planar, wedge and toppling failure modes was considered. These failure modes can occur if the discontinuities are persistent (at least at a bench scale), relatively weak and oriented in such a way that they daylight in the pit wall. Kinematic failure modes are summarized on Figure 4.2 and below.

- **Planar Failure -** This failure mode is kinematically possible when a discontinuity plane is inclined less than the slope face (i.e., it daylights) and at an angle steeper than the friction angle.
- **Wedge Failure -** This failure mode is kinematically possible when the plunge of the intersection of two planes (i.e., sliding vector) is inclined less than the slope face (i.e., it daylights) and at an angle greater than the friction angles of the planes forming the wedge.
- **Toppling Failure -** Flexural toppling is kinematically possible when sub-vertical jointing dips into the slope at a steep angle and has a strike close to that of the slope. Flexural toppling most commonly occurs in relatively weak rock masses where the sub-vertical jointing is persistent and tightly spaced.

ψ_{BF} – Bench face angle
ψ_{IR} – Interramp slope angle
ψ_{OA} – Overall slope angle



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WHALE TAIL PIT

DEFINITIONS OF PIT SLOPE ANGLES

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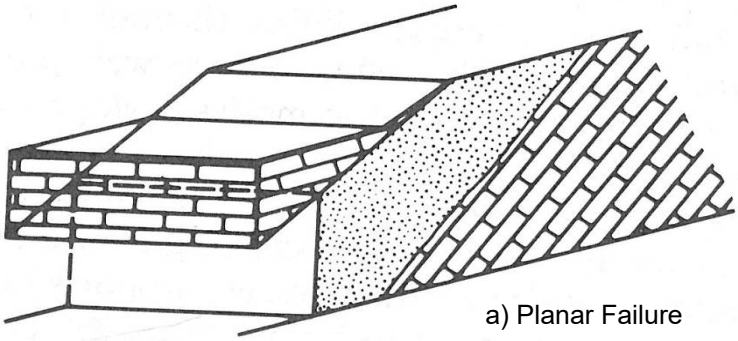
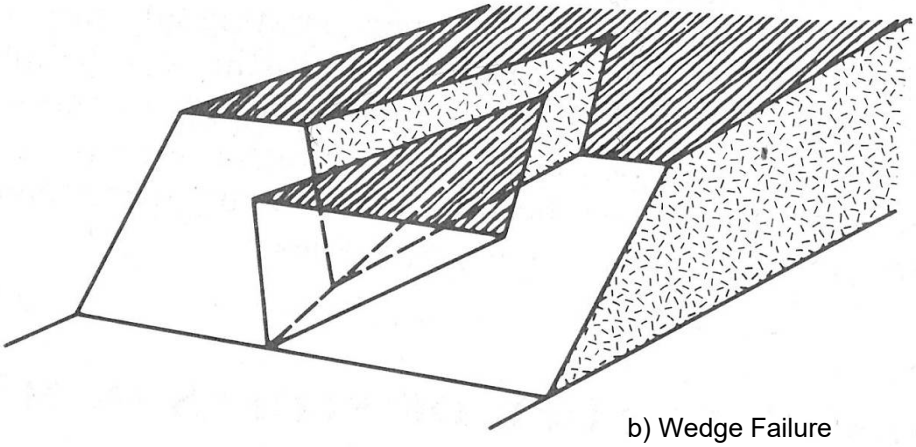
REF. NO. 3

FIGURE 4.1

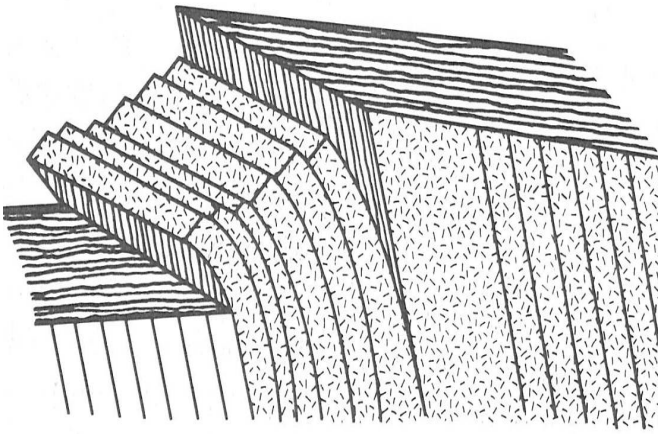
REV 0



a) Planar Failure



b) Wedge Failure



c) Toppling Failure (Flexural)

NOTES:

1. IMAGES FROM GOODMAN (1980).

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REV	DATE	DESCRIPTION	PREP'D	RVW'D

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

ROCK SLOPE FAILURE MODES

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P/A NO. NB101-622/3

REF. NO. 3

FIGURE 4.2

REV 0

4.4.2 Bench Geometry

Achievable BFAs were predominantly determined through a combination of experience and stereographic analysis using the DIPS software (Rocscience, 2012). The stereographic techniques consider the dominant structural orientations and were used to assess the significance of each potential planar, wedge or toppling failure.

The stereographic analyses focused on the failures that were most likely to impact bench performance. The potential importance of a failure was based on the prominence of the structure (the Set Significance) and the likelihood of the failure occurring (the Effect Significance). The product of these factors was then used to obtain an overall rating, which was converted into the following three descriptive categories: MINOR, MODERATE and MAJOR.

In terms of “Set Significance”, confirmed large-scale structures and major joint sets were rated more highly than less-prominent discontinuities. The “Effect Significance” was based on proximity to the kinematic failure window. A potential failure located in the centre of the kinematic failure window was rated more highly than a potential failure lying on the edge of the window. Only potential failures with MAJOR ratings were considered within the slope design.

Due to the relatively shallow dip of the foliation in the West-North sector, the kinematic analyses for this sector were supplemented with L-E analyses to evaluate the FoS for a sliding block on a single plane. The analyses were carried out using RocPlane (Rocscience, 2014) to determine the FoS against bench-scale planar failure. The analyses were based on the bench geometry, the dip of Joint Set A in the West structural domain, typical discontinuity strengths and assumed the slope was dry.

4.4.3 Inter-Ramp Angles

The IRAs were evaluated to consider possible failures resulting from major joint sets and confirmed large-scale structures. These are the features that can be reasonably expected to result in multi-bench instabilities. Potential inter-ramp kinematic failures were evaluated using stereographic methods. The average orientation of the confirmed large-scale structures and major joint sets were compared to the kinematic failure window for each IRA under consideration.

Potential interactions between known large-scale structures and the open pit walls were also evaluated visually using SURPAC™ (Dassault Systèmes, 2015).

4.5 LIMIT-EQUILIBRIUM ANALYSES (CIRCULAR ROCK MASS FAILURE)

4.5.1 General

L-E analyses were carried out using SLOPE/W® (Geo-Slope International, 2012) and were used to determine the FoS against circular failure through the rock mass. This type of failure can result in multi-bench (inter-ramp) or overall slope scale instabilities. As such, this technique was utilized to evaluate the suitability of selected IRAs and OSAs.

The conditions typically considered in evaluating circular failure are: slope geometry, rock mass strength and anisotropy, stress conditions, hydrogeological conditions and seismic loading. Each of these conditions is briefly described below:

- **Slope Geometry -** Models were based on the final pit design and were constructed with a simplified geometry (i.e., excluding benches and ramps and removing complex geology). Models were developed for representative and limiting-case design sectors in order to capture any substantial variations in geology, pit wall geometry and slope height. The design sectors used are shown on Figure 3.3.
- **Rock Mass Strength -** Estimates of rock mass strength were obtained using the Hoek-Brown failure criterion (Hoek et. al., 2002). These estimates are based on the intact rock strength (i.e., UCS, mi) and rock mass quality (i.e., RMR). An introduction to this failure criterion is included as Appendix C. The Hoek-Brown design values for each domain are summarized on Table 4.1.

  A Disturbance Factor, (D), is used in the Hoek-Brown criterion to account for rock mass disturbance from blasting and stress change effects. Values of D=0.7, 0.85 and 1.0 have been found from experience to be roughly equivalent to excellent controlled blasting, normal controlled blasting and heavy production blasting, respectively.
- **Stress Conditions -** For deep open pits, stress-induced disturbance is expected to influence rock mass quality and the long-term performance of the slopes. This type of disturbance will occur when the load applied to the pit walls locally exceeds the strength of the rock mass. Disturbance of this type will tend to manifest itself as a reduction in rock mass quality and an increase in deformation. The impact of stress induced disturbance can be estimated and accounted for by adjusting both the depth of the disturbed zone and the level of disturbance. The proposed open pit is relatively shallow and the impact of stress conditions on the slope performance is expected to be minor.
- **Hydrogeological Conditions -** The groundwater conditions incorporated into the L-E analyses were based on the available hydrogeological data and an assessment of the potential for taliks below Whale Lake (KP, 2015c). The groundwater conditions for slopes that could be located within an open talik were modelled using a phreatic surface. The remaining slopes were assumed to be dry due to either the presence of permafrost or the limited groundwater recharge expected within a closed talik. The potential impacts of slope depressurisation on the slopes located within an open talik were also considered. The potential extents of talik relative to the proposed open pit are shown on Figure 4.3.
- **Seismic Loading -** Dynamic loading of the slope during an earthquake would be expected to temporarily influence slope stability. The seismic hazard for the Project is expected to be relatively low based on publicly available hazard maps (Natural Resources Canada, 2010). As a result, the L-E analyses did not consider dynamic loading.

Two general categories of L-E models were developed for each pit: inter-ramp models and overall slope models. The different model configurations are described in the following sections and set out in Table 4.2.

606 000 E
606 200 E
606 400 E
606 600 E
606 800 E
607 000 E
607 200 E
7 255 800 N
7 255 600 N
7 255 400 N
7 255 200 N
7 255 000 N

EAST-NORTH
EAST
CENTRAL-NORTH
EAST-SOUTH
WEST-NORTH
CENTRAL-SOUTH
WEST
WEST-SOUTH
NOT EVALUATED

TALIK BENEATH WHALE TAIL LAKE. LIKELY DOES NOT EXTEND TO REGIONAL GROUNDWATER SYSTEM.

WHALE TAIL LAKE

TALIK BENEATH WHALE TAIL LAKE. LIKELY EXTENDS TO REGIONAL GROUNDWATER SYSTEM.

WHALE TAIL PIT OUTLINE

LEGEND:

- WATER
- POTENTIAL TALIK
- DESIGN SECTOR BOUNDARY
- DESIGN SECTOR BOUNDARY CONTROLLED BY PIT GEOMETRY

NOTES:

1. COORDINATE GRID IS UTM NAD83 ZONE 14N.
2. PIT DESIGN, TOPOGRAPHY AND BATHYMETRY PROVIDED BY AEM (SEPTEMBER, 2015).
3. CONTOUR INTERVAL IS 1 METRE.
4. DIMENSIONS AND ELEVATIONS ARE IN METRES, UNLESS NOTED OTHERWISE.

SCALE A 40 20 0 40 80 120 160 200 m

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	29APR'16	ISSUED WITH REPORT	ATJ	SIR/AS	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

WHALE TAIL PIT AND POTENTIAL EXTENTS OF TALIK

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P/A NO. NB101-622/3 | REF NO. 3 | REV 0

FIGURE 4.3

SAVED: I:\1101\0062\03\A\Acad\FIGS\813_r0_4/29/2016 9:56:34 AM, ASIMPSON PRINTED: 4/29/2016 9:57:40 AM, FIG_4.3, ASIMPSON
XREF FILE(S): X - C - TOPO - WATR; X - C - SI - 2015-07-28; X - C - SI - 2015-07-29; GW; X - C - SI - 2015-09-29 - UG MMOD FILE(S)

TABLE 4.1

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN (REVISED)
LIMIT-EQUILIBRIUM PARAMETER SUMMARY

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Domain		Intact Rock Properties			Rock Mass Properties	
		mi	UCS (MPa)	Unit Weight (kN/m^3)	RMR_{89}	GSI
Diorite		20 [3]	125	27.7	70	65
Greywacke [4]	Greywacke	28	65	28.0	65	60
	Mudstone					
	Mafic Volcanics					
Chert		20 [3]	135	28.1	65	60
Altered Ultramafics		4	90	29.4	65	60
Ultramafics	North Limb	10	50	28.0	55	50
	South Limb				50	45

I:\1\01\00622\03\A\Report\Report 3 Rev 0 Updated Open Pit Scoping Study\Tables\[Table 4.1 - L-E Parameter Summary.xlsx]Table 4.1 - Design Parameters

NOTES:

1. RMR_{89} VALUES HAVE BEEN WEIGHTED BY LENGTH TO ACCOUNT FOR THE VARIATION IN THE LENGTH OF LOGGING RUNS. DESIGN VALUES BASED ON 30TH PERCENTILE.
2. UCS, mi AND UNIT WEIGHT BASED ON AVERAGE LABORATORY TESTING RESULTS PROVIDED BY AMEC (SEPT 28, 2015).
3. mi DESIGN VALUE BASED ON HOEK ET AL. (1992) LOWER BOUND VALUES.
4. INTACT PROPERTIES FOR GREYWACKE DOMAIN BASED ON LAB TESTING RESULTS FOR ONLY GREYWACKE SAMPLES (I.E., DO NOT INCLUDE THE TESTING OF THE MAFIC VOLCANICS).

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TABLE 4.2

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN (REVISED)
LIMIT-EQUILIBRIUM MODEL SET-UP PARAMETERS

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Parameter	Inter-Ramp Slope Models		Overall Slope Models	
	Values	Comments	Values	Comments
Geometry and Geology	Based on general slope consisting of a single domain. Slope angles varied from 40 to 55° based on recommended bench geometries. Slope height varied from 75 to 100 m.		Based on select design sectors to account for sector geology and varying slope heights. Models constructed from the Lithology model and Open Pit Design received from AEM on September 29 and 30, 2015, respectively.	
Disturbance Factor	0.7 and 0.85	Entire slope fully disturbed to reflect production blasting. Fully disturbed model considered appropriate as the critical slip surface is expected to lie entirely within the disturbed portion of the pit wall. A disturbance factor of 0.85 was used for all domains except the Ultramafics. A disturbance factor of 0.7 was used for the Ultramafics. Due to the lower rock mass quality of this domain, the relative reduction in rock mass quality due to blasting is expected to be less than for the other domains.	0.7 and 0.85	Disturbed Zone adjacent to the face of the slope associated with production blasting. Zone extends 20 m perpendicular to the pit wall. Damage expected to extend 1 to 1.5 times the bench height in the that wall [(1)]. A disturbance factor of 0.85 was used for all domains except the Ultramafics. A disturbance factor of 0.7 was used for the Ultramafics. Due to the lower rock mass quality of this domain, the relative reduction in rock mass quality due to blasting is expected to be less than for the other domains.
			0	Remainder of slope modelled as undisturbed. Limited stress-induced damage expected due to shallow depth of the pits.
Groundwater Conditions	Fully Saturated	Slopes within the footprint of Whale Tail Lake may be within an open talik zone. The entire slope was considered fully saturated in these cases.	Fully Saturated	The entire slope was considered fully saturated in the overall slope models. A portion of slopes within the footprint of Whale Tail Lake may be within an open talik zone; therefore a fully saturated slope was considered as a worst-case scenario.
	10 m Depressurized	Limited slope depressurization within the potential open talik zone was considered. Depth of depressurization measured perpendicular to the slope.		
	Dry	Many pit slopes are expected to be completely within permafrost.		
Loading Case	Static	Design based on static loading case only.	Static	Design based on static loading case only.
Critical Slip-Surface	Must extend over the full height of the inter-ramp slope in order to exclude shallow bench-scale failures.		Must extend over the full height of the slope and into the slope beyond the zone of blast disturbance in order to exclude smaller inter-ramp failures.	
Target FoS	1.2	Standard design FoS under static loading.	1.3	Standard design FoS under static loading.

I:\1\01\00622\03\A\Report\Report 3 Rev 0 Updated Open Pit Scoping Study\Tables\[Table 4.2 - L-E Model Set-up Parameters.xlsx]Table 4.2

NOTES:
1. HOEK, E., 2012. BLAST DAMAGE FACTOR D. TECHNICAL NOTE FOR ROCNEWS WINTER 2012 ISSUE. ROCSCIENCE, TORONTO, ON.

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4.5.2 Inter-Ramp Angles

Inter-ramp slope models were developed for each geomechanical domain. The models were independent of any specific pit geometry and were constructed with slope heights between 75 and 100 m. The models were evaluated at varying slope angles until the target FoS was attained.

The rock mass was assumed to be entirely disturbed. The majority of the domains were modelled with a disturbance factor of D=0.85. A reduced disturbance factor of D=0.7 was used for the Ultramafics. Due to the lower rock mass quality of the Ultramafics, the relative reduction in rock mass quality due to blasting is expected to be less than for the other domains.

The models considered several different groundwater scenarios.

- **Dry Slope -** Many of the pit slopes are expected to be entirely within permafrost. As a result, a series of models were run without groundwater.
- **Fully Saturated Slope -** Some of the pit slopes may be partially or entirely within open taliks. As a result, a series of models were run with a fully saturated slope.
- **Partially Saturated Slope -** Partial depressurisation of the slopes within an open talik was also considered. A limited amount of depressurisation can be expected to occur naturally. Dewatering wells or horizontal drains can be used to further depressurise the slope. Depressurisation to a distance of 10 m behind the face of the slope was evaluated.

4.5.3 Overall Slope Angles

The purpose of the overall slope models was to confirm that the OSAs resulting from the recommended inter-ramp slope geometry were achievable. These models were based on the open pit geometry provided by AEM (February, 2015). Models were constructed for the deepest design sector in each pit. Additional models where run for areas of special interest *(e.g*., sectors with significant exposures of the Ultramafics). The models incorporated a 20 m thick disturbed zone (D=0.7 for the Ultramafics, D=0.85 for all other domains) to account for blast-induced disturbance (Hoek, 2012). The remainder of the slope was considered to be undisturbed (D=0). The models were evaluated at the overall slope angles estimated for the relevant sectors based on the bench and inter-ramp scale slope recommendations.

4.6 ACCEPTANCE CRITERIA FOR PIT SLOPE DESIGN

4.6.1 Factor of Safety

Target Factors of Safety were based on achieving an acceptable level of risk. Target values vary depending on the scale of the slope and the consequences of failure. Experience has shown that designing at a lower FoS will tend to eventually increase deformations within the wall and lead to progressive slope degradation. These degradations increase the exposure of personnel to rock fall or slope stability issues and also increases the likelihood of interruptions to normal mine operations.

The target FoS used in this study were based upon experience and guidelines provided by Read and Stacey (2009) and Wyllie and Mah (2004), among others. The target FoS used as acceptance criteria for the limit-equilibrium stability analyses are described below.

- **FoS 1.3 -** Overall slope analyses under static loading conditions. This value is typically recognized by regulatory agencies for multiple bench stability, providing that a monitoring program has been established.
- **FoS 1.2 -** Inter-ramp scale analyses under static loading conditions. This value is typically recognized by regulatory agencies for multiple bench stability, providing that a monitoring program has been established.
- **FoS 1.1 -** Bench scale analyses under static loading conditions. This target was only used for the bench-scale limit-equilibrium analyses described in Section 4.4.2.

Certain regions of the pit may have a higher FoS than the minimum targets listed above. This is not uncommon in open pit operations, as some changes in slope angle are difficult to accommodate within a practical pit design. Unless otherwise noted, the recommended pit slope angles will meet or exceed the selected minimum stability criteria and are generally specified in a way that a coherent and practical slope configuration can be achieved between adjacent design sectors.

4.6.2 Cumulative Frequency of Failure

Cumulative Frequency of Failure (CFF) is a measure used to assess bench performance and bench design. Similar to the target FoS, the target CFF was based on achieving an acceptable level of risk and bench performance. The CFF is the percentage of discontinuities in a given joint set that are expected to result in a kinematic failure.

A target CFF of 30% was used in the bench scale kinematic analyses based upon experience and guidelines provided by Read and Stacey (2009). This target means that 70% of the benches are expected to meet or exceed the recommended geometry.

4.6.3 Other

For the inter-ramp scale kinematic analyses, the mean orientations of the confirmed large-scale structures and major joint sets were reviewed to ensure that they were not within the kinematic failure window.

5 – PIT SLOPE DESIGN

5.1 GENERAL

The stability analyses results and the open pit slope design recommendations are provided in this section. In all cases, the recommendations and results are dependent upon the current understanding of the rock mass and hydrogeological characteristics. Future investigations, analyses and observed slope performance should be used to refine these analyses.

5.2 KINEMATIC AND STRUCTURAL ANALYSES

5.2.1 General

Kinematic analyses were undertaken on each design sector using the discontinuity orientation and large-scale structural information available for that sector. The discontinuity orientation data was based on the structural domain in which the sector was located.

5.2.2 Bench Geometry

Stereographic analyses were used to evaluate the achievable bench geometry for each sector. In the West-North sector, these analyses were supplemented with limit-equilibrium planar analyses.

In the absence of any kinematic controls, a design BFA of 75° was recommended based on experience and AEM's practices at the Meadowbank Mine. In cases where significant kinematic stability issues are expected, the BFA was reduced to limit the amount of back break and/or wider bench widths were recommended to increase rock fall storage capacity. Bench scale kinematic considerations are summarized below. The analyses are summarized in Appendix D.

The potential for kinematic failures is expected to limit the achievable BFA in the following sectors:

- **East-North, Central-North and West-North Sectors -** Planar failures involving the foliation (i.e., Joint Set A) are expected to be the dominant structural control on the achievable slope geometry in these sectors. In particular, planar failures in the West-North and Central-North sectors are expected to limit the achievable BFA to 55°.
- **Central-South Sector -** Planar failures involving a dominant joint set (i.e., Joint Set B) are expected to control the achievable slope geometry in this sector.
- **East-South, Central-South and West-South Sectors -** Toppling failures may occur along the hangingwall of the deposit in these sectors. As other factors strongly influence the potential for toppling failure (e.g., joint spacing and persistence), the bench geometry has not been adjusted to reflect this failure mode.

The analyses also suggest the potential for wedge failure involving Joint Sets A and D in the East-North, Central-North and West-North sectors and involving Joint Sets B and D in the Central-South sector. A review of these potential wedge failures concluded that they were fundamentally a planar failure along the dominant structure (Joint Sets A and B), with steep release planes (Joint Set D). As such, the bench geometry has been based on the results of the planar analyses rather than the wedge analyses for these sectors.

The results of the kinematic analyses for the West-North sector suggest that the achievable BFA will be controlled by planar failure on Joint Set A (foliation). Due to the shallow dip of the foliation in this

sector, the kinematic analyses were supplemented by bench scale L-E models that considered the FoS for a block sliding on a single plane. The BFA was varied within reasonable ranges and the dip of the structure was varied within the range of variation seen in the foliation. The results of the analyses are included in Appendix E.

5.2.3 Inter-Ramp Angles

Once an appropriate bench configuration was selected for a design sector, it was used to determine the steepest possible IRA. These IRA values were then used to check for the possibility of multi-bench kinematic failures. The analyses suggest that inter-ramp scale kinematic considerations are not expected to limit the achievable slope geometry. The analyses are summarized in Appendix D.

5.3 LIMIT-EQUILIBRIUM ANALYSES (CIRCULAR ROCK MASS FAILURE)

5.3.1 IRA Analyses

In order to evaluate achievable IRAs from a rock mass strength perspective, inter-ramp slope models were developed for each geomechanical domain present within the final pit wall. The height of the slope was varied within reasonable ranges to establish a relationship between achievable angles and slope height. The effects of groundwater depressurisation were also considered within the Ultramafics, when this unit is likely to be within talik.

One result of the analysis strategy employed is that the target FoS can be achieved by different combinations of slope heights and angles. In all cases, the recommended values were thought to be the most appropriate under the circumstances. The results of the analyses are included in Appendix F1.

5.3.2 OSA Analyses

OSA models were constructed for representative design sectors as final checks on the stability of the overall slope. L-E stability analyses were conducted under static conditions only. In all cases, the target FoS was achieved for the OSA models. The results of the analyses are included in Appendix F2.

5.4 RECOMMENDED OPEN PIT SLOPE GEOMETRY

The recommended slope configurations and design considerations for each sector of the proposed pit is summarized in Table 5.1. The open pit slope design recommendations are also presented graphically on Figure 5.1. Note that these recommendations are only for slopes excavated in rock.

A summary of the recommendations is provided below:

- Design BFA: 65 to 75°
- Design Bench Width: 10 to 14.4 m
- Bench Height: 21 m
- IRA: 41 to 53°

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TABLE 5.1

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN (REVISED)
SUMMARY OF OPEN PIT SLOPE RECOMMENDATIONS

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Pit Design Sector	Dominant Domain (See Note 1 & 2)	Nominal Pit Wall Dip Direction (See Note 3) (°)	Total Slope Height (See Note 3) (m)	Dominant Potential Failure Mode	Bench Configurations						Inter-Ramp Slope Configurations				Overall Slope Angle	Comments
					Design Bench Face Angle (BFA) (°)	Potential Kinematic Back-Break Angle (See Note 4) (°)	Design Bench Width (m)	Base Bench Width (See Note 5) (m)	Potential Kinematic Back-Break (m)	Bench Height (m)	Inter-Ramp Angle (IRA)			Max. Inter-Ramp Slope Height (m)	Expected OSA Performance Based on Precedent Practice	
											From Design Bench Configuration (°)	Achievable Based on Kinematics	Achievable Based on LE (See Note 6)			
East-South	Greywacke & Ultramafics (SL)	300	135	Toppling	**75**	N/A	**10**	10	0	**21**	**53**	Yes	Yes (10 m Depressurized)	**100**	FoS > 1.3	- Toppling failure on Joint Set A may locally limit the achievable bench and inter-ramp geometry. - Several faults are expected to intersect the pit wall in this sector. The reduced rock mass quality associated with the faults may result in local bench-scale failures.
East	Greywacke, Altered Ultramafics, Ultramafics (SL)	240	135	None	**75**	N/A	**10**	10	0	**21**	**53**	Yes	Yes (10 m Depressurized)	**100**	FoS > 1.3	- The RQD corridor faults are expected to intersect the pit wall in this sector. The reduced rock mass quality associated with the fault may result in local bench-scale failures.
East-North	Altered Ultramafics & Ultramafics (NL)	110	125	Planar (Wedge)	**65**	60	**11.8**	9.5	2.3	**21**	**44**	Yes	Yes	**100**	FoS > 1.3	- Planar failures on Joint Set A are expected to limit the achievable bench face angle. Benches designed to maintain a 9.5 m effective bench width based on the expected back-break angle. - The Ultramafics compose the majority of the pit slope in this sector and a fault is believed to exist within this unit. The reduced rock mass quality associated with the Ultramafics and the fault may result in local bench-scale failures. -The RQD Corridor faults are expected to run sub-parallel and just behind the pit wall in this sector. The faults may result in local bench-scale failures.
Central-North	Ultramafics (NL), Altered Ultramafics & Greywacke	155	155	Planar (Wedge)	**65**	55	**14.4**	9.5	4.9	**21**	**41**	Yes	Yes	**100**	FoS > 1.3	- Planar failures on Joint Set A are expected to limit the achievable bench face angle. Benches designed to maintain a 9.5 m effective bench width based on the expected back-break angle. - The Ultramafics compose the majority of the pit slope in this sector and a fault is believed to exist within this unit. The reduced rock mass quality associated with the Ultramafics and the fault may result in local bench-scale failures. - The RQD Corridor faults are expected to run sub-parallel and just behind the pit wall in this sector. The faults may result in local bench-scale failures.
Central-South	Greywacke, Ultramafics (SL) & Chert	315	155	Planar (Wedge) & Toppling	**75**	70	**11.5**	9.5	2.0	**21**	**51**	Yes	Yes (10 m Depressurized)	**100**	FoS > 1.3	- Planar failures on Joint Set B are expected to limit the achievable bench face angle. Benches designed to maintain a 9.5 m effective bench width based on the expected back-break angle. - Toppling failure on Joint Set B' may locally limit the achievable bench geometry. - Several faults are expected to intersect the pit wall in this sector. The reduced rock mass quality associated with the faults may result in local bench-scale failures.
West-North	Altered Ultramafics, Ultramafics (NL) & Greywacke	145	120	Planar (Wedge)	**65**	55	**14.4**	9.5	4.9	**21**	**41**	Yes	Yes	**100**	FoS > 1.3	- Planar failures on Joint Set A are expected to limit the achievable bench face angle. Benches designed to maintain a 9.5 m effective bench width based on the expected back-break angle. - The Ultramafics compose the majority of the pit slope in this sector. The reduced rock mass quality associated with the Ultramafics may result in local bench-scale failures. - The RQD Corridor faults are expected to intersect or run sub-parallel and just behind the pit wall in this sector. The faults may result in local bench-scale failures.
West	Greywacke, Altered Ultramafics, Ultramafics (NL)	85	120	None	**75**	N/A	**10**	10	0	**21**	**53**	Yes	Yes (10 m Depressurized)	**100**	FoS > 1.3	- The Ultramafics compose a large portion of the pit slope in this sector. The reduced rock mass quality associated with the Ultramafics may result in local bench-scale failures.
West-South	Greywacke, Ultramafics (SL), Chert	335	130	Toppling	**75**	N/A	**10**	10	0	**21**	**53**	Yes	Yes (10 m Depressurized)	**100**	FoS > 1.3	- Toppling failure on Joint Set A may locally limit the achievable bench face angle. - The RQD Corridor faults are expected to intersect the pit wall in this sector. The faults may result in local bench-scale failures.

I:\1\01\00622\03\A\Report\Report 3 Rev 0 Updated Open Pit Scoping Study\Tables\[Table 5.1 and Figure 5.2 - Pit Slope Recommendations (Oct 30).xlsx]Table 5.1 - Pit Recommendations

NOTES:
1. THE ULTRAMAFICS (NORTH LIMB (NL) AND SOUTH LIMB (SL)) IS A WEAKER UNIT OF VARIABLE ROCK MASS QUALITY AND IS EXPECTED TO BE SUSCEPTIBLE TO RAVELLING. FOR EXPOSURES OF 40 m OR MORE OF THIS DOMAIN, ADDITIONAL BENCH WIDTH MAY BE REQUIRED.
2. DOMINANT PIT WALL DOMAINS BASED ON LITHOLOGY MODEL PROVIDED BY AEM (SEPT 29, 2015). GREYWACKE DOMAIN INCLUDES THE GREYWACKE, MUDSTONE AND MAFIC VOLCANIC LITHOLOGIES.
3. TOTAL SLOPE HEIGHT AND WALL ORIENTATIONS BASED ON PIT DESIGN PROVIDED BY AEM (SEPT 30, 2015). SLOPE HEIGHT MEASURED FROM THE TOE OF THE SLOPE IN THE DEEPEST PORTION OF THE SECTOR TO THE CREST WHERE INTERSECTED BY THE TOPOGRAPHY.
4. BENCH FACE ANGLE RECOMMENDATIONS BASED ON THE RESULTS OF KINEMATIC ANALYSES. THE POTENTIAL KINEMATIC BACK-BREAK ANGLE FOR THE WEST-NORTH SECTOR IS BASED ON HIGH-LEVEL PLANAR FAILURE ANALYSES USING ROCPLANE (ROCSCIENCE, 2014).
5. THE BASE BENCH WIDTH IS 9.5 m. FOR SECTORS WITH NO KINEMATIC CONTROLS, THE MAXIMUM ACHIEVABLE INTER-RAMP ANGLE HAS BEEN LIMITED TO 53°. IN ORDER TO ACHIEVE THIS, THE BASE BENCH WIDTH HAS BEEN INCREASED TO 10 m FOR SELECT DESIGN SECTORS.
6. WHERE NOTED, TO ACHIEVE THE INTER-RAMP CONFIGURATION, 10 m OF SLOPE DEPRESSURIZATION (MEASURED PERPENDICULAR TO THE PIT FACE) IS REQUIRED WHEN THE ULTRAMAFICS ARE EXPOSED IN THE PIT WALL AND ARE WITHIN UNFROZEN GROUND.
7. ACHIEVABLE OVERALL SLOPE ANGLE EVALUATED USING LIMIT-EQUILIBRIUM METHODS FOR THE DEEPEST SECTORS AS WELL AS LIMITING CASES (I.E. LARGE EXPOSURES OF ULTRAMAFICS, POTENTIAL OPEN TALIKS). ALL MODELS EXCEEDED THE TARGET FACTOR OF SAFETY OF 1.3; THE STABILITY OF THE REMAINING SECTORS HAS BEEN INFERRED FROM THESE ANALYSES.
8. OVERBURDEN TO BE SET BACK 10 m FROM PIT SLOPE CREST TO ALLOW SUFFICIENT SPACE FOR THE INSTALLMENT OF SEDIMENT CONTROL BERM AND THE COLLECTION OF ANY MOBILIZED MATERIAL.

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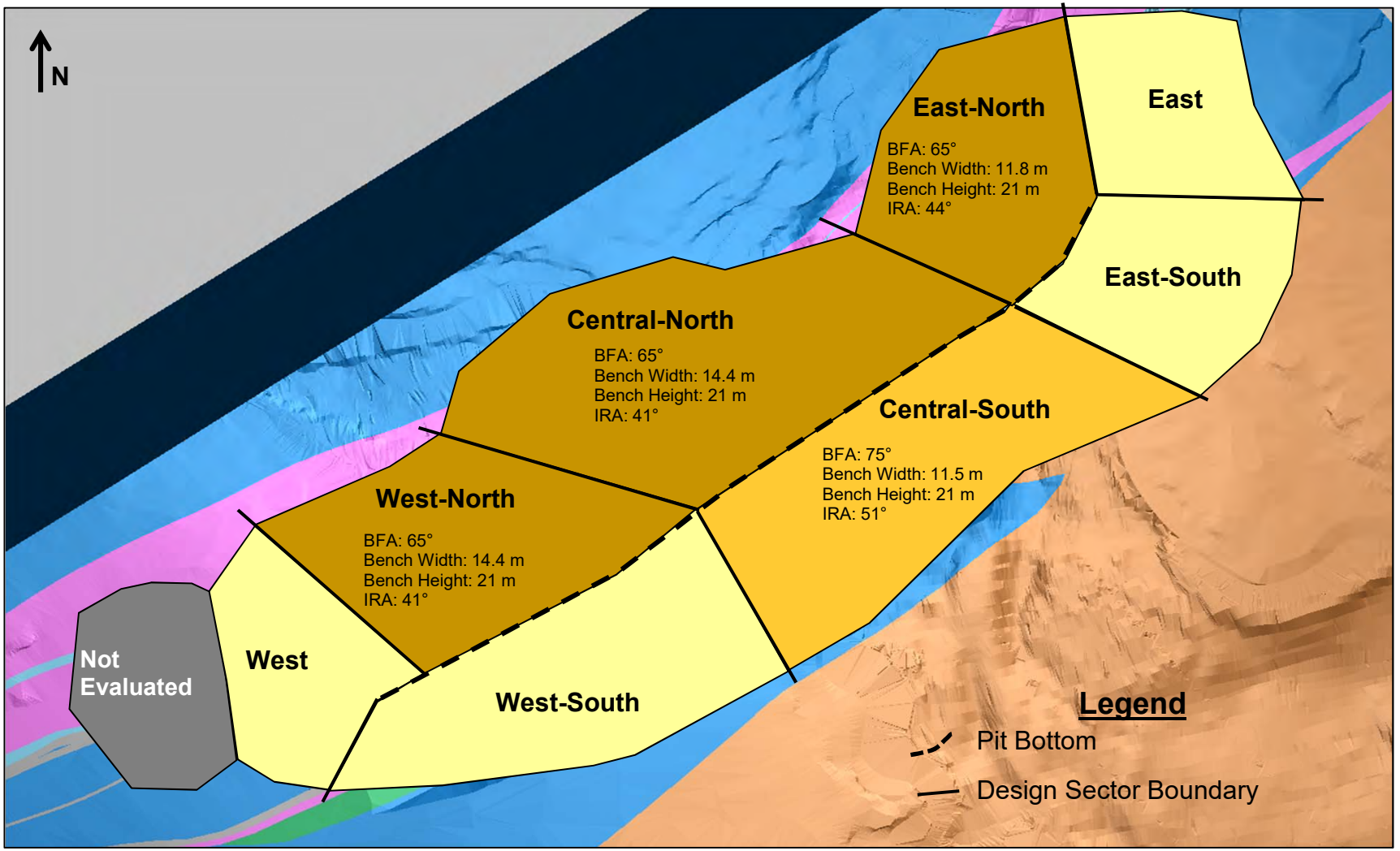

Base Bench Geometry

BFA: 75°
Bench Width: 10 m
Bench Height: 21 m
IRA: 53°

Bench Geometry Controlled by Bench-Scale Failures

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AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

SUMMARY OF OPEN PIT SLOPE RECOMMENDATIONS

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P/A NO. NB101-622/3

REF. NO. 3

FIGURE 5.1

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The achievable slope geometry varies from sector to sector. Some of the issues that are expected to influence the open pit wall performance for the Whale Tail Pit include:

- Planar failures involving the foliation (Joint Set A) are expected to limit the achievable bench face angle in the East-North, Central-North and West-North sectors. The design BFA has been reduced and the design bench width increased to manage these failures. In the Central-North and West-North sectors, where the foliation is relatively shallow dipping, this has resulted in an IRA of 41°.
- Planar failures involving a dominant structural orientation (Joint Set B) are expected to limit the achievable bench face angle in the Central-South sector. The design BFA has been reduced and the design bench width increased to manage these failures.
- Toppling failure involving the foliation may locally limit the achievable slope geometry in the East-South and West-South sectors.
- The Ultramafics are of variable and locally reduced rock mass quality. The Ultramafics are expected to be susceptible to ravelling and the bench width may need to be increased within significant exposures of this unit (e.g. exposures of greater than 40 m, or more than two benches in height).
- Limited depressurization may be necessary to achieve the recommended inter-ramp slope configuration in the Central-South sector. The slope in this sector is likely within talik and increased groundwater recharge is expected. Limited depressurisation may also be necessary in other sectors with significant exposures of Ultramafics (i.e. the East-South, East, West and West-South sectors) if this unit is within unfrozen ground. Depressurisation of the slope in these sectors is expected to be less important than depressurisation of the slope in the Central-South sector.
- The achievable slope geometry is sensitive to the strength of the foliation (Joint Set A) and the strike of the slope.

The above considerations underscore the importance of maintaining flexibility in the mine plan to ensure that production delays and/or adjustments to the slope geometry can be accommodated. This is expected to be particularly true for the East-North, Central-North, West-North and Central-South sectors.

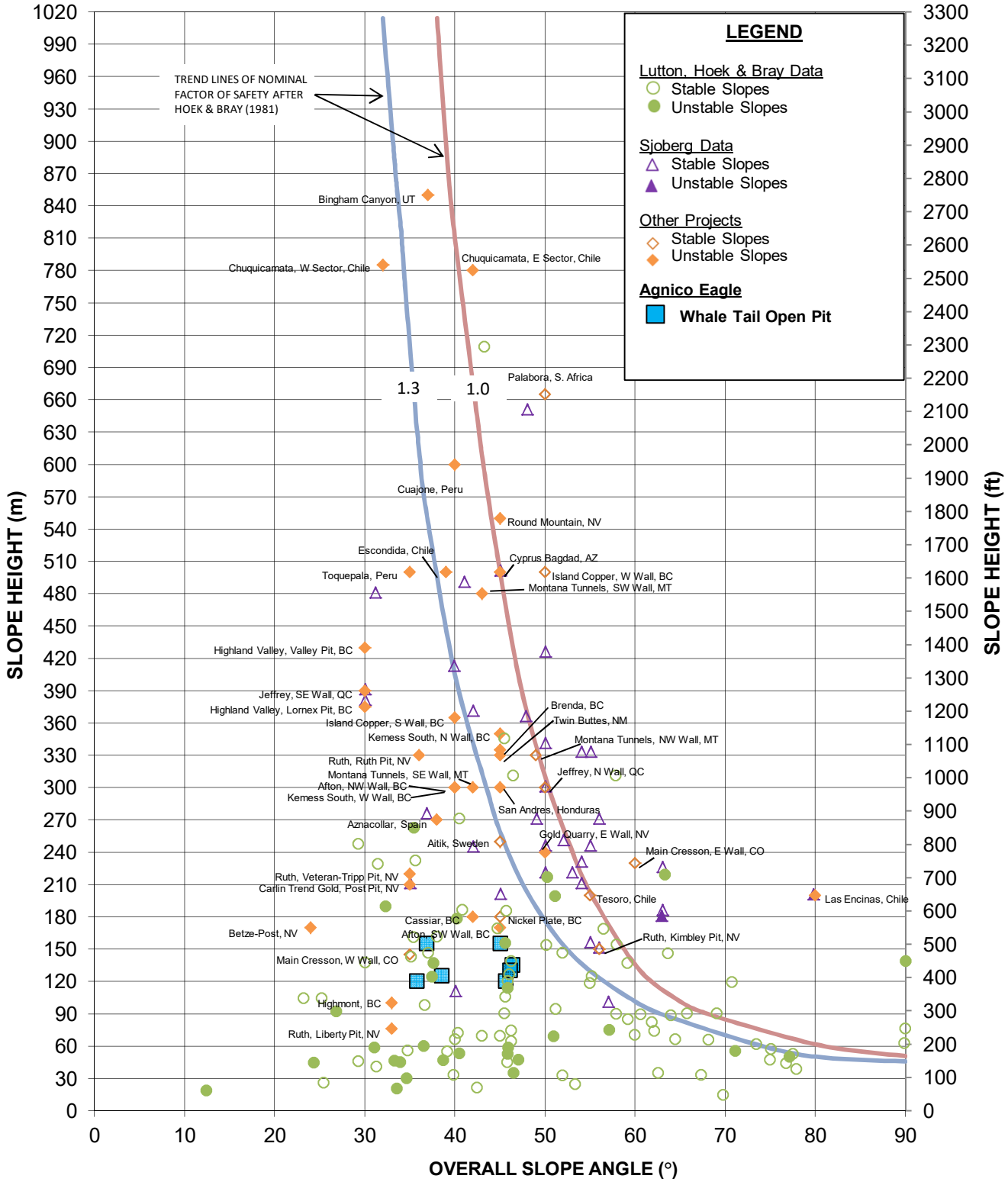
5.5 PRECEDENT PRACTICE

Pit slope stability and performance depends on a variety of site-specific factors (geological structure, alteration rock strength, groundwater conditions, discontinuity characteristics and orientation, pit geometry, blasting practices, stress conditions, climatic conditions and time), which makes it difficult to provide direct comparisons with other operations. However, it is still valuable to review both the successes and wall performance issues encountered at other open pit operations in order to recognize opportunities and potential constraints for the proposed open pit development.

A summary plot of pit depth vs. slope angles achieved in various operations is illustrated on Figure 5.2. The plot includes the inferred extension to the Lutton, Hoek & Bray Stability Line up to a slope height of 1000 m (Lutton, 1970; Hoek and Bray, 1981; Sjoberg, 1996; Read and Stacey, 2009). This plot is most relevant for deep open pits (e.g. depths > 400 m) but is still a useful point of comparison for shallower open pits, such as the proposed Whale Tail Pit. The proposed

slope geometries for all sectors plot on or below the FoS 1.3 curve. This result suggests that the recommended slopes are reasonable and achievable from a precedent practice perspective.

It is important to note that most open pit operations have encountered some form of slope instability and that it is likely that some areas of the pit slopes in the Whale Tail Pit will require modifications to the slope geometry in response to instabilities. As such, mine plans should remain flexible.



NOTES:

1. ORIGINAL DATA POINTS AFTER LUTTON (1970), HOEK AND BRAY (1981), AND SJOBERG (1996).
2. ADDITIONAL DATA FROM KNIGHT PIÉSOLD PROJECTS AND OTHERS ALSO INCLUDED.

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WHALE TAIL PIT

SLOPE HEIGHT VERSUS SLOPE ANGLE PRECEDENTS FOR HARD ROCK SLOPES

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FIGURE 5.2 | REV 0

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6 – OPERATIONAL CONSIDERATIONS

6.1 GENERAL

The proposed pit slope design is influenced by several operational considerations including those discussed below.

6.2 OPERATIONAL CONSIDERATIONS

6.2.1 Blasting Practices

Slope instabilities at open pit mines are often triggered by the progressive deterioration of the bench face. Such deterioration starts with the detachment of small rock blocks (key blocks), which are defined by rock mass discontinuities. Under these circumstances, the preservation of rock mass integrity during mining is important for the development of the steepest possible pit slopes. Low damage controlled blasting methods will facilitate steeper final pit slopes.

The application of good controlled blasting practices is recommended for the development of all inter-ramp slopes and will be important within zones of reduced rock mass quality. Blasting practices that employ smaller diameter blast holes and closer spacing is recommended, especially along the final pit walls. Trial blasts are recommended wherever there is a substantial change in rock mass conditions.

Bench crest and face scaling should be conducted after blasting when equipment access is available to these areas. Rock fall cleanup should be performed as much as possible throughout the mine life.

6.2.2 Pit Dewatering and Slope Depressurization

A portion of the proposed Whale Tail open pit is expected to be located within talik (Figure 4.3). The phreatic surface that will develop behind the pit walls should be monitored over the course of the mine life and depressurization implemented on an as-needed basis. Any depressurisation activities are expected to focus on the Central-South sector but may be required in other areas on a case-by-case basis.

Surface water diversion measures should be implemented to limit inflows to the open pits, especially during the spring thaw.

6.2.3 Permafrost

Excavation of the open pits will result in the local thawing of the permafrost in the vicinity of the pit slopes. Subsequent freezing and thawing within this active layer can be expected to result in damage to the near-surface rock mass and will likely result in ravelling and/or bench-scale failures. The catch benches should be cleaned in the fall to accommodate increased ravelling during the spring thaw.

AEM's experience at the Meadowbank Mine suggests that ravelling and/or bench-scale failures associated with freezing and thawing will primarily be a concern for slopes excavated within talik.

6.2.4 Slope Monitoring Program

A proactive slope monitoring program is recommended for all stages of pit development. The monitoring program should include geotechnical and tension crack mapping, as well as a suitable surface displacement monitoring program.

The slope monitoring program should also consider critical structural features, recognized instabilities, cracks along haul ramps etc.

Sufficient staffing resources should be allocated to collect, process and interpret the geotechnical monitoring data on a regular basis. The timely identification of accelerated movements from surface displacement monitoring and tension cracks will be important to managing any instability. The status of highwall stability should be compiled and discussed regularly with operations personnel. These reports will also help mine engineering staff to optimize final pit slopes and improve the effectiveness of the controlled blasting program.

7 – SUMMARY

7.1 CONCLUSIONS

Pit slope design recommendations for the proposed Whale Tail Pit have been provided in terms of achievable bench face, inter-ramp and overall slope angles.

The provided pit slope design recommendations are based upon the geological, structural, geomechanical and hydrogeological data available as of September 2015, as well as the September 30, 2015 open pit design provided by AEM. The completed stability analyses and a review of practices at other operations suggest that the recommended geometries are reasonable and appropriate. To achieve these slope angles, the design assumes that controlled blasting and geotechnical monitoring will be undertaken, along with an on-going commitment to geomechanical data collection and analysis. Maintaining flexibility in the mine plan will be important to accommodate any slope stability issues.

8 – REFERENCES

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9 – CERTIFICATION

This report was prepared and reviewed by the undersigned.

Prepared:

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Geological Engineering

Reviewed:

Ben Peacock, P.Eng.
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
R.A. MERCER
LICENSEE
NWT/NU

Reviewed:

Robert A. Mercer, Ph.D., P.Eng.
Managing Principal, North Bay

ISSUED FOR PERMITTING

AGNICO EAGLE DATE : April 29, 2016

PERMIT TO PRACTICE
KNIGHT PIESOLD LTD.
Signature
Date April 29/2016
PERMIT NUMBER: P 547
The Association of Professional Engineers, Geologists and Geophysicists of NWT/NU

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Approval that this document adheres to Knight Piésold Quality Systems:

The following appendices were previously issued with the KP Report NB101-622/3-2 Rev 1 entitled "6108-MEM-001_R0 Updated Scoping Level Open Pit Slope Design", dated December 11, 2015.

APPENDIX A

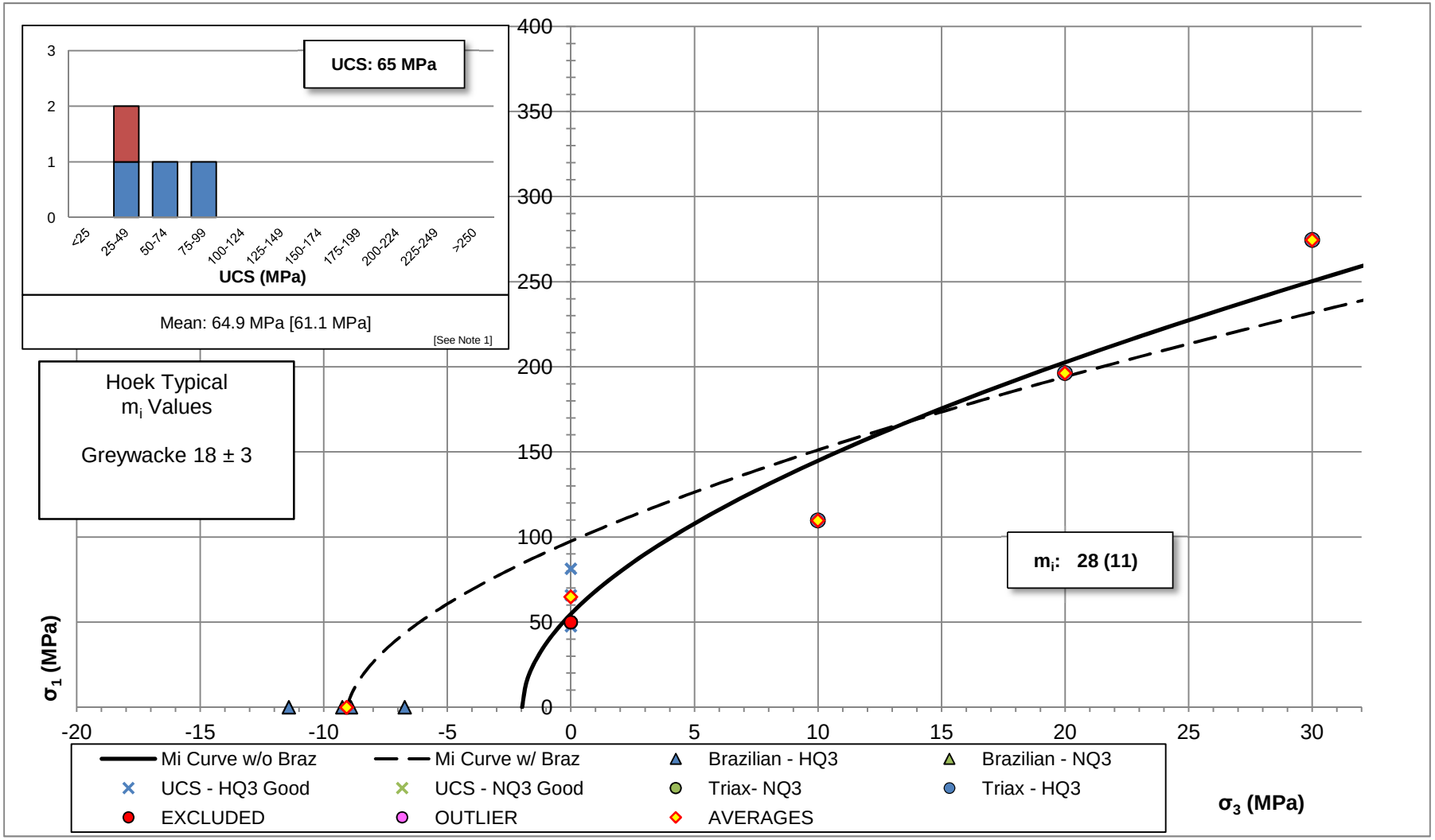
LAB TESTING RESULTS

Appendix A1 UCS and Triaxial Results by Rock Type
Appendix A2 Direct Shear Results by Rock Type

APPENDIX A1

UCS AND TRIAXIAL RESULTS BY ROCK TYPE

(Pages A1-1 to A1-4)



NOTES:

1. MEAN UCS EXCLUDES POOR (RED) RESULTS. MEAN UCS IN SQUARE BRACKETS INCLUDES ALL DATA.
2. m_i DETERMINED USING AVERAGE RESULTS (EX. BRAZILIANS) EXCLUDING OUTLYING RESULTS.
3. m_i INSIDE BRACKETS INCLUDES BRAZILIAN AVERAGE.
4. LAB TESTING COMPLETED BY AMEC (OCT 1, 2015).
5. THE RESULTS OF THE BRAZILIAN TESTS HAVE BEEN REDUCED TO 70% OF THEIR ORIGINAL VALUE (BEWICK ET. AL., 2011).

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	ATJ	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

TRIAXIAL AND UCS RESULTS FOR GREYWACKE

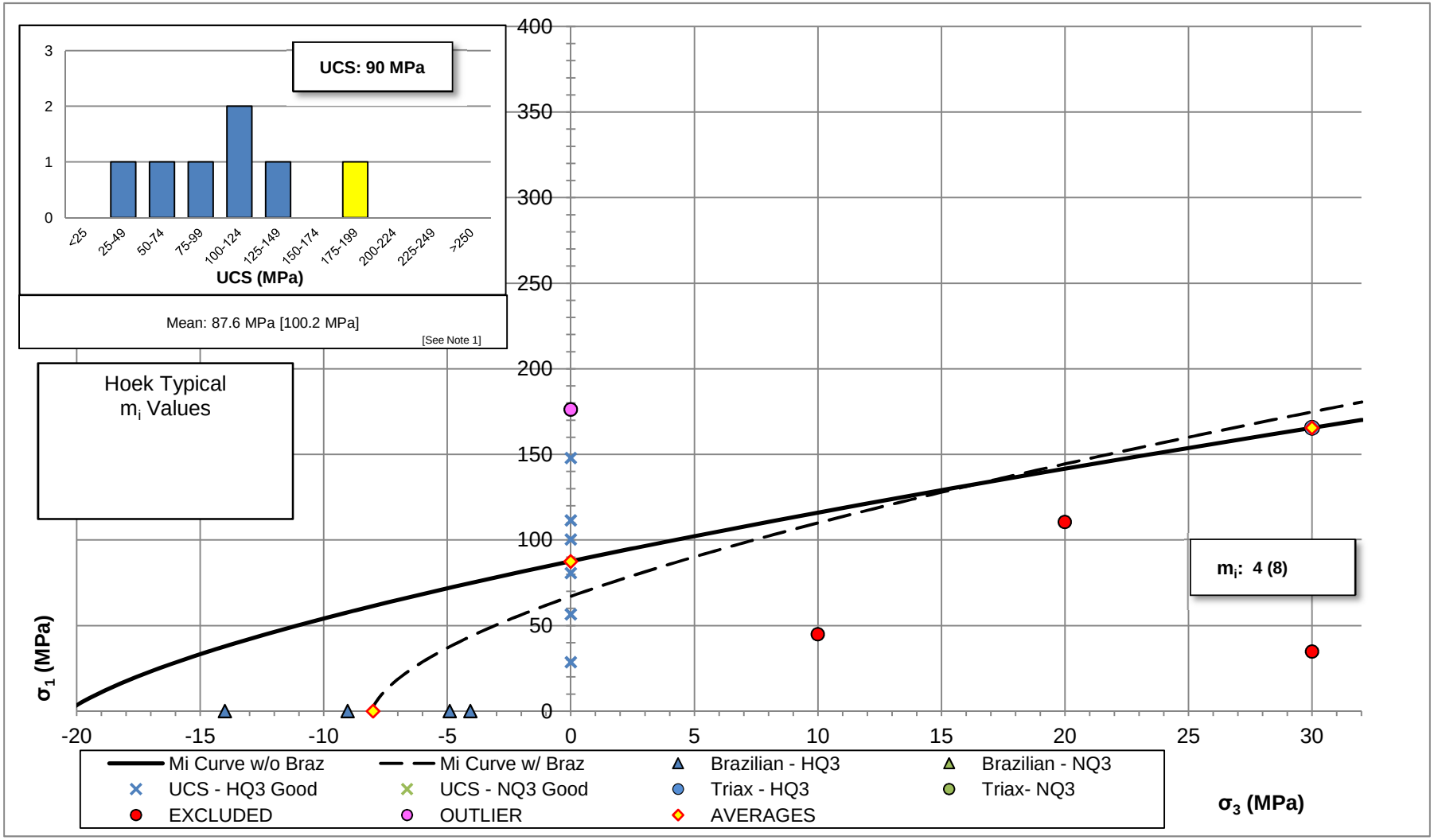
Knight Piésold CONSULTING

P/A NO. NB101-622/3

REF. NO. 2

FIGURE A1.1

REV 0



NOTES:

1. MEAN UCS EXCLUDES OUTLYING (YELLOW) RESULTS AND POOR (RED) RESULTS. MEAN UCS IN SQUARE BRACKETS INCLUDES ALL DATA.
2. m_i DETERMINED USING AVERAGE RESULTS (EX. BRAZILIANS) EXCLUDING OUTLYING RESULTS.
3. m_i INSIDE BRACKETS INCLUDES BRAZILIAN AVERAGE.
4. LAB TESTING COMPLETED BY AMEC (OCT 1, 2015).
5. THE RESULTS OF THE BRAZILIAN TESTS HAVE BEEN REDUCED TO 70% OF THEIR ORIGINAL VALUE (BEWICK ET. AL., 2011).

REV	DATE	DESCRIPTION	PREP'D	RVW'D
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AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

TRIAXIAL AND UCS RESULTS FOR ALTERED ULTRAMAFICS

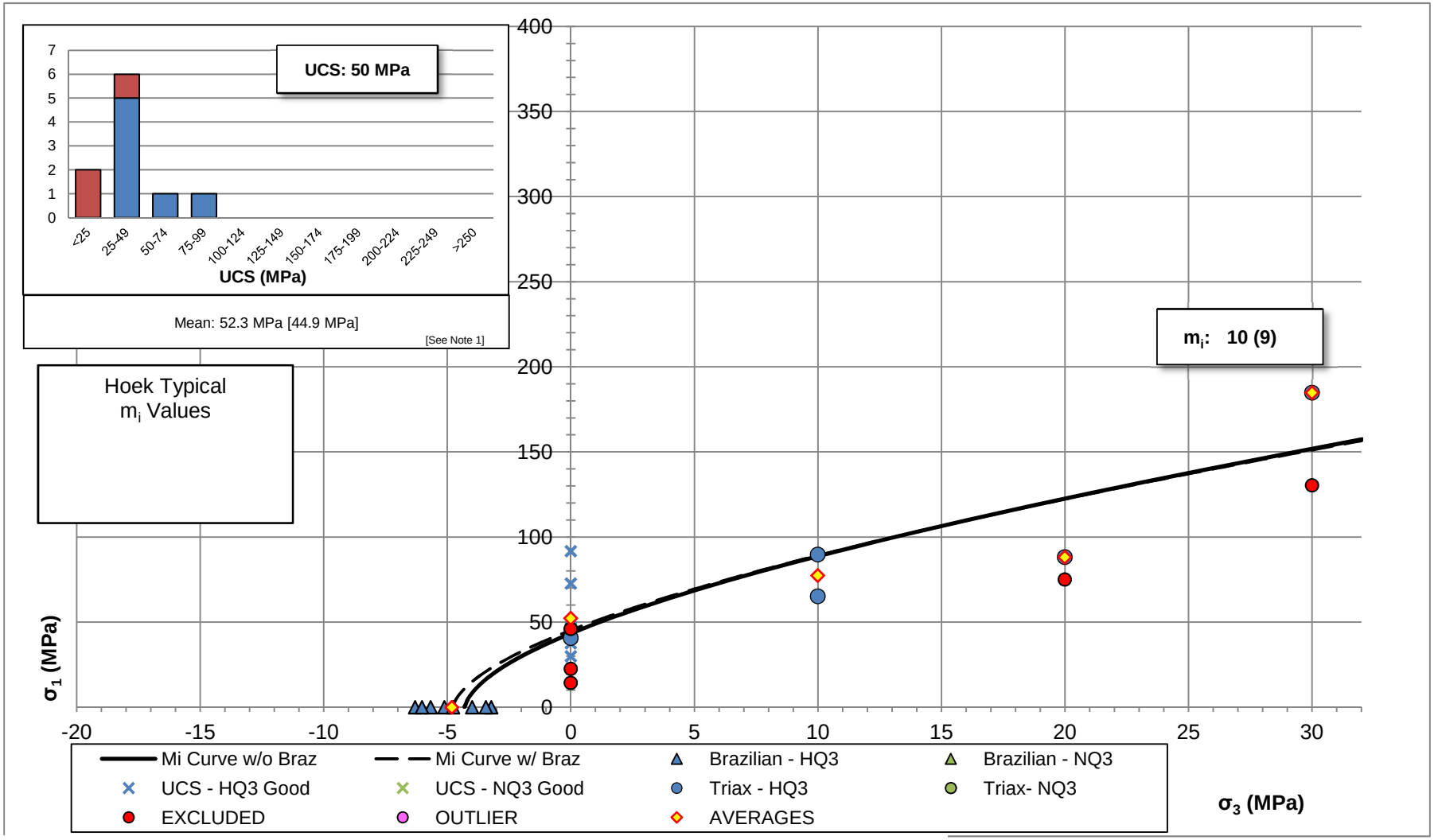
Knight Piésold CONSULTING

P/A NO. NB101-622/3

REF. NO. 2

FIGURE A1.2

REV 0



NOTES:

1. MEAN UCS EXCLUDES POOR (RED) RESULTS. MEAN UCS IN SQUARE BRACKETS INCLUDES ALL DATA.
2. m$_i$ DETERMINED USING AVERAGE RESULTS (EX. BRAZILIANS) EXCLUDING OUTLYING RESULTS.
3. m$_i$ INSIDE BRACKETS INCLUDES BRAZILIAN AVERAGE.
4. LAB TESTING COMPLETED BY AMEC (OCT 1, 2015).
5. THE RESULTS OF THE BRAZILIAN TESTS HAVE BEEN REDUCED TO 70% OF THEIR ORIGINAL VALUE (BEWICK ET. AL., 2011).

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	ATJ	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

TRIAXIAL AND UCS RESULTS FOR ULTRAMAFICS

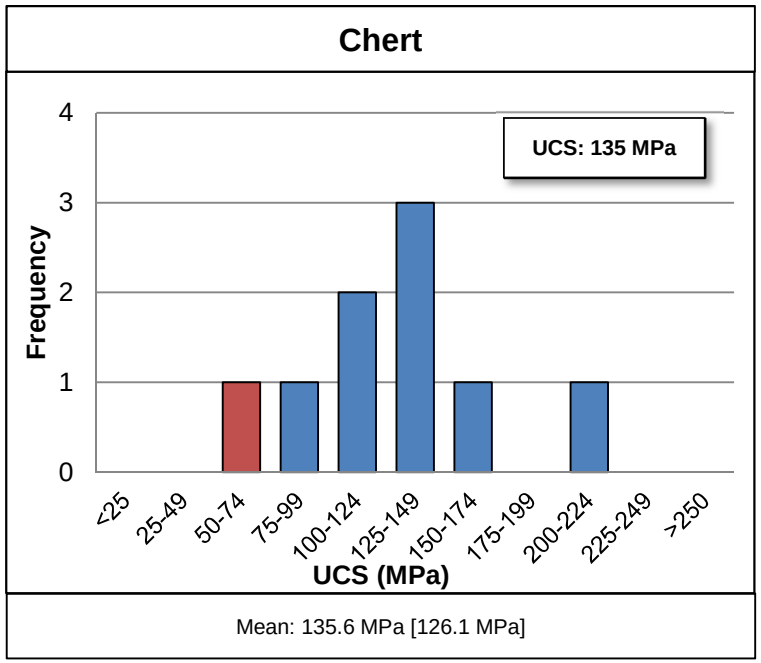
Knight Piésold CONSULTING

P/A NO. NB101-622/3

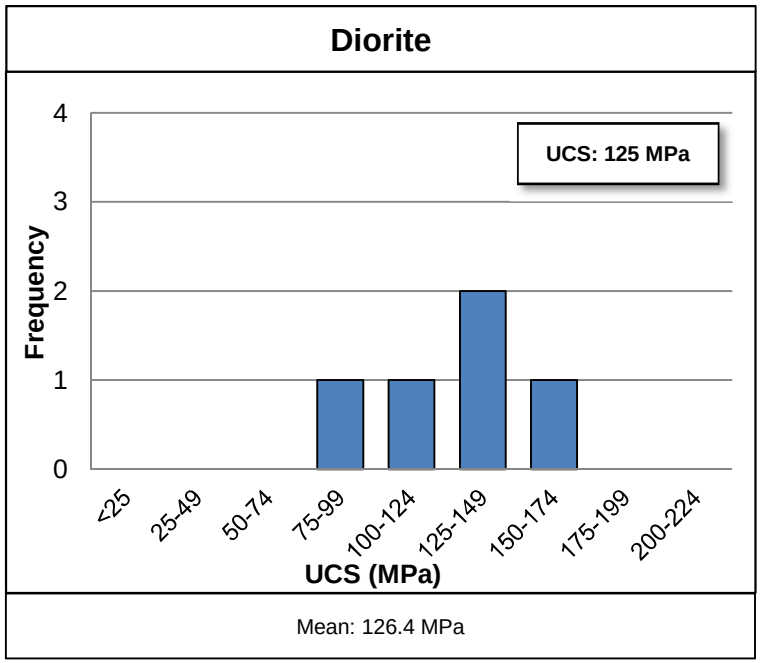
REF. NO. 2

FIGURE A1.3

REV 0



Mean: 135.6 MPa [126.1 MPa]



Mean: 126.4 MPa

NOTES:
1. MEAN UCS EXCLUDES POOR (RED) RESULTS. MEAN UCS IN SQUARE BRACKETS INCLUDES ALL DATA.
2. LAB TESTING COMPLETED BY AMEC (OCT 1, 2015).

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

UCS RESULTS FOR CHERT AND DIORITE

Knight Piésold CONSULTING

P/A NO. NB101-622/3

REF. NO. 2

FIGURE A1.4

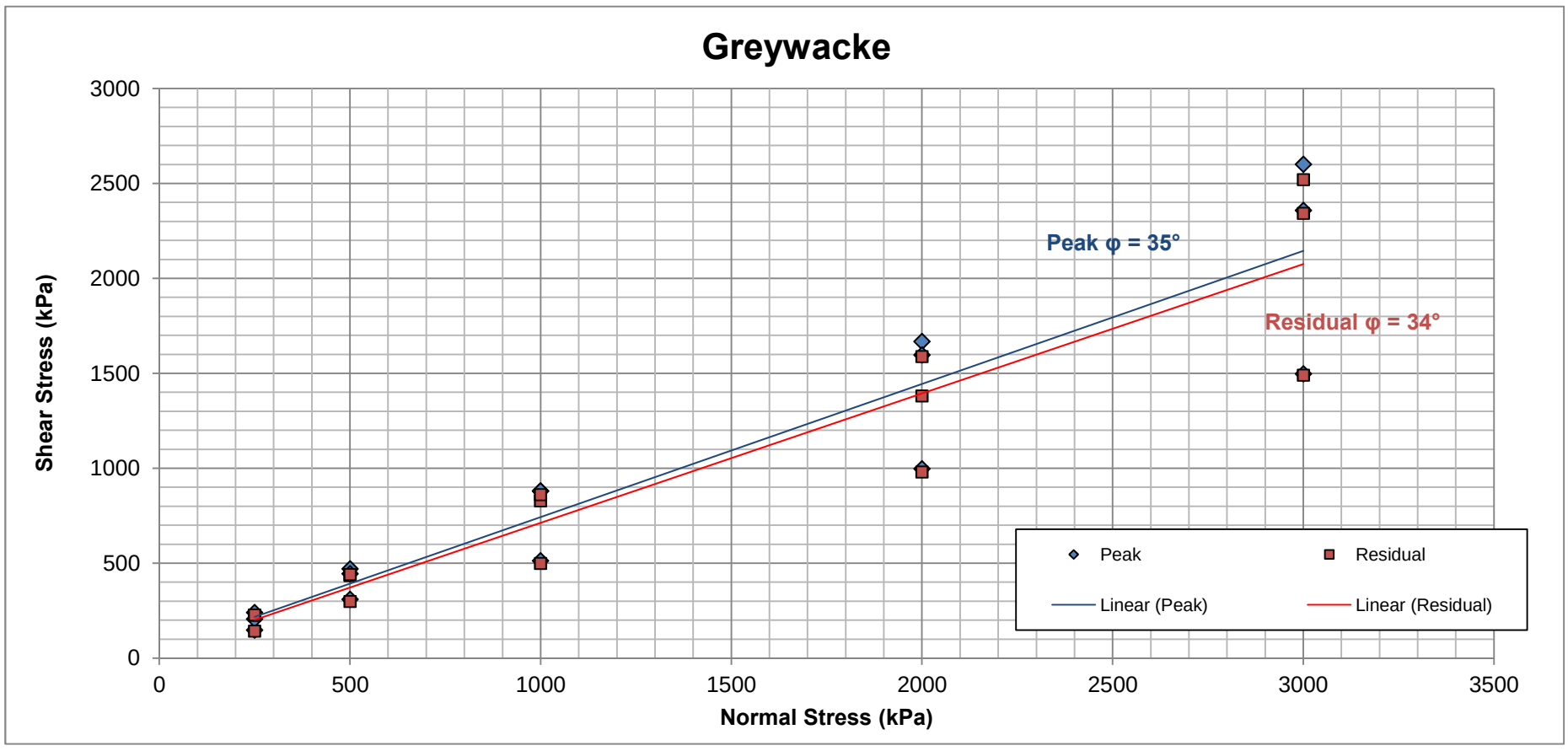
REV 0

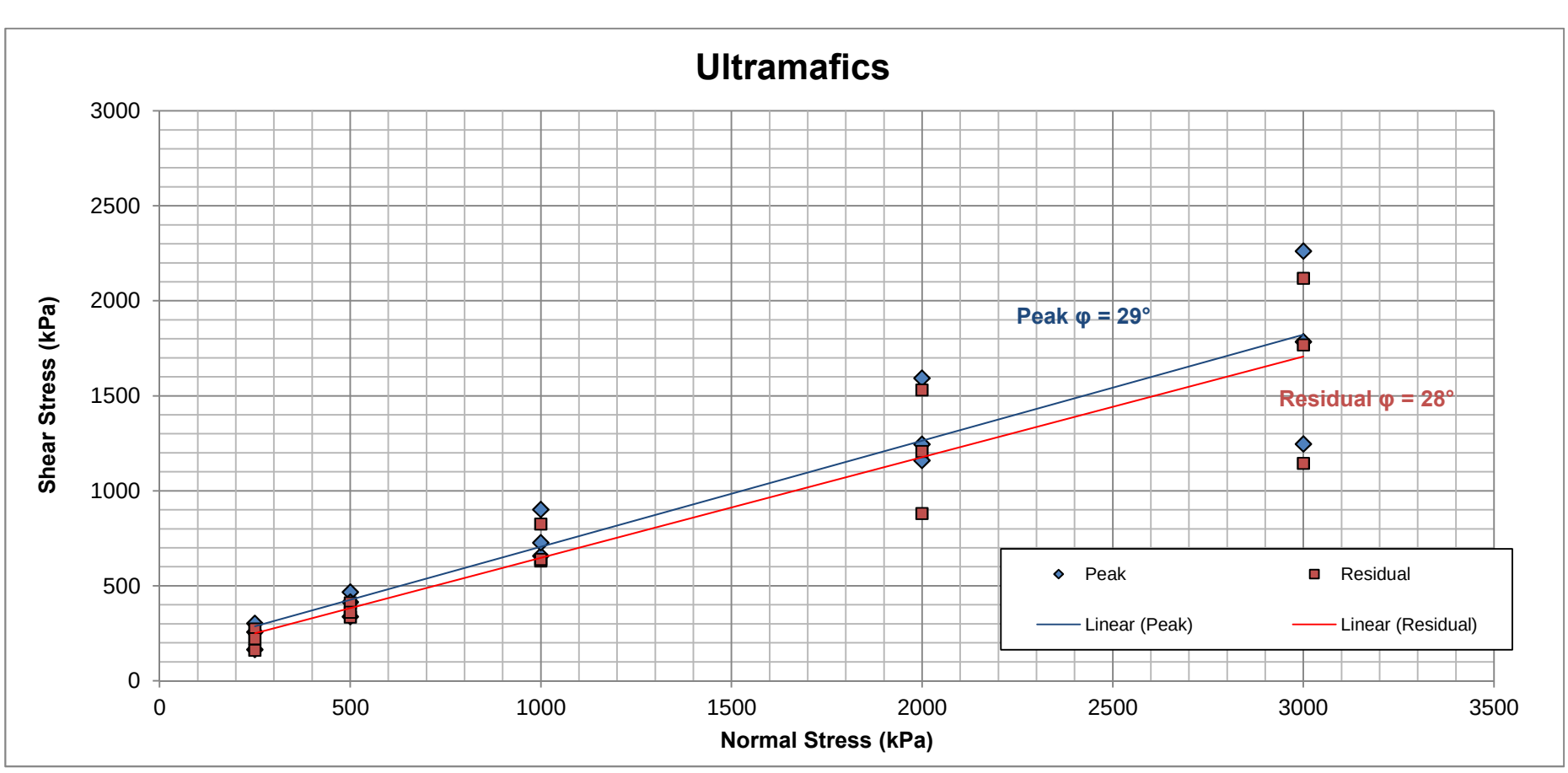
REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	ATJ	BDP

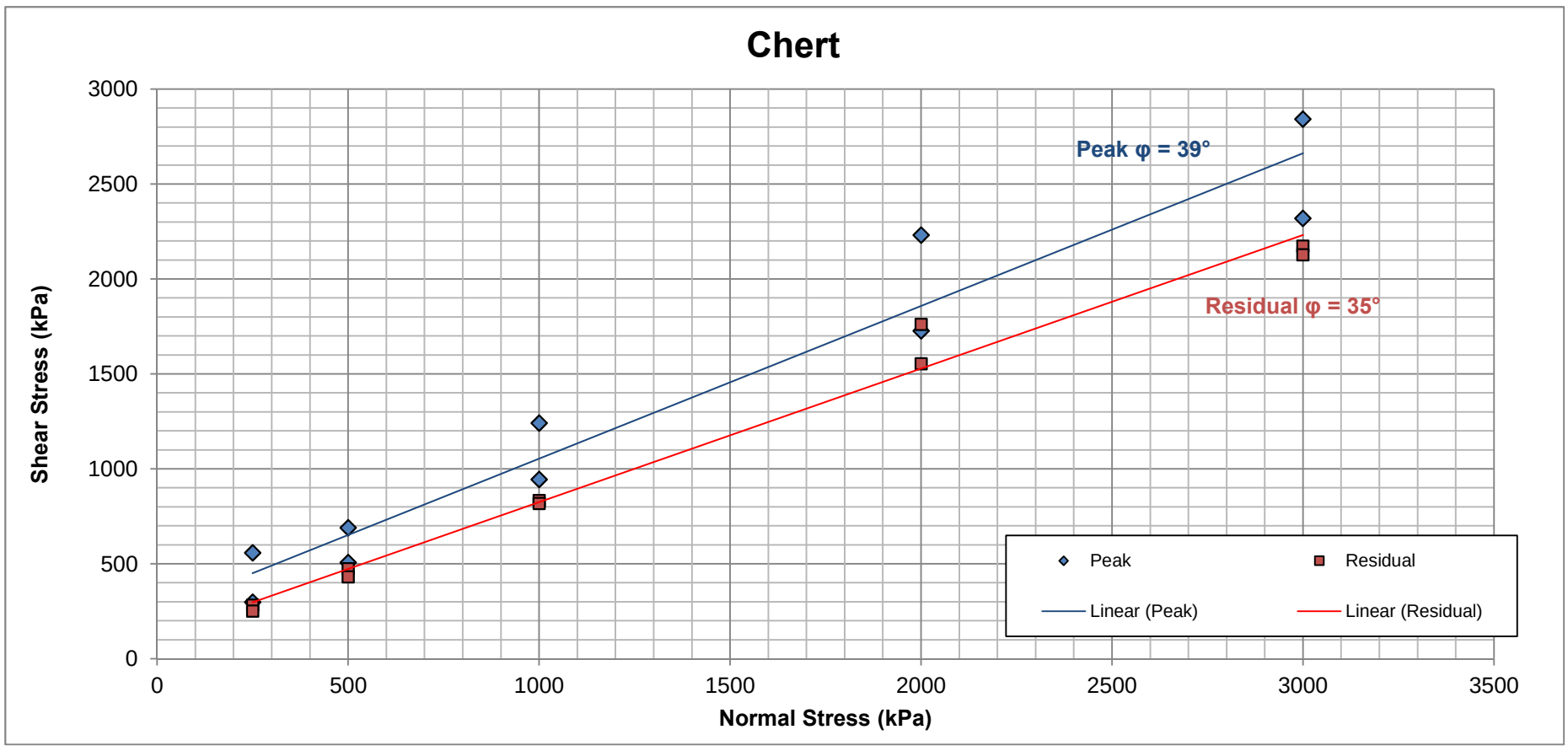
APPENDIX A2

DIRECT SHEAR RESULTS BY ROCK TYPE

(Page A2-1)







NOTES:
1. LAB TESTING COMPLETED BY AMEC (OCT 1, 2015).

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	ATJ	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

DIRECT SHEAR RESULTS BY ROCK TYPE

Knight Piésold CONSULTING

P/A NO. NB101-622/3

REF. NO. 2

FIGURE A2.1

REV 0

APPENDIX B

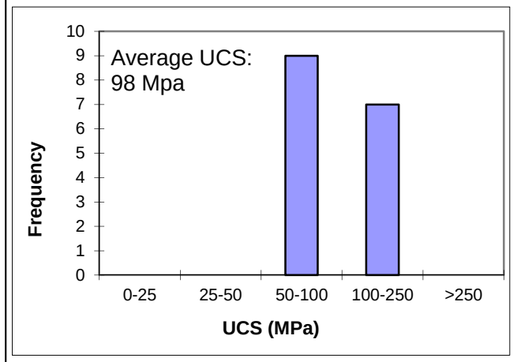
RMR HISTOGRAMS BY ROCK TYPE

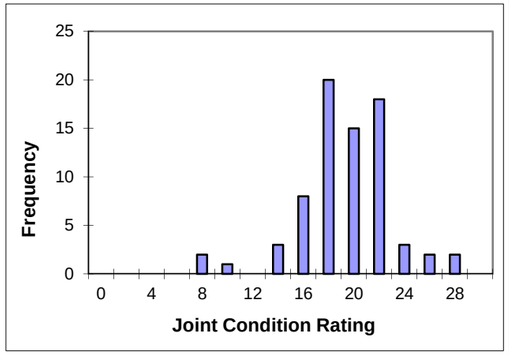
Appendix B1 RMR Histograms by Rock Type
Appendix B2 RMR Histograms by Length by Rock Type

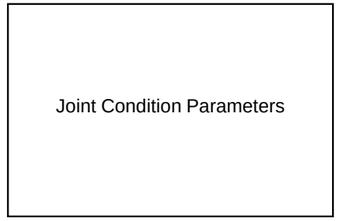
APPENDIX B1

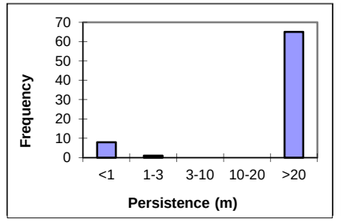
RMR HISTOGRAMS BY ROCK TYPE

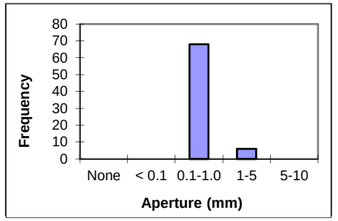
(Pages B1-1 to B1-6)

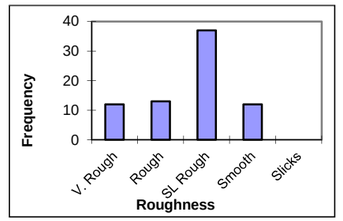


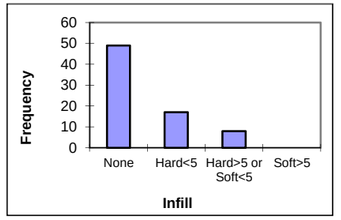


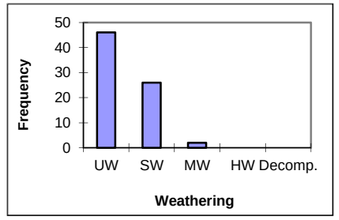


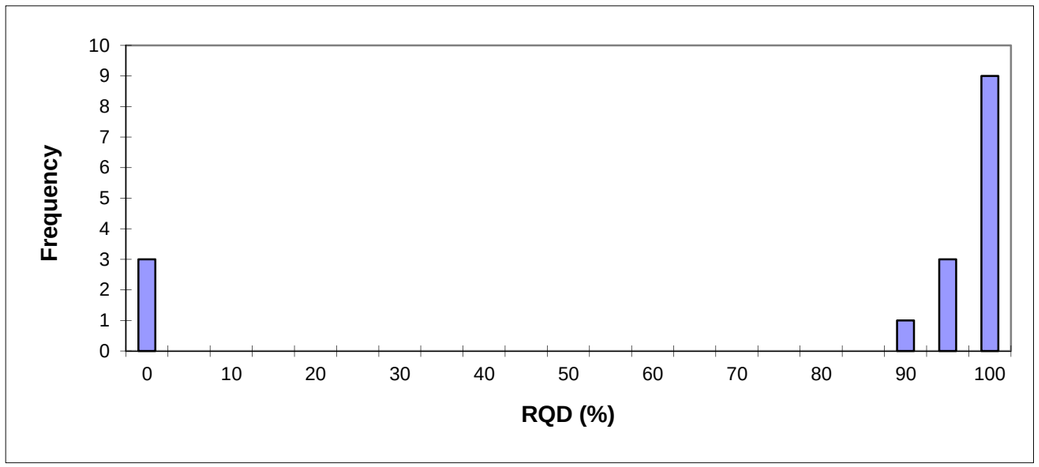


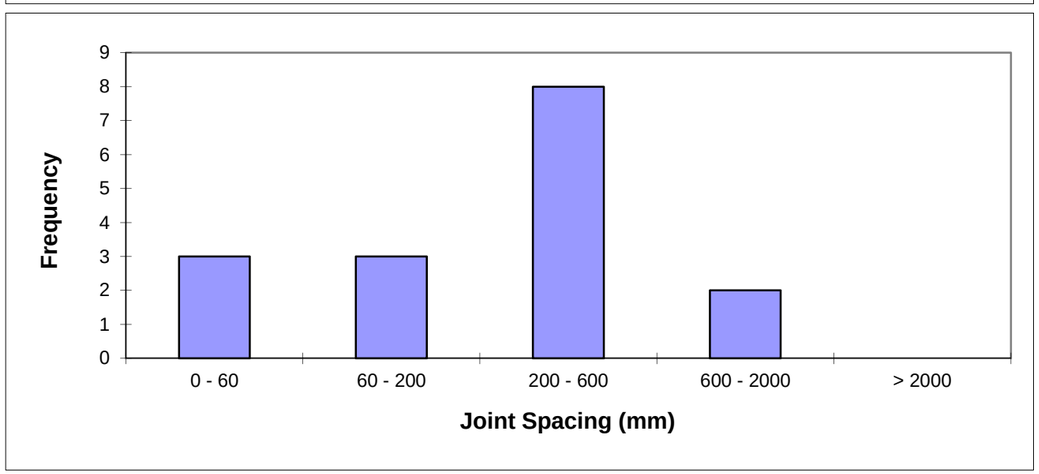


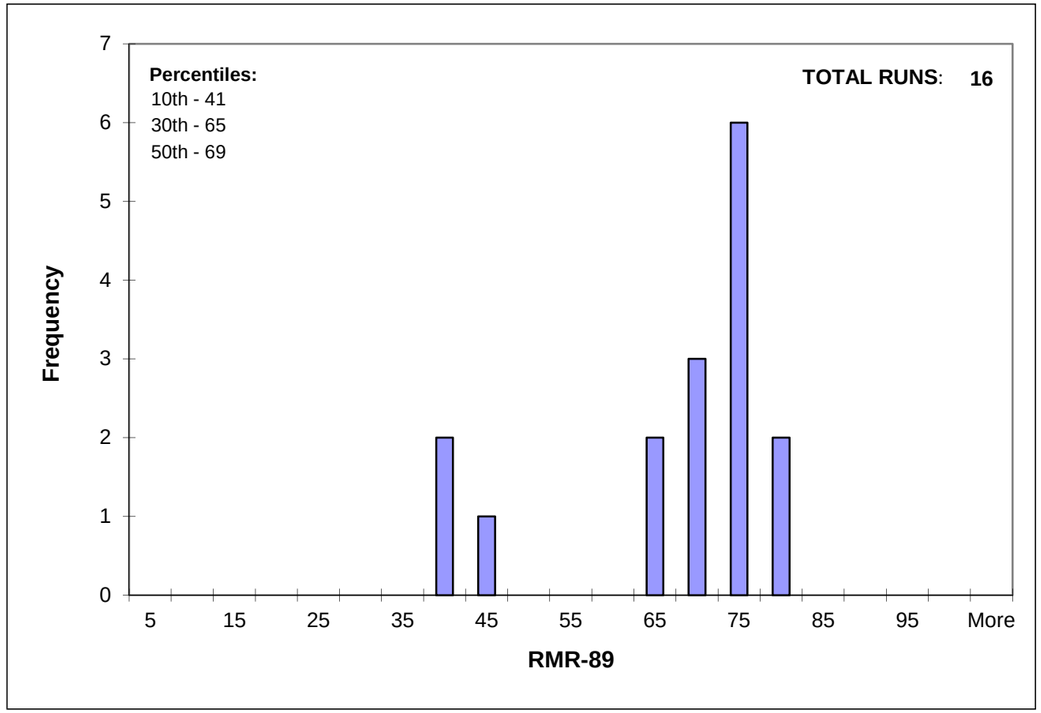












NOTES:

1. BINS INCLUDE PREVIOUS RANGE (I.E., BIN 60 INCLUDES VALUES FROM 55-60).
2. RQD, RMR89, JOINT SPACING, AND UCS ARE RUN BASED PARAMETERS WHILE JOINT CONDITION RATING AND PARAMETERS ARE BASED ON INDIVIDUAL DISCONTINUITIES WITHIN A LOGGING RUN.
3. MINIMUM RMR VALUE OF EACH RUN DISPLAYED.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	MJR	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

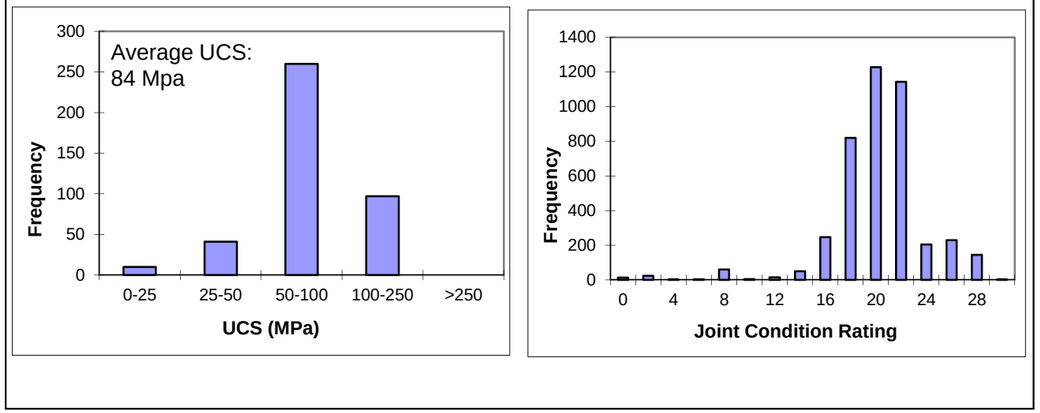
WHALE TAIL PIT

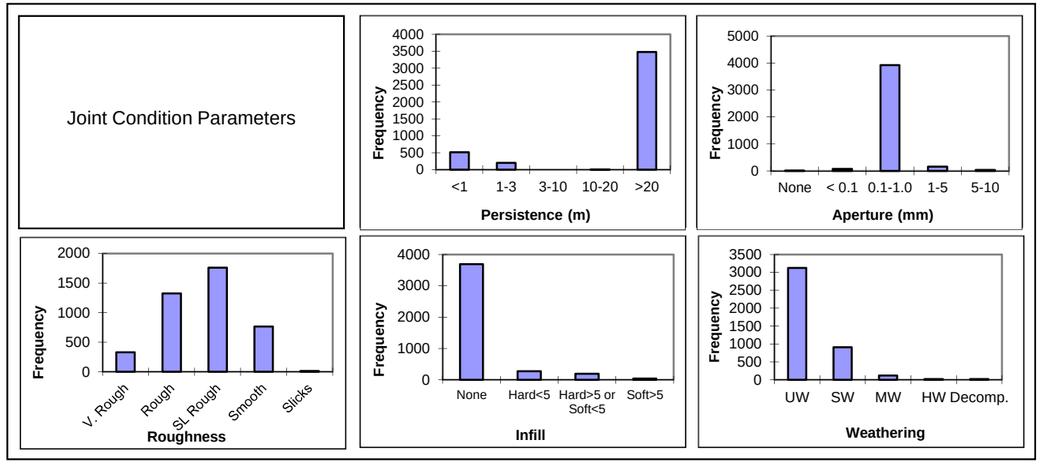
RMR89 PARAMETER HISTOGRAMS FOR DIORITE (I2)

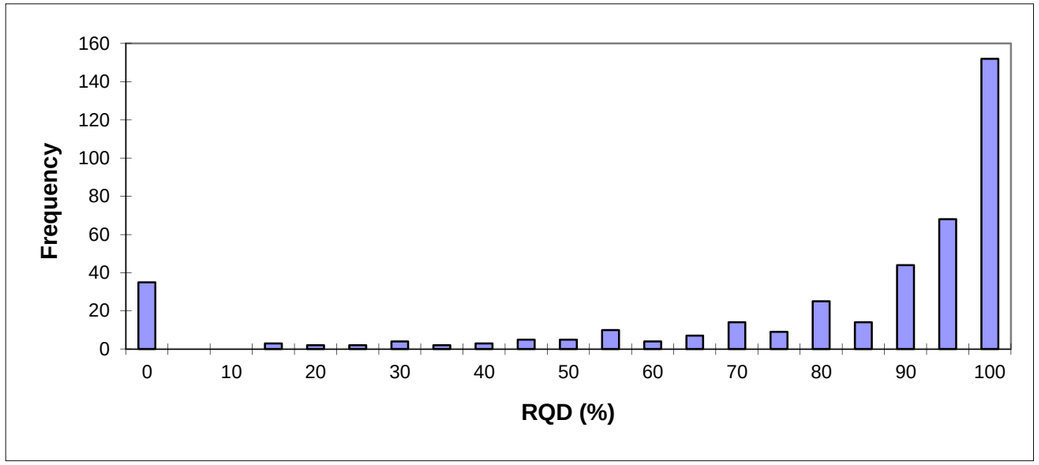
Knight Piésold CONSULTING

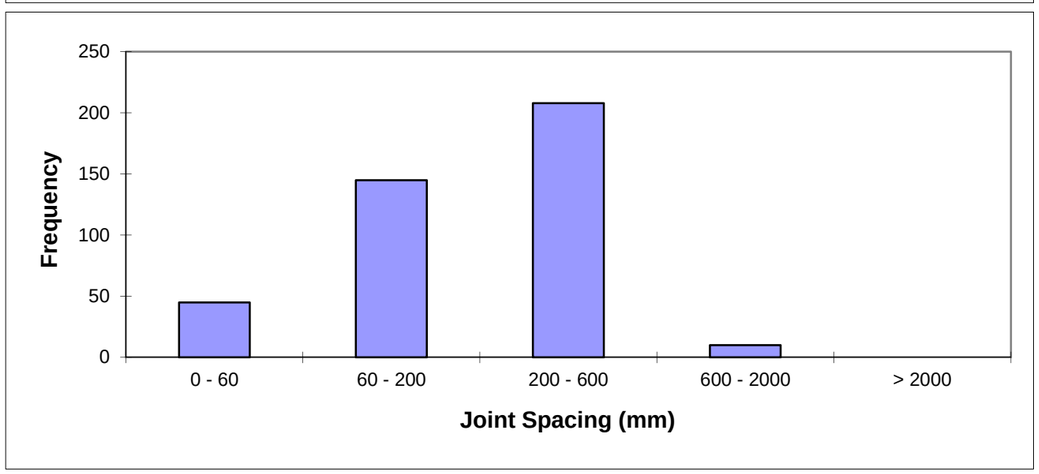
P/A NO. NB101-622/3 | REF. NO. 2

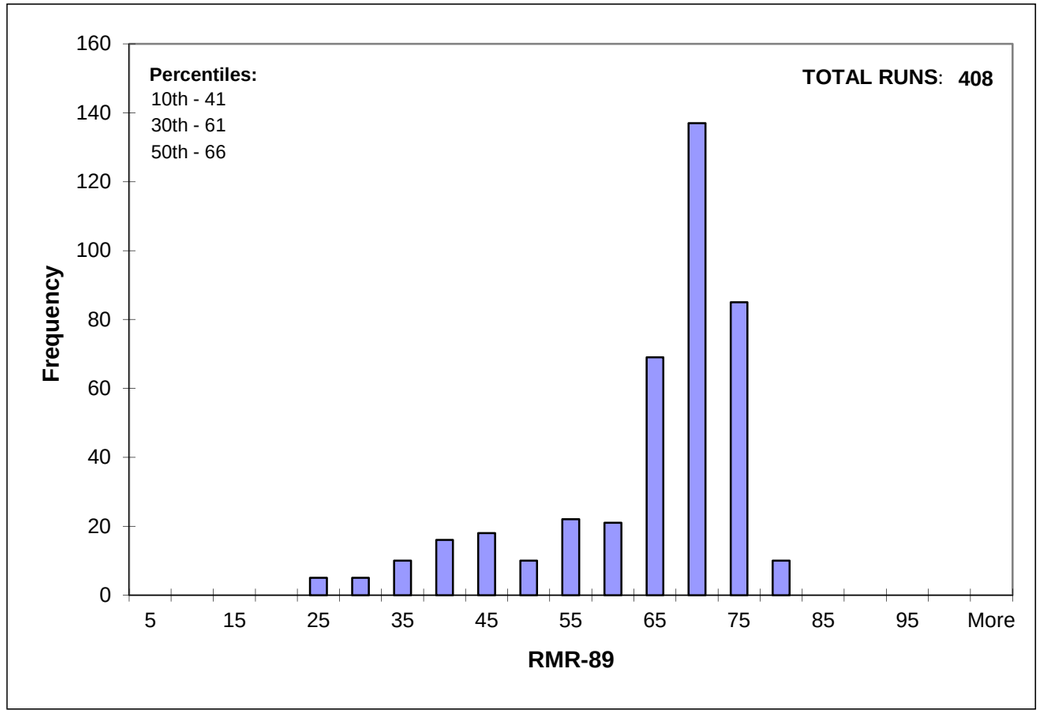
FIGURE B1.1 | REV 0











NOTES:

1. BINS INCLUDE PREVIOUS RANGE (I.E., BIN 60 INCLUDES VALUES FROM 55-60).
2. RQD, RMR89, JOINT SPACING, AND UCS ARE RUN BASED PARAMETERS WHILE JOINT CONDITION RATING AND PARAMETERS ARE BASED ON INDIVIDUAL DISCONTINUITIES WITHIN A LOGGING RUN.
3. MINIMUM RMR VALUE OF EACH RUN DISPLAYED.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	MJR	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

RMR89 PARAMETER HISTOGRAMS FOR GREYWACKE (S3, S6 & V3)

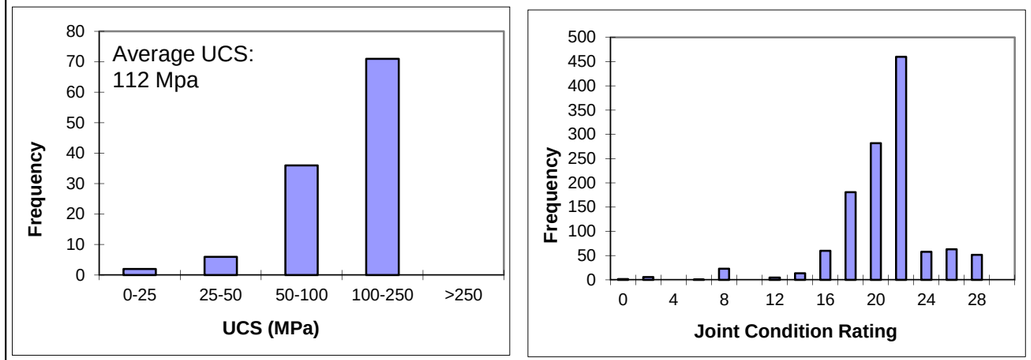
Knight Piésold CONSULTING

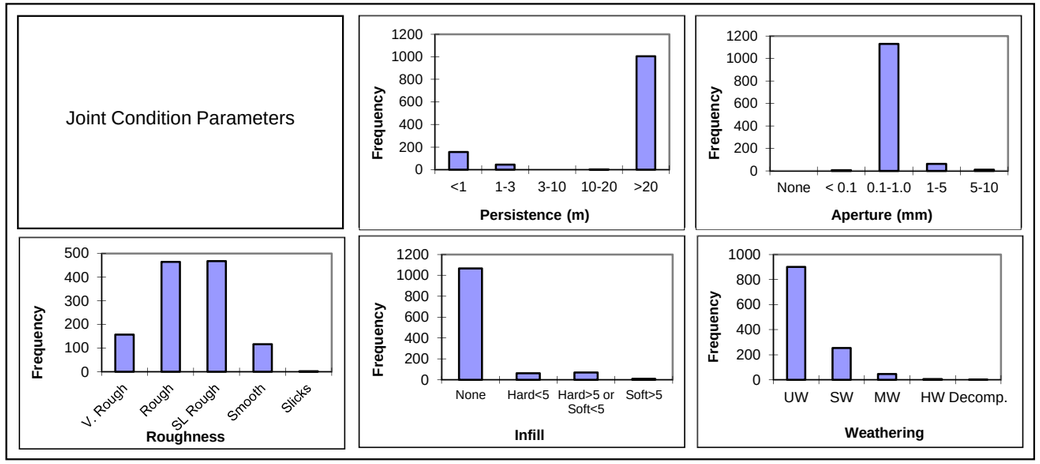
P/A NO. NB101-622/3

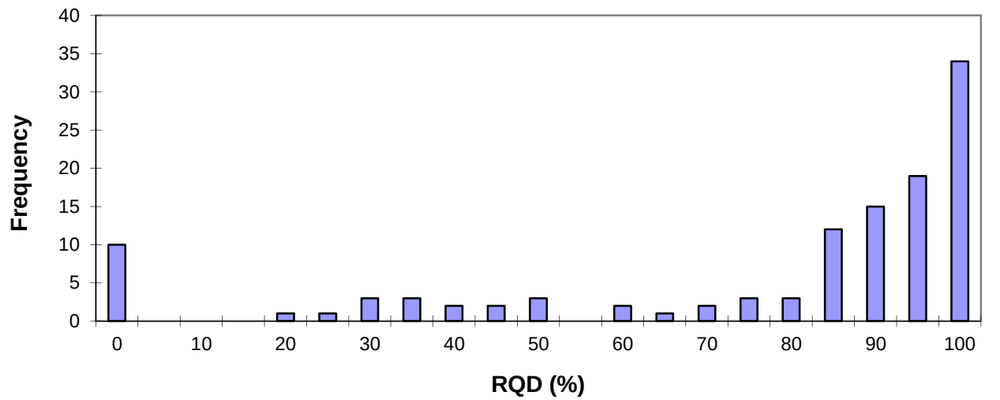
REF. NO. 2

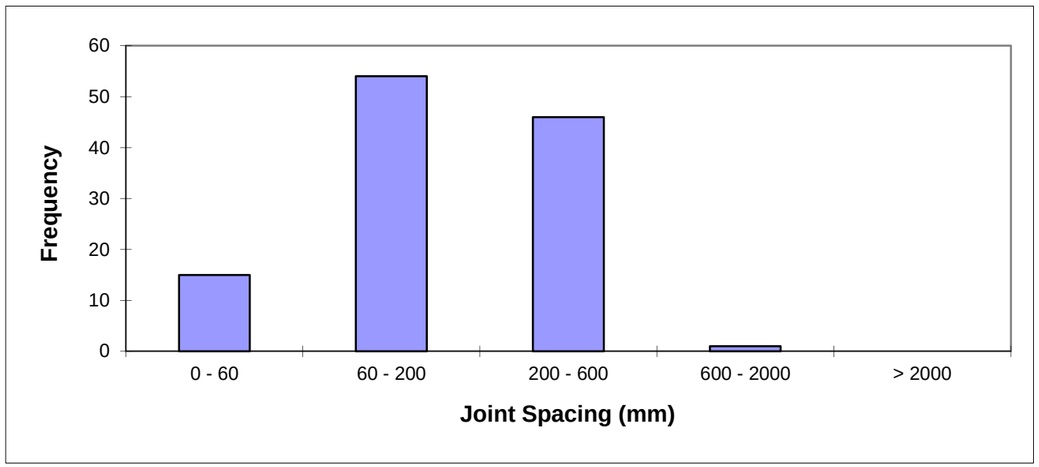
FIGURE B1.2

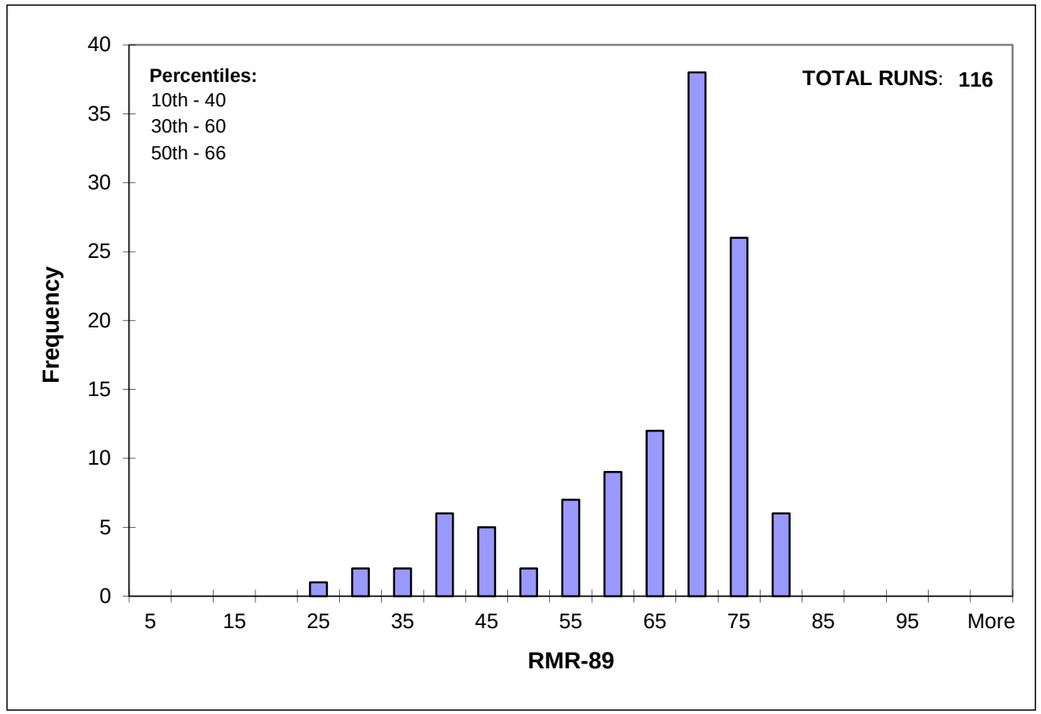
REV 0











NOTES:

1. BINS INCLUDE PREVIOUS RANGE (I.E., BIN 60 INCLUDES VALUES FROM 55-60).
2. RQD, RMR89, JOINT SPACING, AND UCS ARE RUN BASED PARAMETERS WHILE JOINT CONDITION RATING AND PARAMETERS ARE BASED ON INDIVIDUAL DISCONTINUITIES WITHIN A LOGGING RUN.
3. MINIMUM RMR VALUE OF EACH RUN DISPLAYED.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	MJR	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

RMR89 PARAMETER HISTOGRAMS FOR CHERT (S10, S10E, S10mSi & S10sSi)

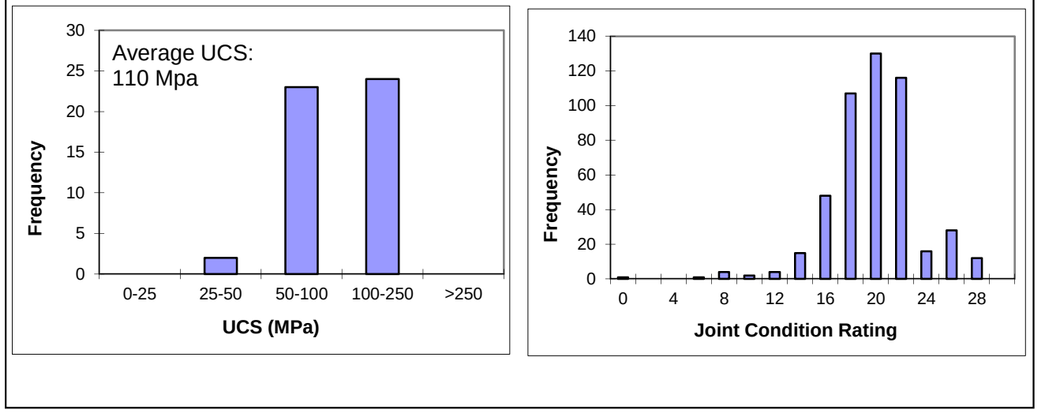
Knight Piésold CONSULTING

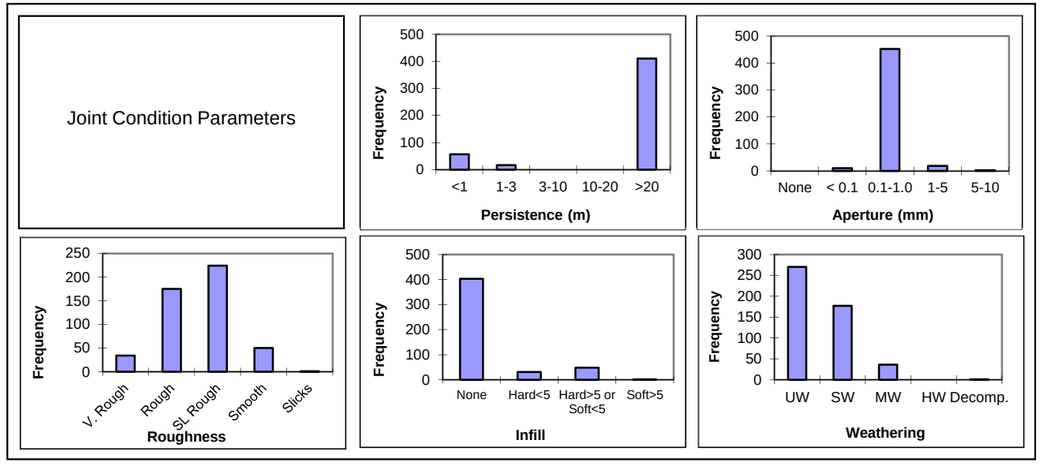
P/A NO. NB101-622/3

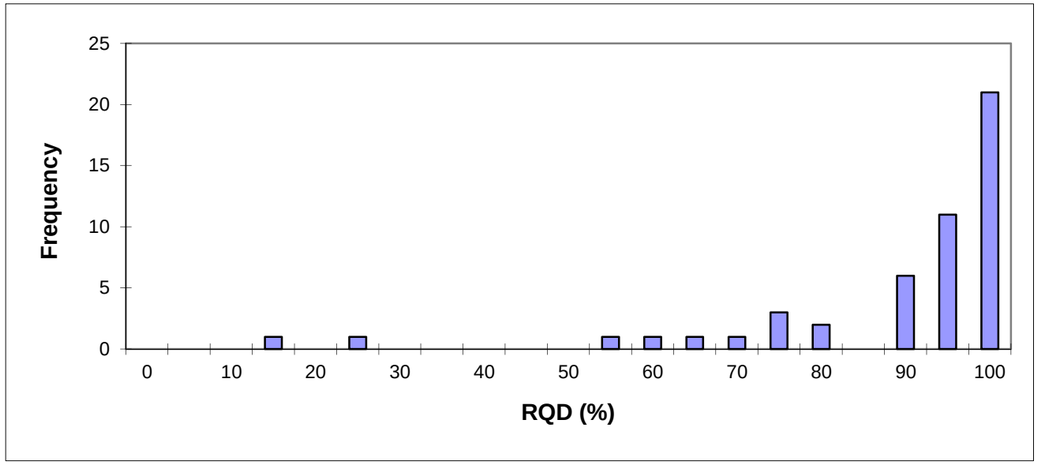
REF. NO. 2

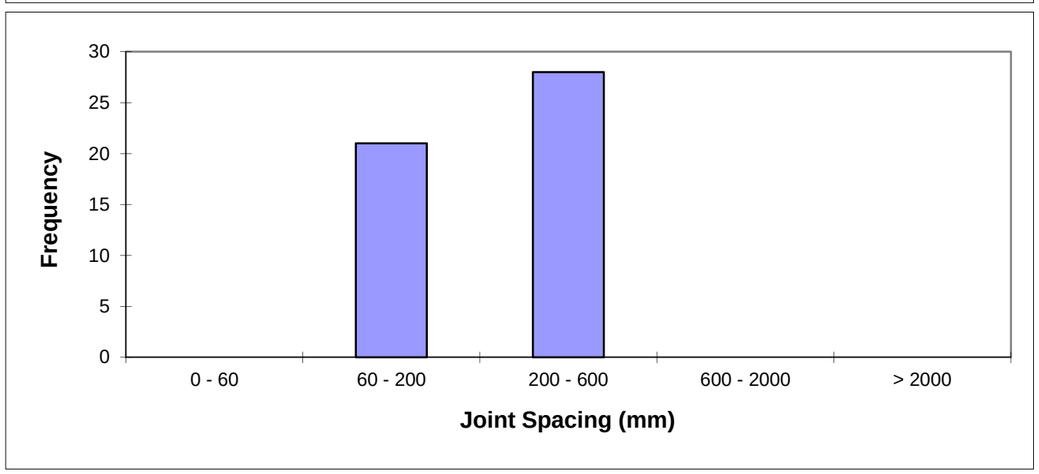
FIGURE B1.3

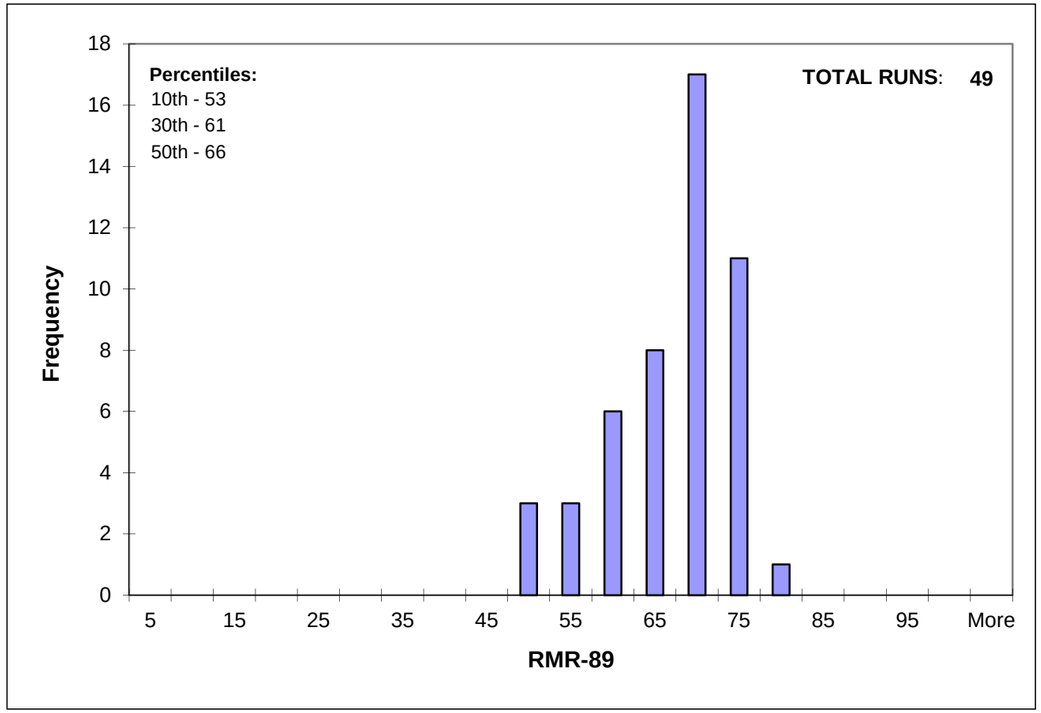
REV 0











NOTES:

1. BINS INCLUDE PREVIOUS RANGE (I.E., BIN 60 INCLUDES VALUES FROM 55-60).
2. RQD, RMR89, JOINT SPACING, AND UCS ARE RUN BASED PARAMETERS WHILE JOINT CONDITION RATING AND PARAMETERS ARE BASED ON INDIVIDUAL DISCONTINUITIES WITHIN A LOGGING RUN.
3. MINIMUM RMR VALUE OF EACH RUN DISPLAYED.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	MJR	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

RMR89 PARAMETER HISTOGRAMS FOR ALTERED ULTRAMAFICS (V3F & V4Amph)

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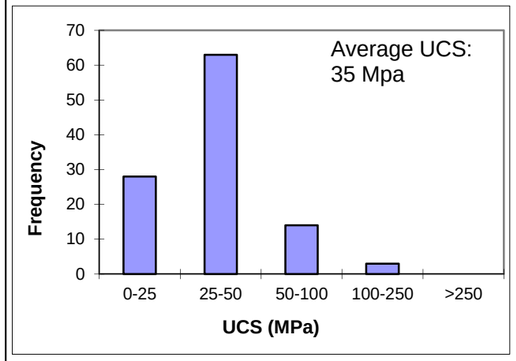
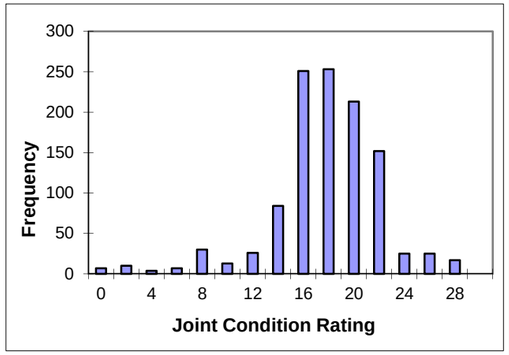
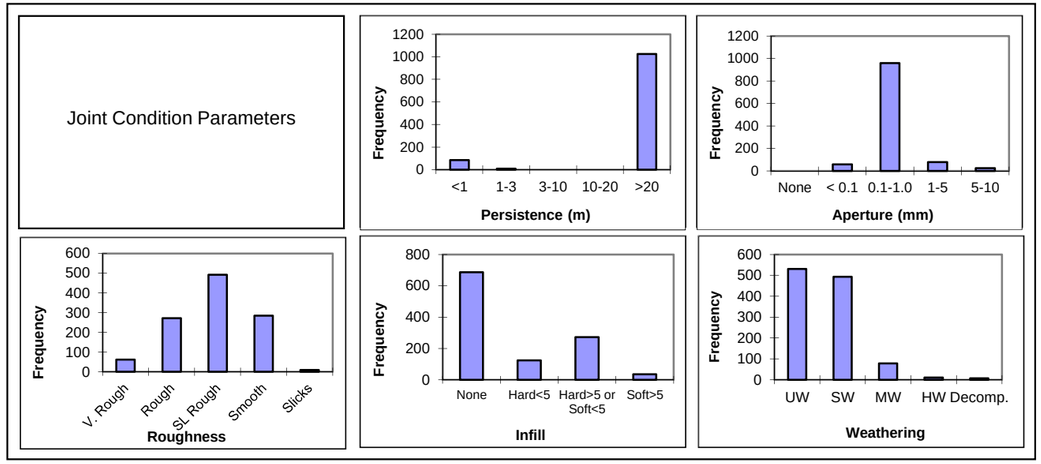
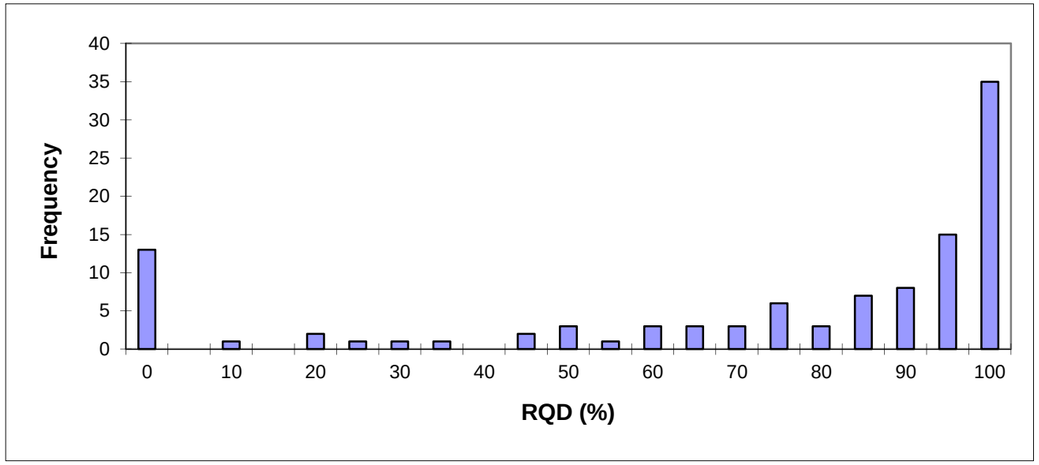
P/A NO. NB101-622/3 | REF. NO. 2

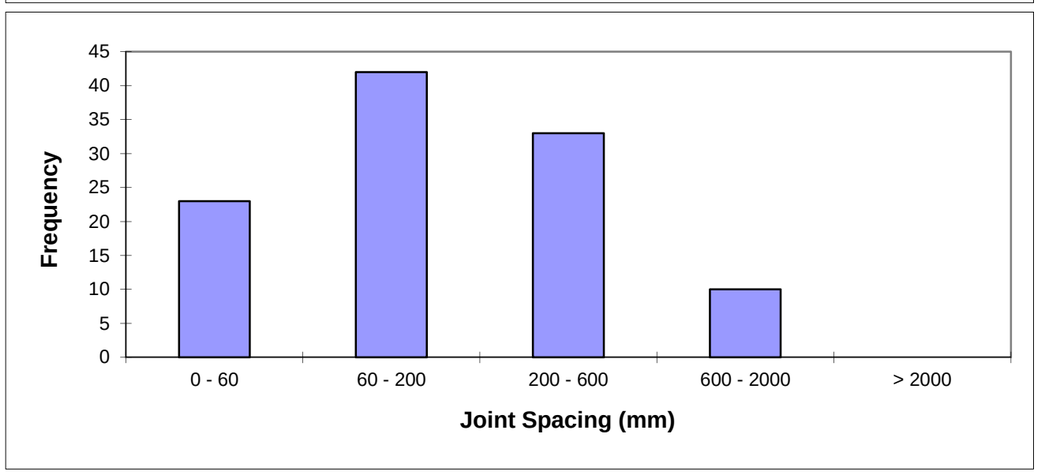
FIGURE B1.4 | REV 0

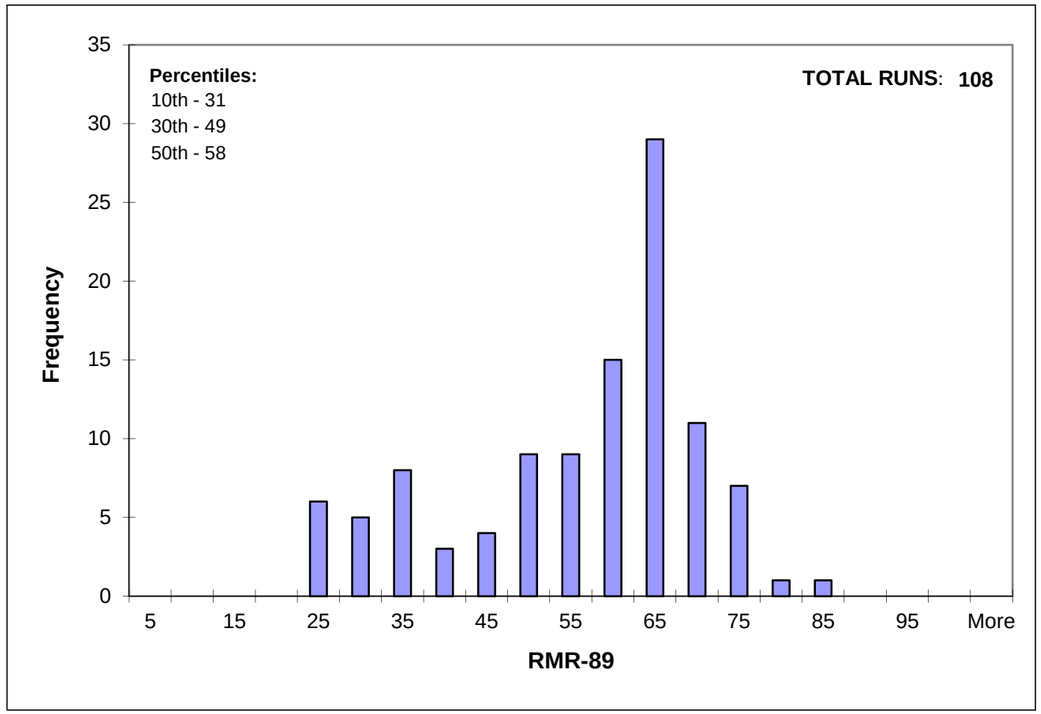












NOTES:

1. BINS INCLUDE PREVIOUS RANGE (I.E., BIN 60 INCLUDES VALUES FROM 55-60).
2. RQD, RMR89, JOINT SPACING, AND UCS ARE RUN BASED PARAMETERS WHILE JOINT CONDITION RATING AND PARAMETERS ARE BASED ON INDIVIDUAL DISCONTINUITIES WITHIN A LOGGING RUN.
3. MINIMUM RMR VALUE OF EACH RUN DISPLAYED.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	MJR	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

RMR89 PARAMETER HISTOGRAMS FOR ULTRAMFICS - NORTH LIMB (V4A)

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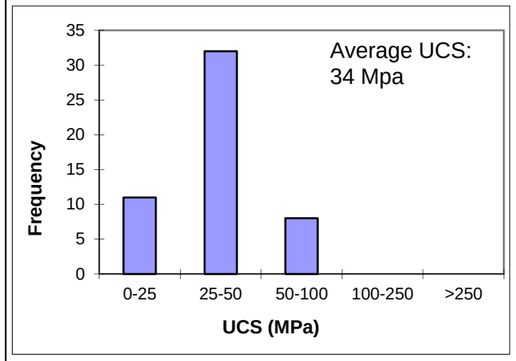
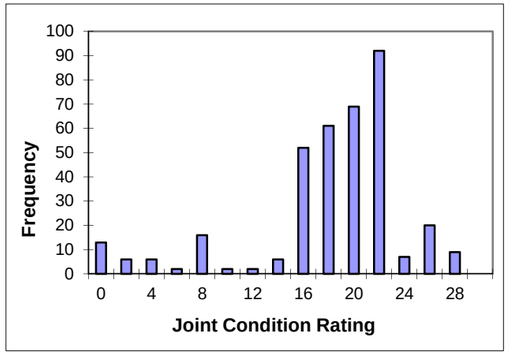
P/A NO. NB101-622/3

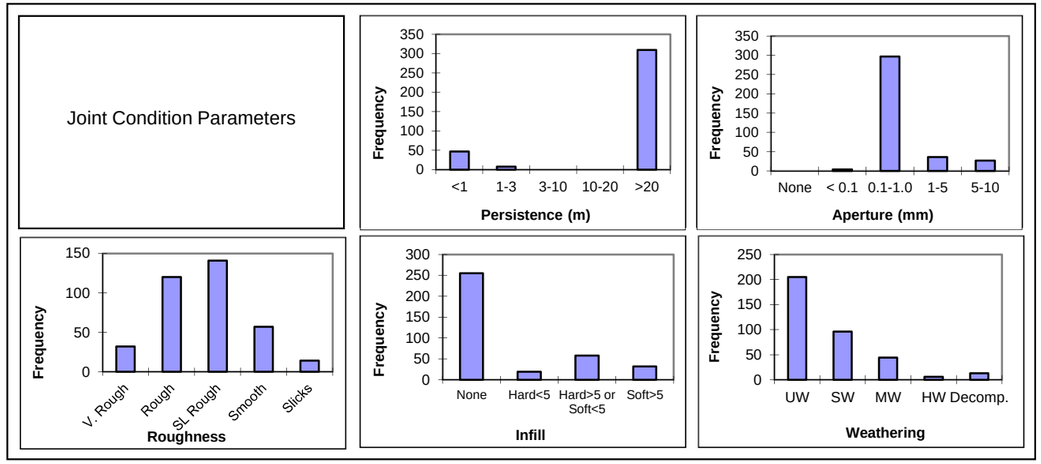
REF. NO. 2

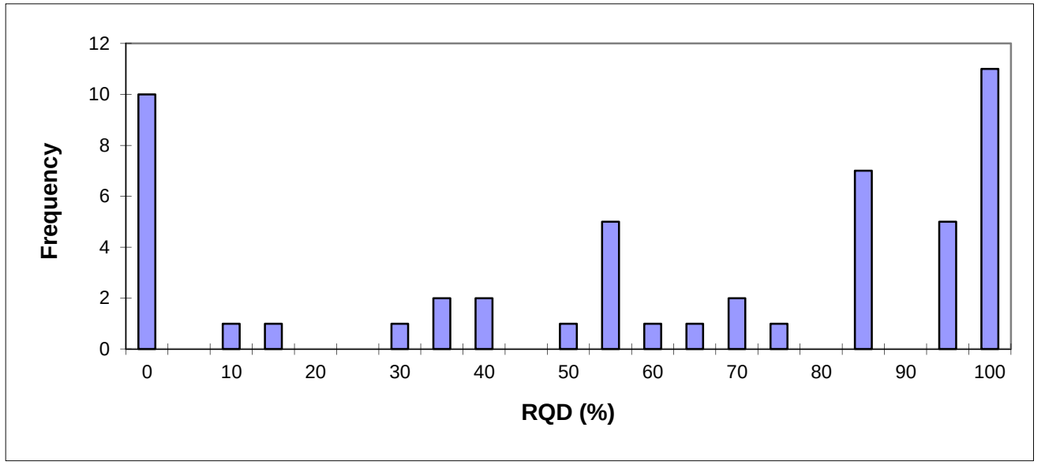
FIGURE B1.5

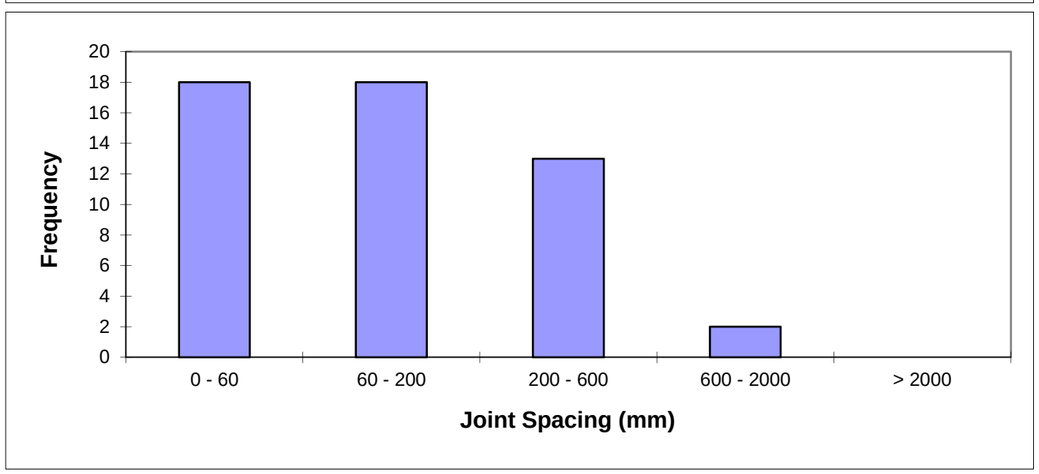
REV 0

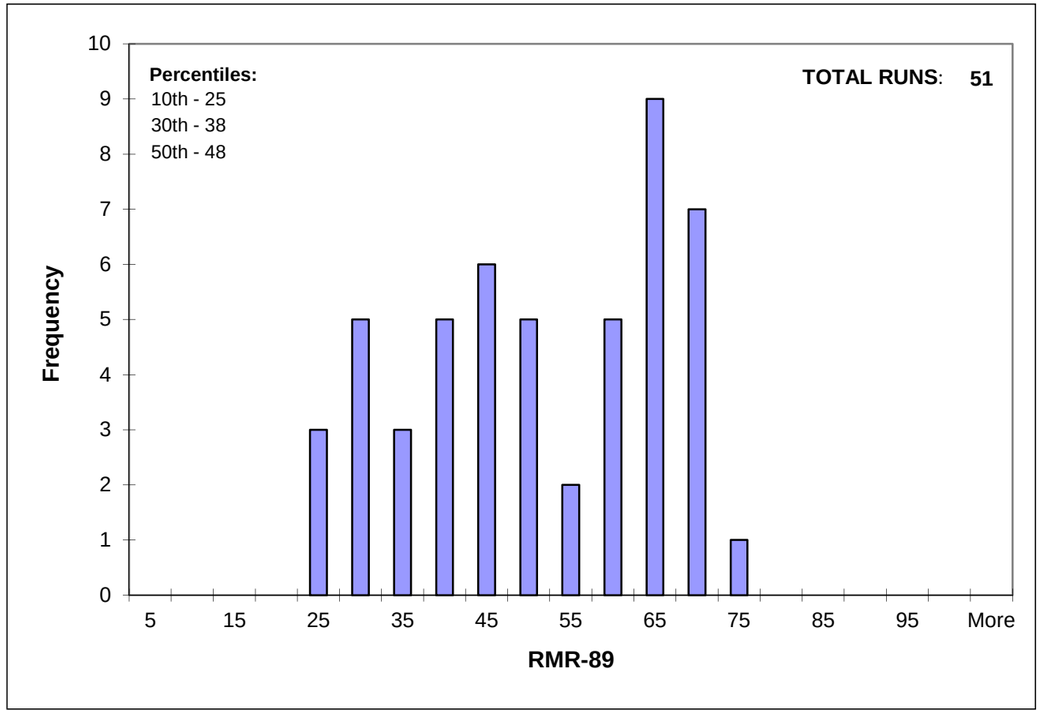












NOTES:

1. BINS INCLUDE PREVIOUS RANGE (I.E., BIN 60 INCLUDES VALUES FROM 55-60).
2. RQD, RMR89, JOINT SPACING, AND UCS ARE RUN BASED PARAMETERS WHILE JOINT CONDITION RATING AND PARAMETERS ARE BASED ON INDIVIDUAL DISCONTINUITIES WITHIN A LOGGING RUN.
3. MINIMUM RMR VALUE OF EACH RUN DISPLAYED.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	MJR	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

RMR89 PARAMETER HISTOGRAMS FOR ULTRAMAFICS - SOUTH LIMB (V3-V4 & V4Bio)

Knight Piésold CONSULTING

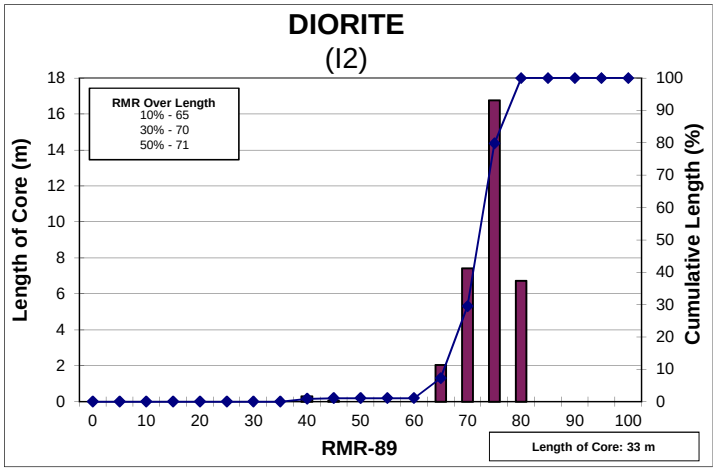
P/A NO. NB101-622/3 | REF. NO. 2

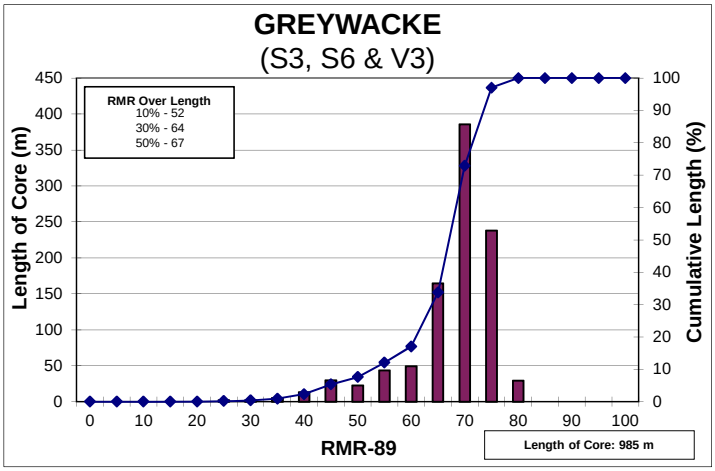
FIGURE B1.6 | REV 0

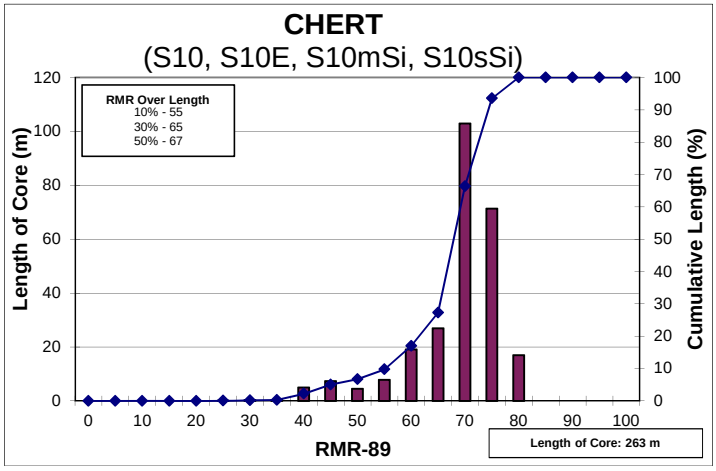
APPENDIX B2

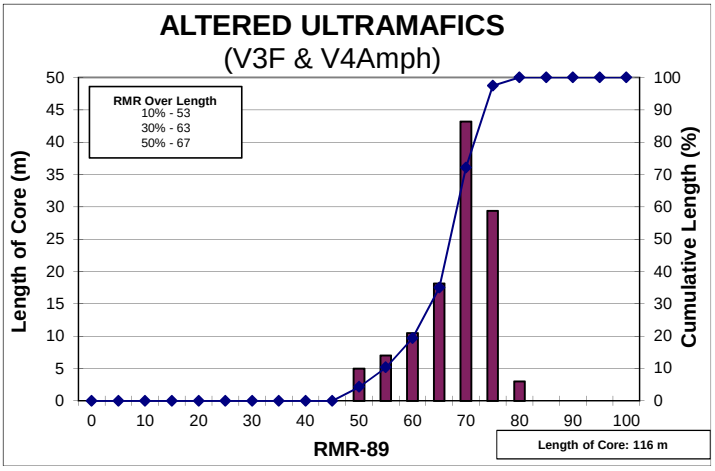
RMR HISTOGRAMS BY LENGTH BY ROCK TYPE

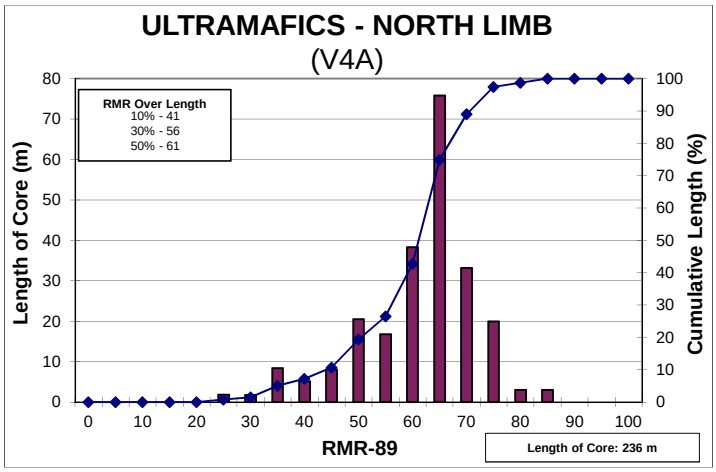
(Page B2-1)

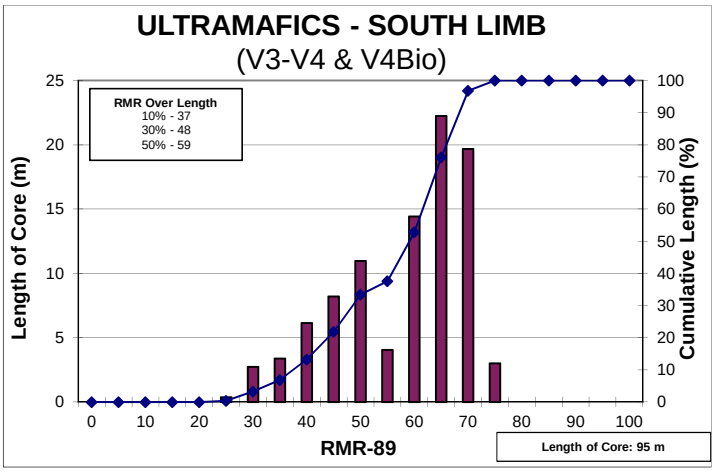












NOTES:

1. THE PRESENTED RMR_{89} DATA HAVE BEEN WEIGHTED BY LENGTH TO ACCOUNT FOR THE VARIATION IN THE LENGTH OF LOGGING RUNS.
2. RMR DESIGN VALUE BASED ON 30% OF TOTAL LENGTH OF CORE ROUNDED TO THE NEAREST 5.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	ATJ	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

RMR HISTOGRAMS OVER LENGTH BY ROCK TYPE

Knight Piésold CONSULTING

P/A NO. NB101-622/3 | REF. NO. 2

FIGURE B2.1 | REV 0

APPENDIX C

INTRODUCTION TO HOEK-BROWN CRITERION

(Pages C-1 to C-2)

APPENDIX C

1 – INTRODUCTION TO THE HOEK-BROWN FAILURE CRITERION

1.1 GENERAL

The achievable overall slope angle for a large open pit is often limited by the possibility for deep-seated circular failure through the rock mass. The likelihood of this type of failure depends on the strength of the rock mass. The strength of the rock mass is most commonly estimated through the application of the Hoek-Brown failure criterion (Hoek, et. al., 2002). In this case, the strength of a rock mass is a function of the intact strength, the characteristics of the discontinuities that bound the intact blocks and the amount of disturbance the rock mass has been subjected to through a combination of excavation and stress change. The Hoek-Brown failure criterion can be written as:

$$\sigma_1^{'} = \sigma_3^{'} + \sigma_{ci}\left(m_b \frac{\sigma_3^{'}}{\sigma_{ci}} + s \right)^a \qquad (1)$$

Where:

$\sigma_1^{'}$ and $\sigma_3^{'}$ are the maximum and minimum stresses, respectively

m_b, s, and a are rock mass constants

σ_{ci} is the unconfined compressive strength of the intact rock

Each of the required input parameters are described in the following sections.

1.2 INPUT VALUES

The Hoek-Brown constant, m_b, is for the rock mass and is a reduced value of the Hoek-Brown constant, m_i, for the intact rock. The reduction is based on the Geological Strength Index, GSI, of the rock mass and the disturbance factor, D. This relation is described below:

$$m_b = m_i \exp\left(\frac{GSI - 100}{28 - 14D} \right) \qquad (2)$$

Following Hoek *et. al.* (2002), the Hoek-Brown constant for the intact rock, m_i, has been selected from standard values for the different rock types encountered. The remaining rock mass constants are determined from the following equations:

$$s = \exp\left(\frac{GSI - 100}{9 - 3D}\right) \quad (3)$$

$$a = \frac{1}{2} + \frac{1}{6}\left(e^{-\frac{GSI}{15}} - e^{-\frac{20}{3}}\right) \quad (4)$$

1.3 INTACT ROCK STRENGTH

The strength of the intact rock (σ_{ci}) is represented by Unconfined Compression Strength (UCS) values taken from lab testing results.

1.4 ROCK MASS QUALITY

The Geological Strength Index (GSI) was initially based on the RMR rating system and was introduced by Hoek et al. (1995) to overcome issues with the RMR values for very poor quality rock masses. For better quality rock masses (GSI>25), the value of GSI can be estimated from Bieniawski's RMR_{89} rock mass classification system using the following equation:

$$GSI = RMR_{89} - 5 \quad (5)$$

This relation assumes a groundwater rating set to 15 (dry) and the adjustment for joint orientation is set to 0 (very favourable).

1.5 DISTURBANCE FACTOR

To account for rock mass disturbance associated with heavy production blasting and vertical stress relief, Hoek et. al. (2002) recommends downgrading the utilized rock mass strengths to disturbed values. Experience suggests that a disturbance factor of 0.7 may be achievable with the application of "controlled blasting" practices, while a value of 1.0 is appropriate for conventional "production blasting". Recent KP practice suggests that "controlled production blasting" is expected to be between these extremes and consistent with a disturbance factor of 0.85.

APPENDIX D

KINEMATIC ANALYSES - RESULTS SUMMARY

(Pages D-1 to D-49)

Knight Piésold CONSULTING

TABLE D.1

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN
SUMMARY OF KINEMATIC ANALYSES

Print Nov/27/15 11:00:03

Structural Domain	Sector	Nominal Bench Face Dip Direction	Kinematic Failure Mode																			Relative Sensitivity to Friction Angle	Dominant Failure Mode	Maximum Achievable BFA	Suggested Bench Geometry			Calculated IRA From Bench Geometry	Comments
			Planar						Toppling						Wedge										BFA	Bench Width	Bench Height		
			Joint Set / Structure	Joint Set Significance	Effect Significance	Overall Significance	Max BFA	Max IRA	Joint Set / Structure	Joint Set Significance	Joint Effect Significance	Overall Significance	Max BFA	Max IRA	Joint Sets / Structures	Joint Set Significance Set 1	Joint Set Significance Set 2	Joint Set Significance Overall	Effect Significance	Overall Significance	Max BFA	Max IRA								
East	East-South	300	-	-	-	-	-	-	JSA	Major	Major	**Major**	55	No Control	- -	-	-	-	-	-	-	-	None	Toppling	No Limit	75	9.5	21	54	- The achievable bench geometry is not expected to be controlled by structure. - Toppling failure on JSA may locally limit the achievable slope geometry.
									GP-Fault	Major	Moderate	**Major**	-	-															
	East	240	-	-	-	-	-	-	JSD	Moderate	Minor	Minor	-	-	- -	-	-	-	-	-	-	-	None	None	No Limit	75	9.5	21	54	- The achievable bench geometry is not expected to be controlled by structure.
	East-North	110	JSA	Major	Major	**Major**	60	No Control	-	-	-	-	-	-	JSA vs. JSD	3	2	Major	Major	**Major**	55	No Control	Low (Wedge)	Planar & Wedge	60	60	9.5	21	44	- BFA controlled by planar failures involving dominant joint set (JSA). Wedge failures involving JSA and JSD are essentially planar failures with a release feature. - Achievable slope geometry is sensitive to friction angle and the strike of the slope. - Potential for planar or wedge failures involving the RQD5 and RQD7 Faults may locally limit the achievable slope geometry. - RQD5 and RQD7 Faults run sub-parallel and just behind the pit wall in this sector.
			RQD7 Fault	Major	Moderate	**Major**	-	50							JSD vs. RQD5 Fault	2	3	Major	Major	**Major**	-	45								
			RQD5 Fault	Major	Moderate	**Major**	-	50							JSD vs. RQD7 Fault	2	3	Major	Major	**Major**	-	50								
Central-B	Central-North	155	JSA	Major	Major	**Major**	55	-	-	-	-	-	-	-	JSA vs. JSD	3	2	Major	Major	**Major**	50	No Control	Low (Wedge)	Planar & Wedge	55	55	9.5	21	41	- BFA controlled by planar failures involving dominant joint set (JSA). Wedge failures involving JSA and JSD are essentially planar failures with a release feature. - Achievable slope geometry is sensitive to friction angle and the strike of the slope. - RQD4 Fault runs sub-parallel and just behind the pit wall in this sector.
			RQD4 Fault	Major	Major	**Major**	-	50							JSD vs. RQD4 Fault	2	3	Major	Major	**Major**	-	50								
Central-A	Central-South	315	JSB	Major	Major	**Major**	70	55	JSB'	Moderate	Major	**Major**	No Control	-	JSB vs. JSD	3	2	Major	Major	**Major**	60	50	High (Planar)	Planar, Toppling & Wedge	70	70	9.5	21	51	- BFA controlled by planar failures involving dominant joint set (JSB). Wedge failures involving JSB and JSD are essentially planar failures with a release feature. - Toppling failure on JSB' may locally limit achievable slope geometry. - Achievable slope geometry is sensitive to friction angle and the strike of the slope.
			JSC	Moderate	Major	**Major**	No Control	-	GP Fault	Major	Major	**Major**	-	-															
West	West-North	145	JSA	Major	Major	**Major**	55	-	JSB	Minor	Major	Moderate	No Control	-	JSA vs. JSD	3	2	Major	Major	**Major**	45	-	High (Planar) Moderate (Wedge)	Planar & Wedge	55	55	9.5	21	41	- BFA controlled by planar failures involving dominant joint set (JSA). Wedge failures involving JSA and JSD are essentially planar failures with a release feature. - Achievable slope geometry is sensitive to friction angle and the strike of the slope. - Potential for planar or wedge failures involving RQD4 Fault may locally limit the achievable slope geometry. - RQD4 Fault runs sub-parallel and just behind the pit wall in this sector.
			RQD4 Fault	Major	Major	**Major**	-	50	JSE	Minor	Moderate	Minor	65	-	JSD vs. RQD4 Fault	2	3	Major	Major	**Major**	-	50								
	West	85	JSA	Major	Minor	Moderate	-	-	JSD	Moderate	Minor	Minor	-	-	JSA vs. JSD	3	2	Major	Minor	Moderate	55	No Control	Low (Wedge)	None	No Limit	75	9.5	21	54	- BFA may be controlled by wedge failures involving dominant joint set. - Achievable slope geometry is sensitive to the strike of the slope.
	West-South	335	JSE	Minor	Major	Moderate	50	50	JSA	Major	Moderate	**Major**	-	-	JSD vs. JSE	2	1	Minor	Major	Moderate	50	50	High (Toppling)	Toppling	No Limit	75	9.5	21	54	- BFA may be controlled by planar and wedge failures involving dominant joint set. - Toppling failure on JSA may locally limit the achievable slope geometry.
									JSB'	Minor	Major	Moderate	No Control	-																

I:\1\01\00622\03\A\Report\Report 2 Rev 0 Updated Scoping Study\Appendices\D - Kinematic Analyses\[D.1 - High Level Kinematics Analyses - Results Summary (Oct 27, 2015).xlsx]Table - Kinematic Summary

NOTES:
1. ONLY POTENTIAL MAJOR PLANAR OR WEDGE FAILURES INVOLVING A JOINT SET WERE CONSIDERED WHEN EVALUATING THE ACHIEVABLE BENCH GEOMETRY.
2. RESULTS IN RED TEXT INDICATE FAILURE MODES POSSIBLY INFLUENCING BOTH THE IRA AND THE BFA. PLANAR AND WEDGE FAILURE MODES WERE CONSIDERED WHEN EVALUATING THE ACHIEVABLE INTER-RAMP CONFIGURATION.
3. WEDGE FAILURES IN GREEN TEXT IDENTIFY WEDGES THAT ARE ESSENTIALLY A PLANAR FAILURE WITH A STEEPLY DIPPING RELEASE FEATURE (JSD). IN THESE CASES, THE MAXIMUM BFA FOR THAT SECTOR HAS BEEN SELECTED BASED ON THE RESULTS OF THE PLANAR ANALYSES.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV15	ISSUED WITH REPORT NB101-622/3-2	ATJ	BDP

Significance Legend

N/A	
MINOR:	
MODERATE:	
MAJOR:	

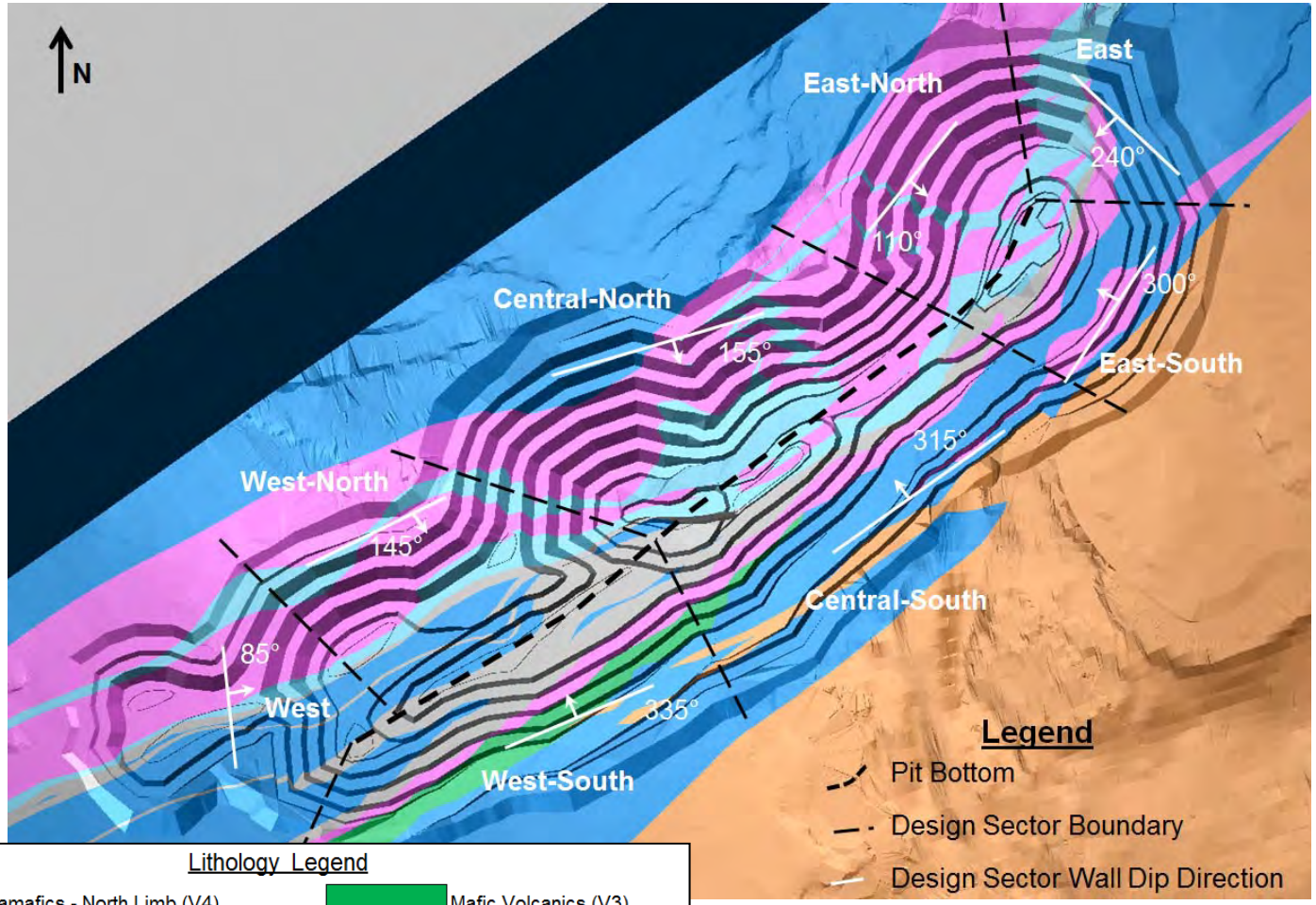
Overall Set Significance

Set 2 Significance \ Set 1 Significance	1	2	3
1	Minor	Minor	Moderate
2	Minor	Moderate	Major
3	Moderate	Major	Major

Kinematic Analyses
Whale Tail Open Pit

Updated Scoping Level Open Pit Slope Design

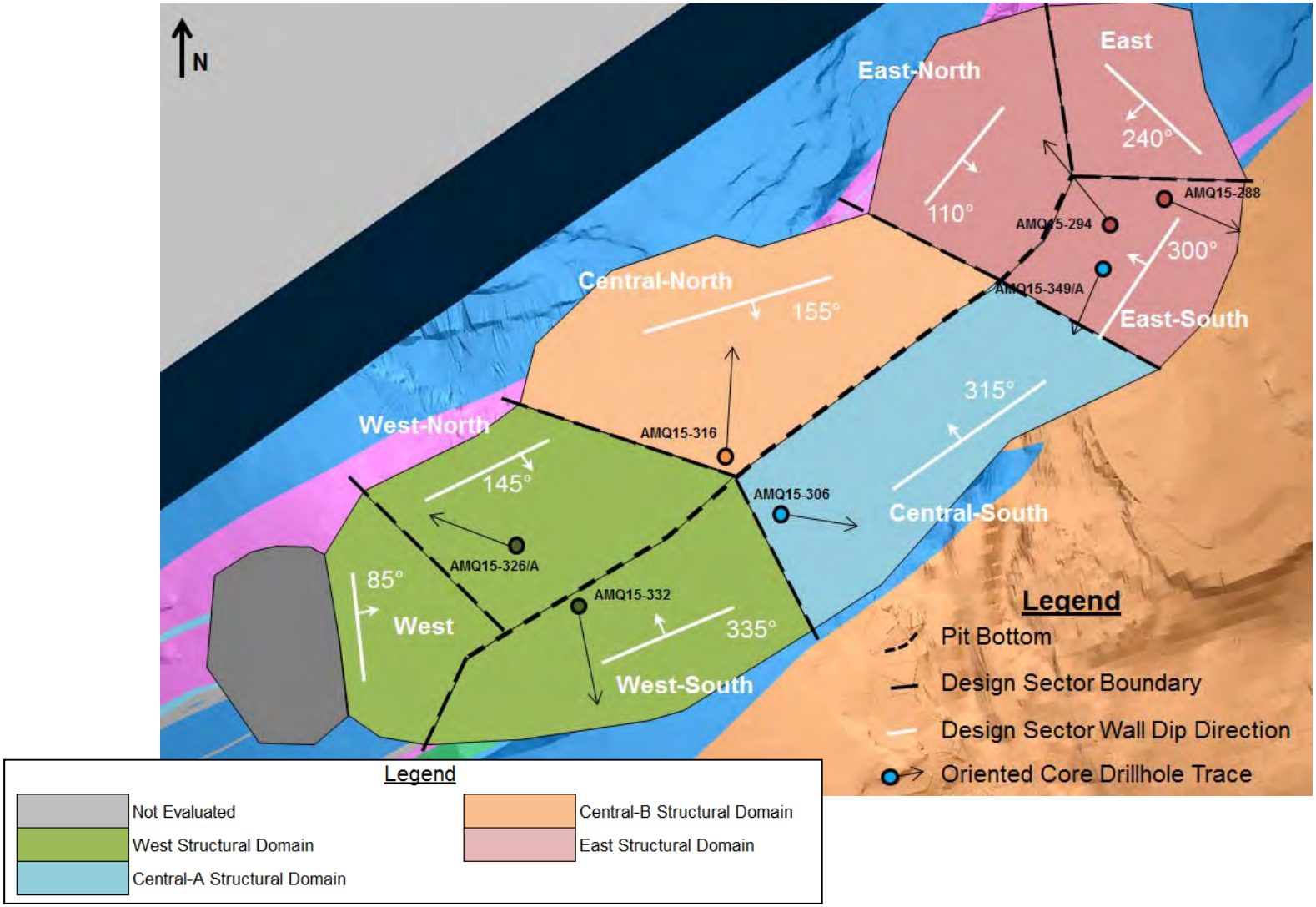
Design Sectors
- Showing Pit Wall Lithology



Lithology Legend

Ultramafics - North Limb (V4)	Mafic Volcanics (V3)
Altered Ultramafics (V3f & V4Amph)	Greywacke (S3 & S6)
Chert (S10, S10E, S10mSi & S10sSi)	Diorite (I2)
Ultramafics - South Limb (V3-V4 & V4bio)	

Design Sectors
- Showing Structural Domains



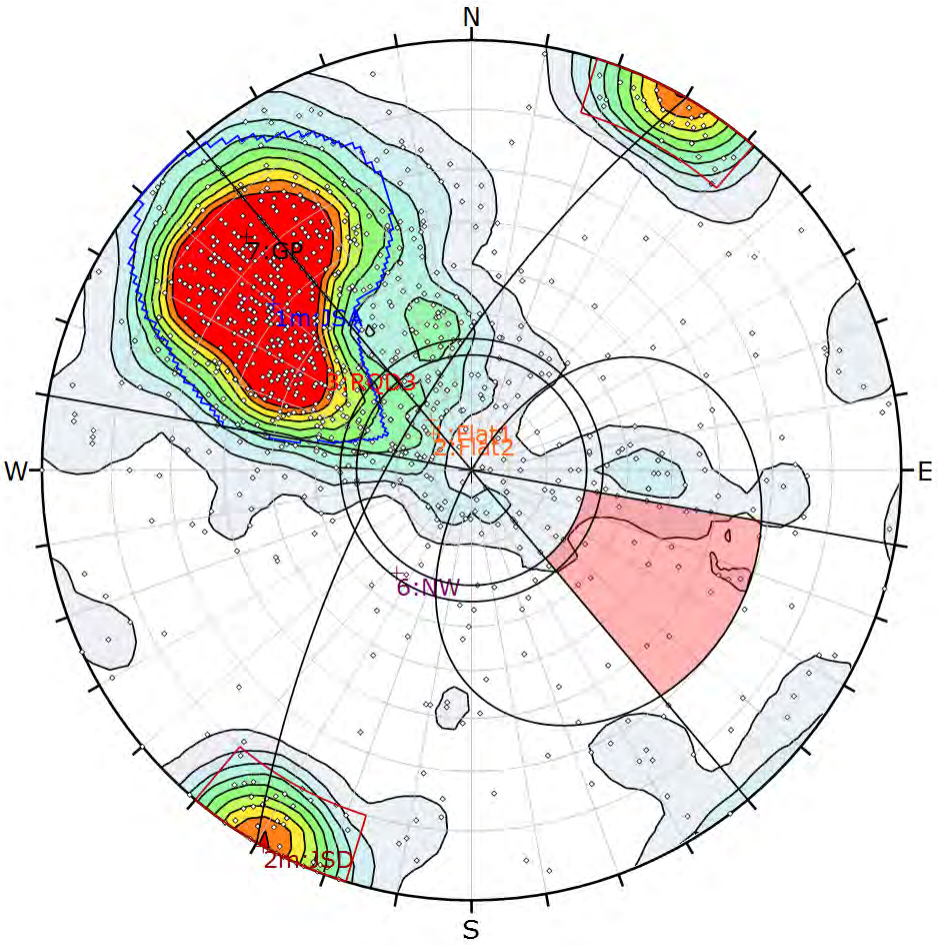
Orientation Data Sets by Design Sector

Design Sector	Approximate Average Pit Wall Dip Direction (°)	Structural Domain	Drillhole Data (Depth Interval)	Large-Scale Structures		
				Fault Name	Dip (°)	Dip Direction (°)
East - South	300	East	- AMQ15-288 (0-150 m) - AMQ15-294 (1-175 m)	GP	74	136
				NW	33	36
				Flat1	17	141
				Flat2	14	134
				RQD3	45	125
East	240			RQD3	45	125
				RQD5	47	138
				GP	74	136
				NW	33	36
East - North	110			RQD5	47	138
				RQD7	51	132
Central - North	155	Central - B	AMQ15-316 (0-EOH)	RQD4	50	145
Central - South	315	Central - A	- AMQ15-306 (0-EOH) - AMQ15-349/349A (0-175 m)	RQD2	45	135
				Flat1	17	141
				Flat2	14	134
				RQD3	45	125
				NW	33	36
				GP	74	136
West - South	335	West	- AMQ15-332 (0-150 m) - AMQ15-326/326A (0 - 100 m)	RQD2	45	135
West	85			RQD1	44	167
West - North	145			RQD4	50	145

Presentation Structure

- Presentation contains the supporting kinematic analysis plots for the three failure modes for each design sector.
- Number convention:
  - 1: Planar analysis
    - 1.1: BFA reduced to meet target cumulative frequency
    - 1.2: Check on potential limits to inter-ramp angle
  - 2: Topping analysis
  - 3.1: Wedge analysis (Foliation vs JSD)
    - 3.1.1: BFA reduced to meet target cumulative frequency
  - 3.2: Wedge analysis (Mean joint set planes and fault planes)

1. East-South: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

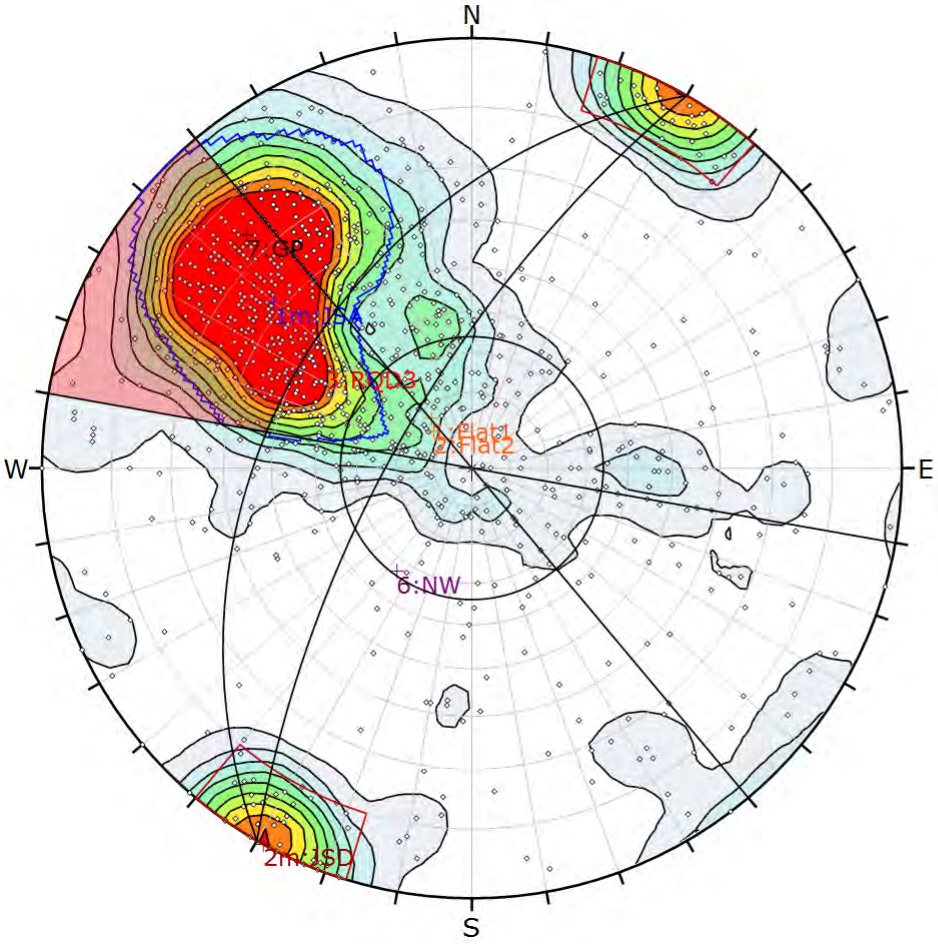
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	300
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	23	1003	2.29%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. East-South: Toppling



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

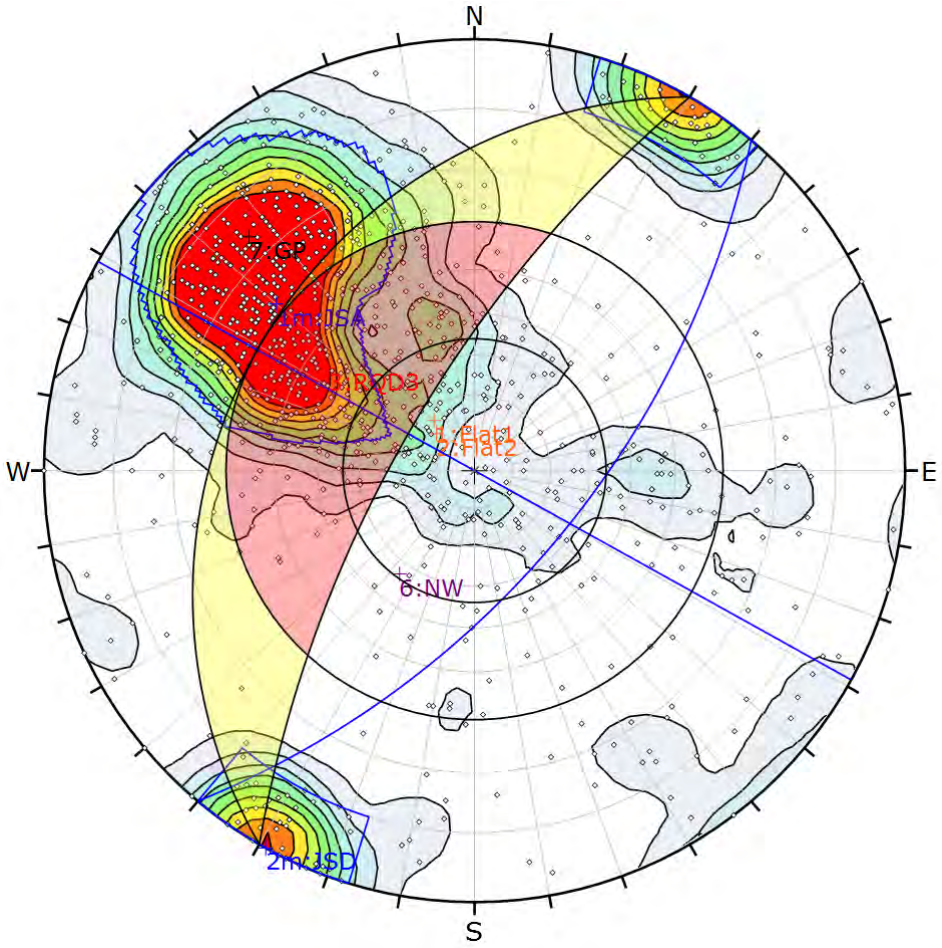
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	300
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	319	1003	31.80%
Flexural Toppling (Set 1)	306	488	62.70%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 East-South: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

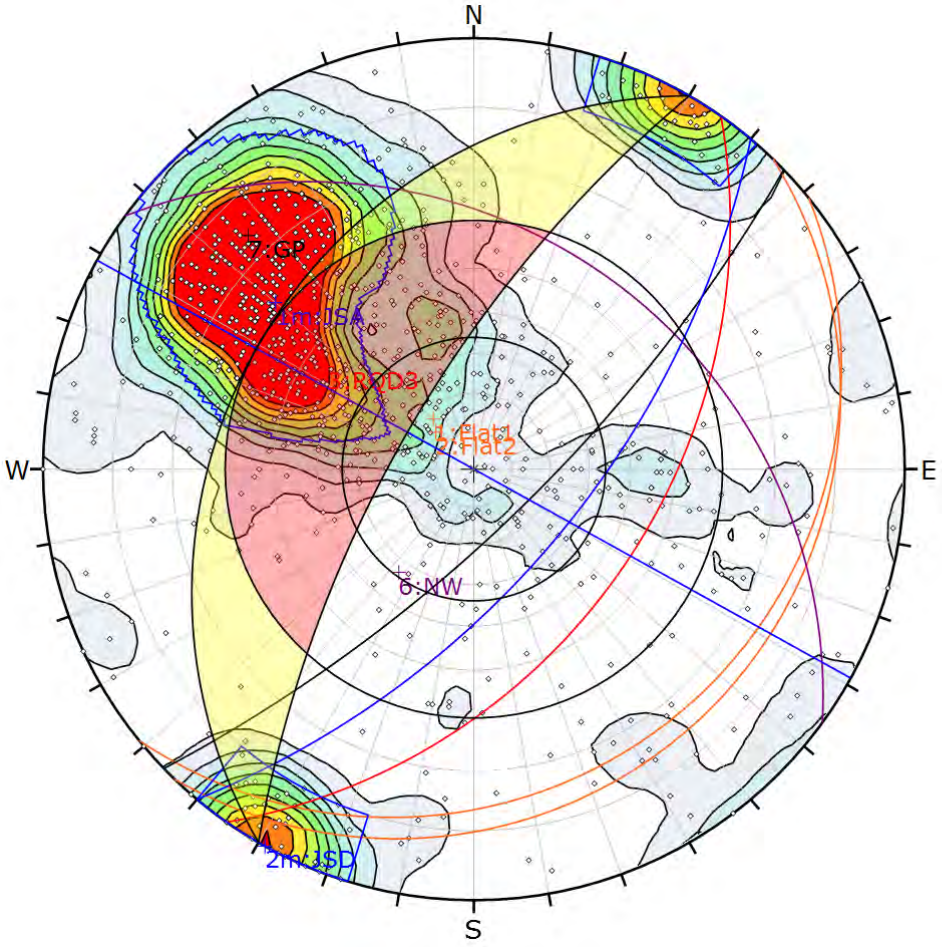
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	300
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	0	36112	0.00%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Intersection Mode	All Set Planes
Intersections Count	36112
Hemisphere	Lower
Projection	Equal Angle

3.2 East-South: Wedge
User and Mean Set Planes



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

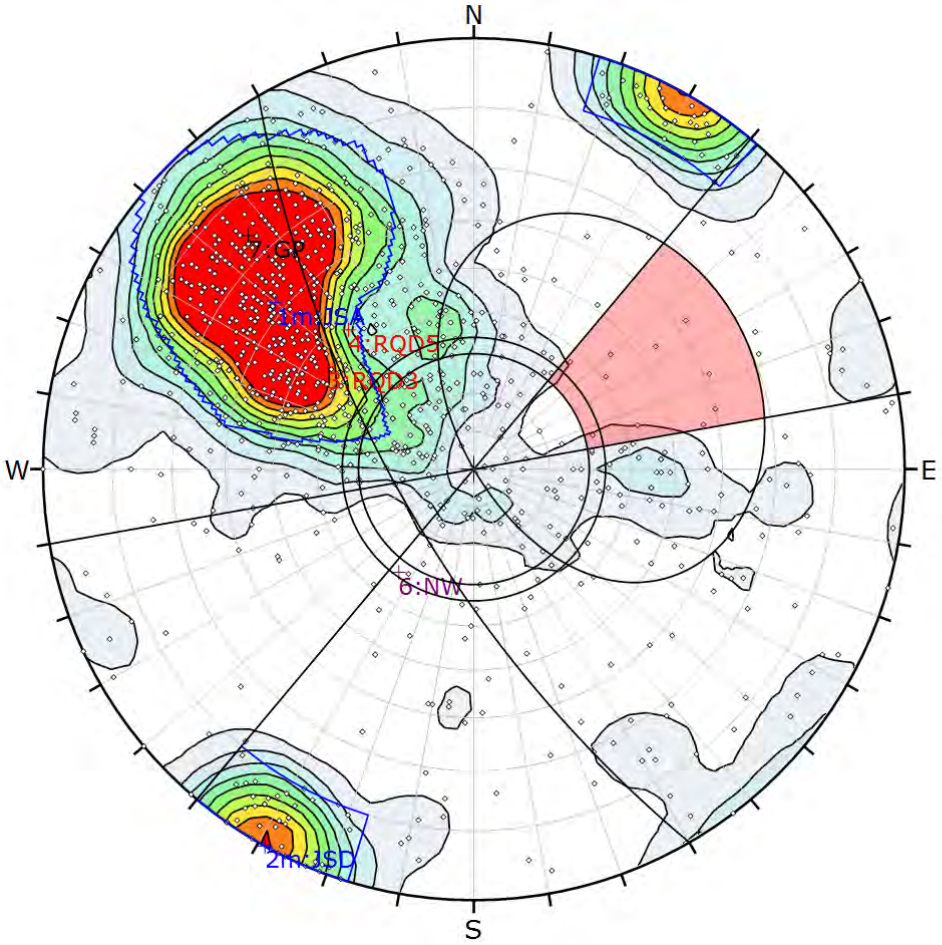
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	300
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	0	36112	0.00%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Intersection Mode	All Set Planes
Intersections Count	36112
Hemisphere	Lower
Projection	Equal Angle

1. East: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

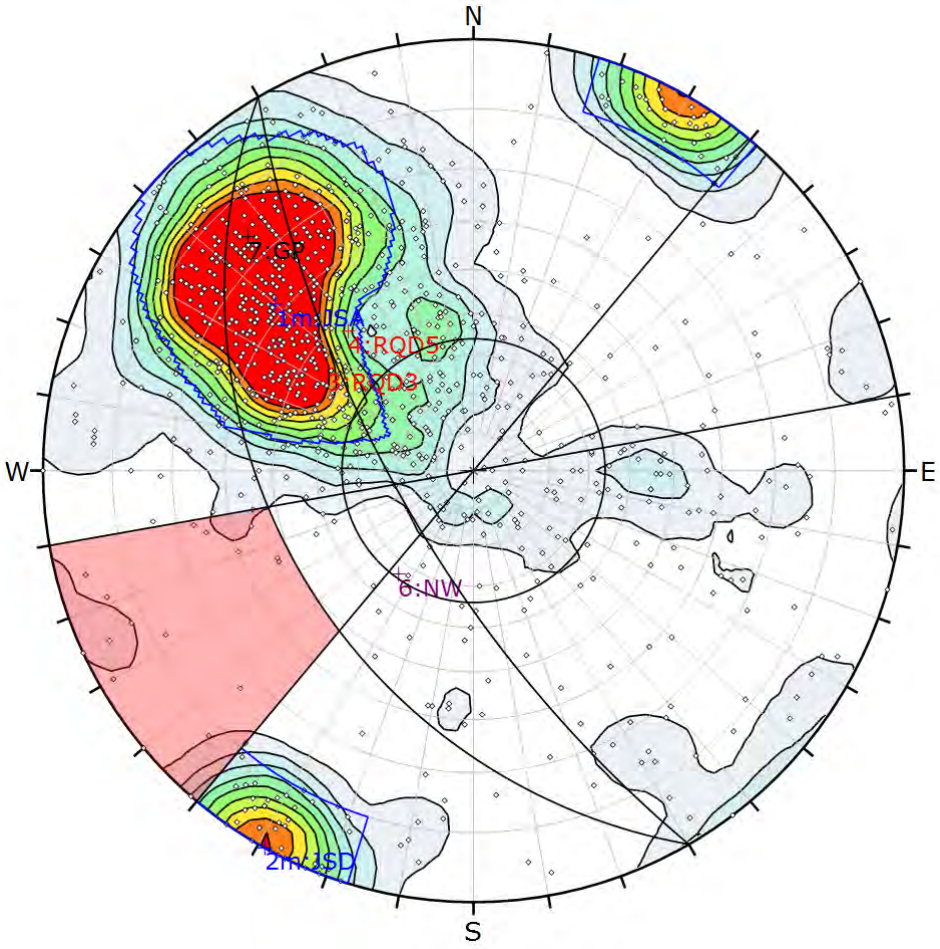
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	240
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	10	1003	1.00%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. East: Toppling



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

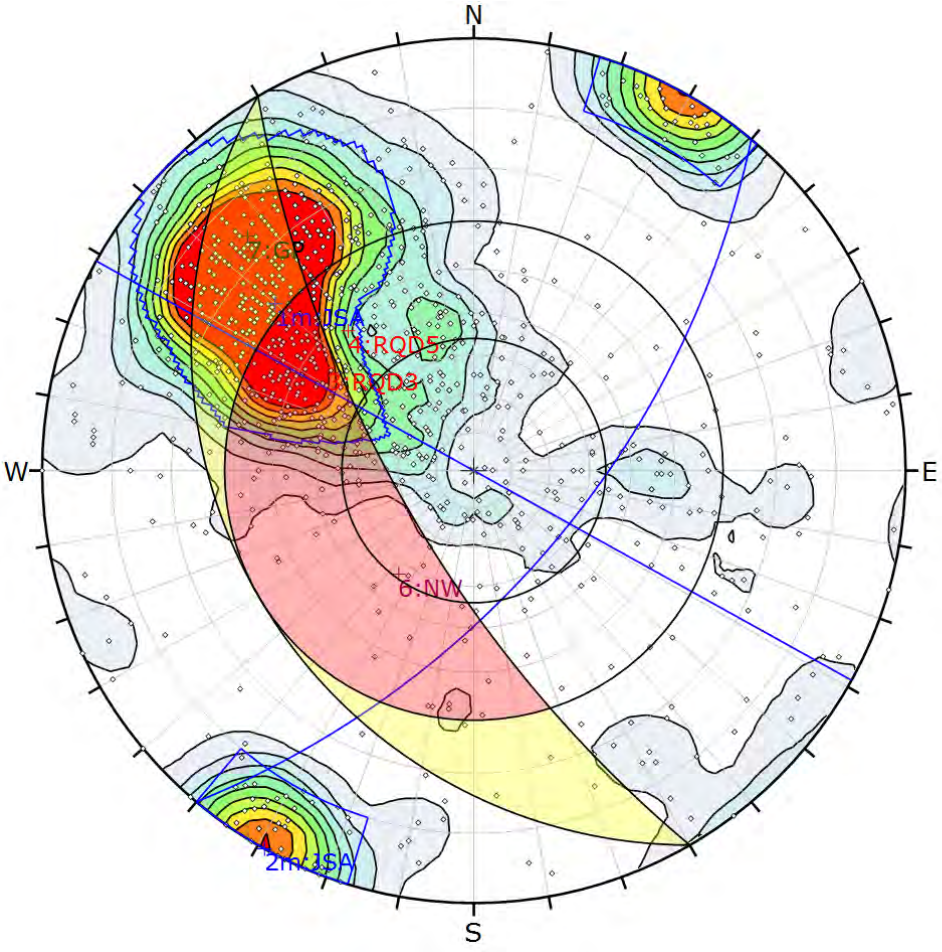
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	240
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	19	1003	1.89%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 East: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

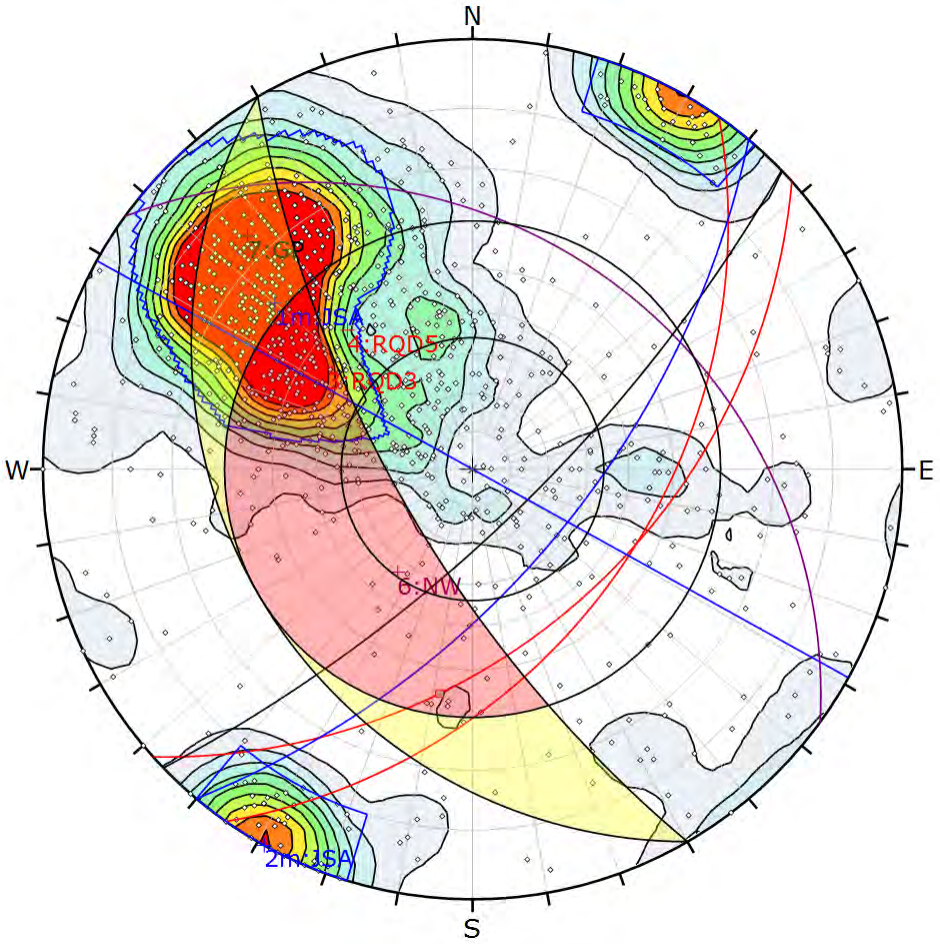
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	240
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	0	36112	0.00%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Intersection Mode	All Set Planes
Intersections Count	36112
Hemisphere	Lower
Projection	Equal Angle

3.2 East: Wedge
User and Mean Set Planes



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

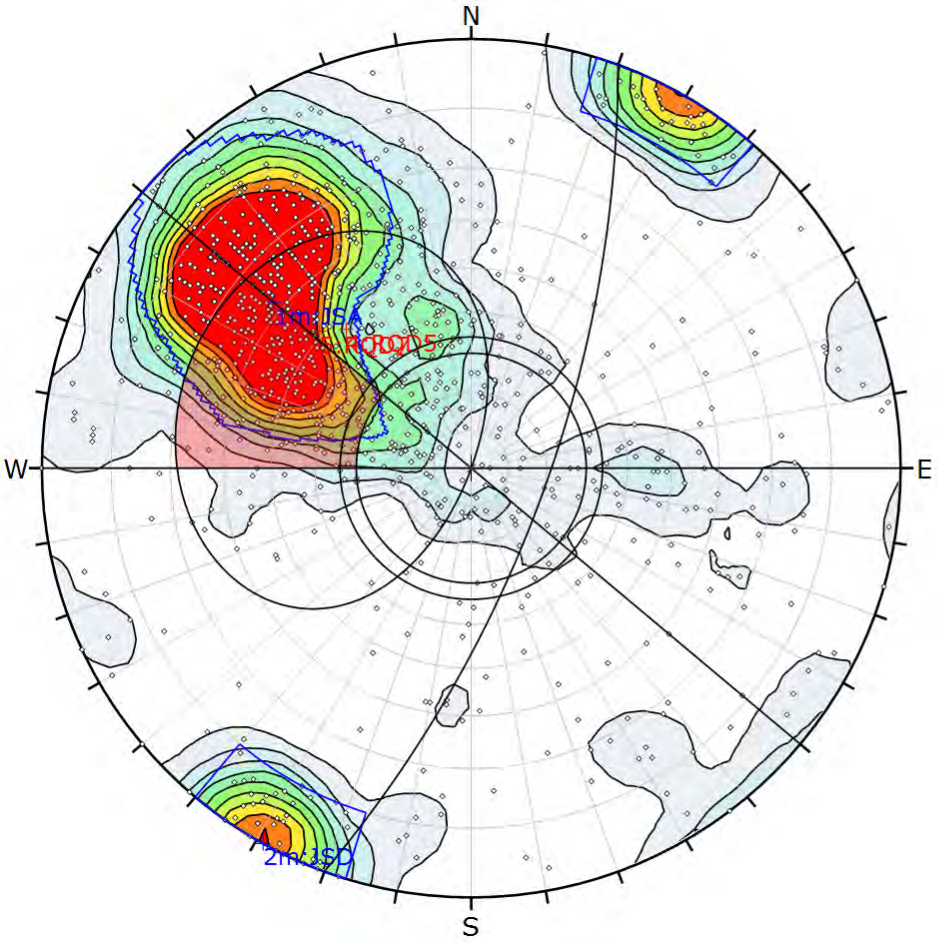
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	240
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	1	45	2.22%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Intersection Mode	User and Mean Set Planes
Intersections Count	45
Hemisphere	Lower
Projection	Equal Angle

1. East-North: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

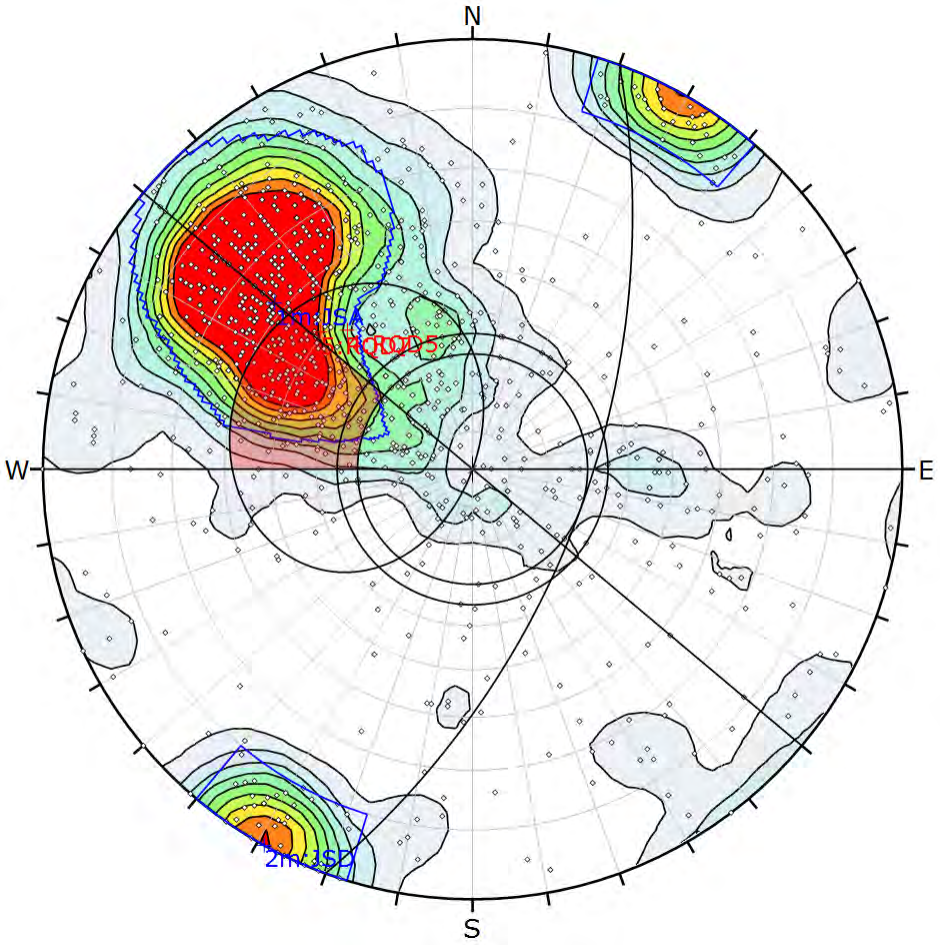
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	110
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	227	1003	22.63%
Planar Sliding (Set 1)	209	488	42.83%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

1.1 East-North: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

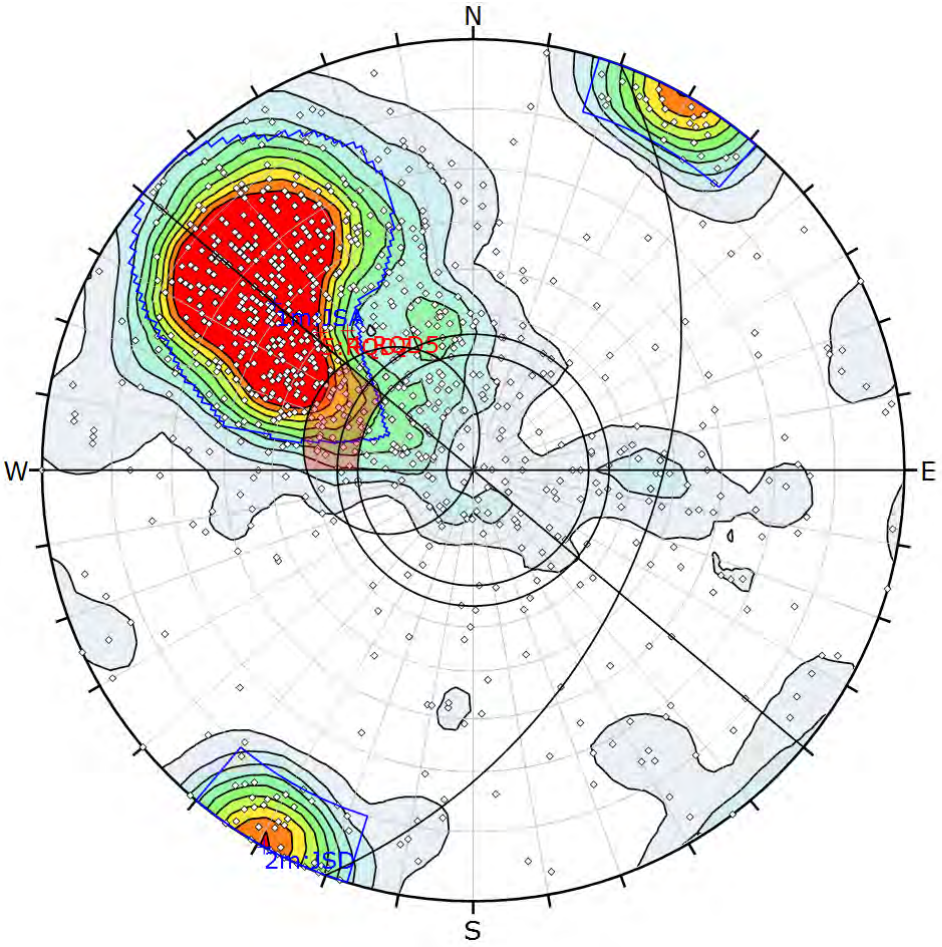
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	60
Slope Dip Direction	110
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	153	1003	15.25%
Planar Sliding (Set 1)	138	488	28.28%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

1.2 East-North: Planar Check on IRA



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

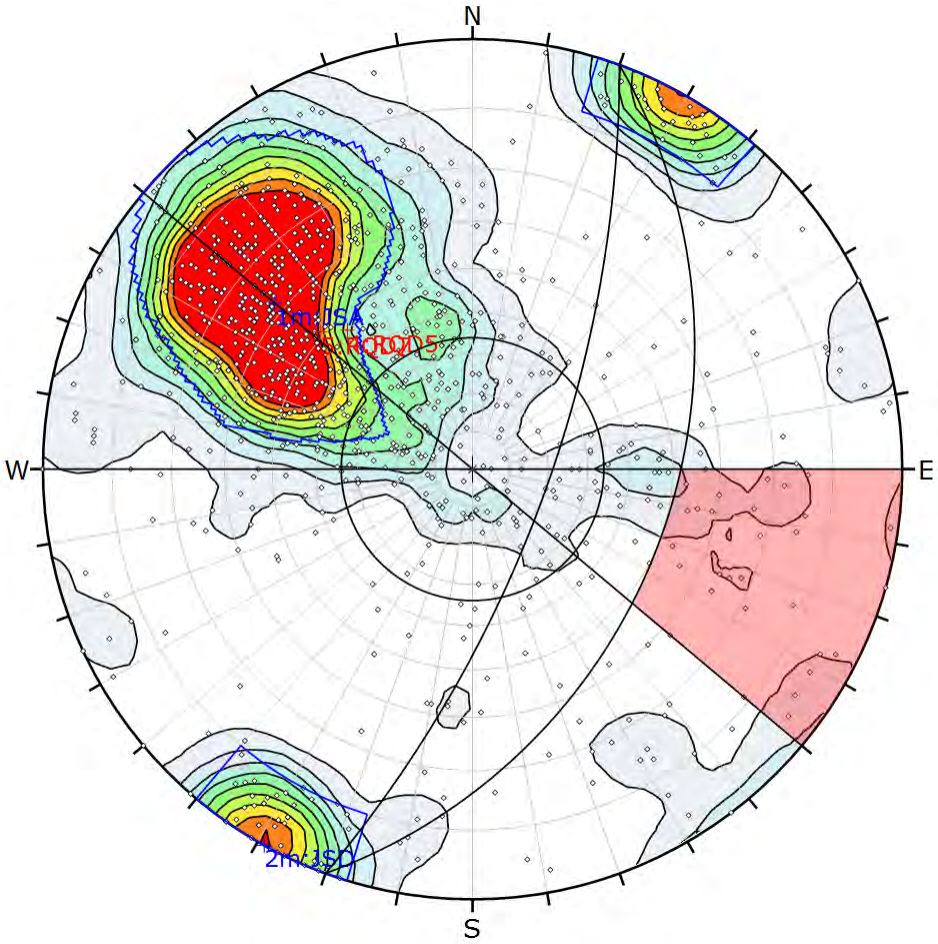
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	44
Slope Dip Direction	110
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	50	1003	4.99%
Planar Sliding (Set 1)	41	488	8.40%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. East-North: Toppling



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

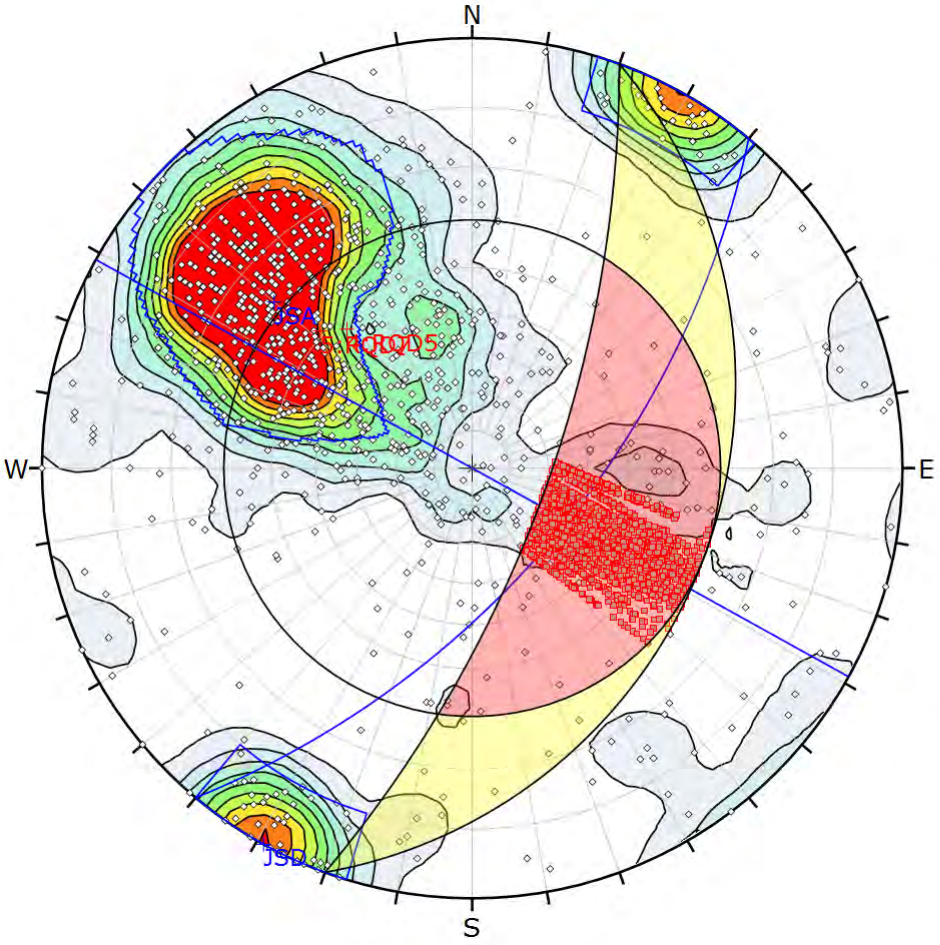
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	110
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	30	1003	2.99%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 East-North: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

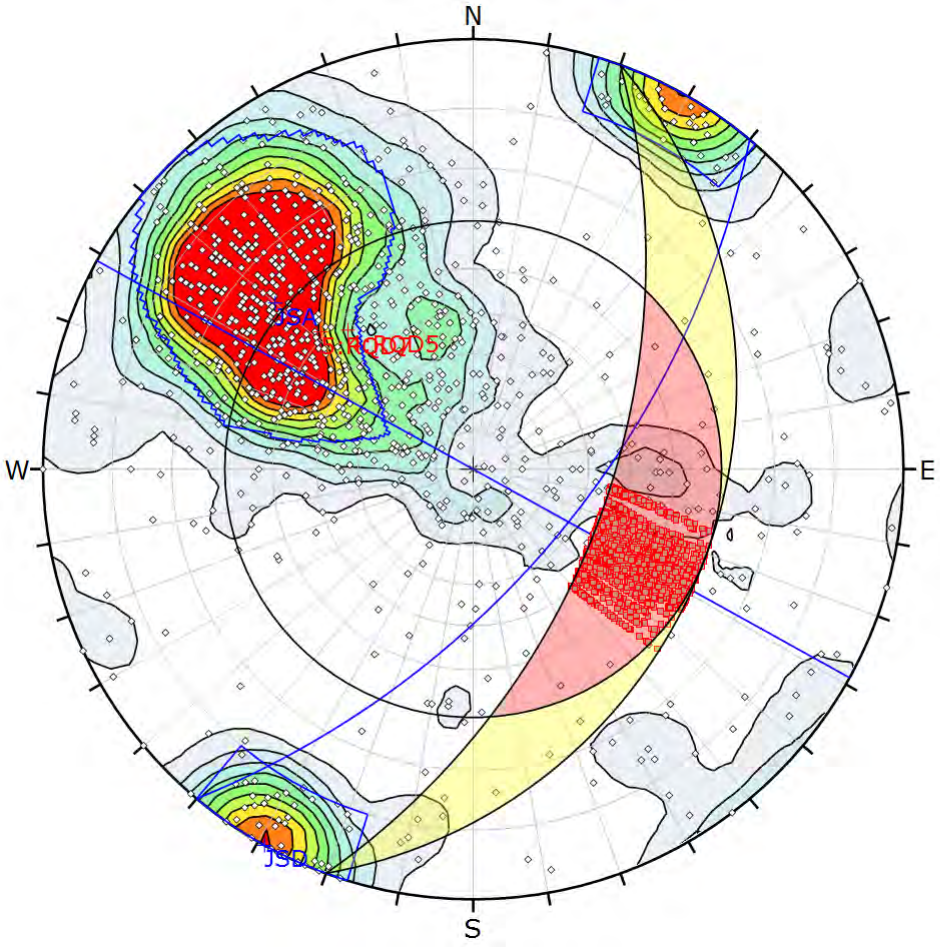
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	110
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	24854	36112	68.82%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Intersection Mode	Set 1 vs Set 2 Planes
Intersections Count	36112
Hemisphere	Lower
Projection	Equal Angle

3.1.1 East-North: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

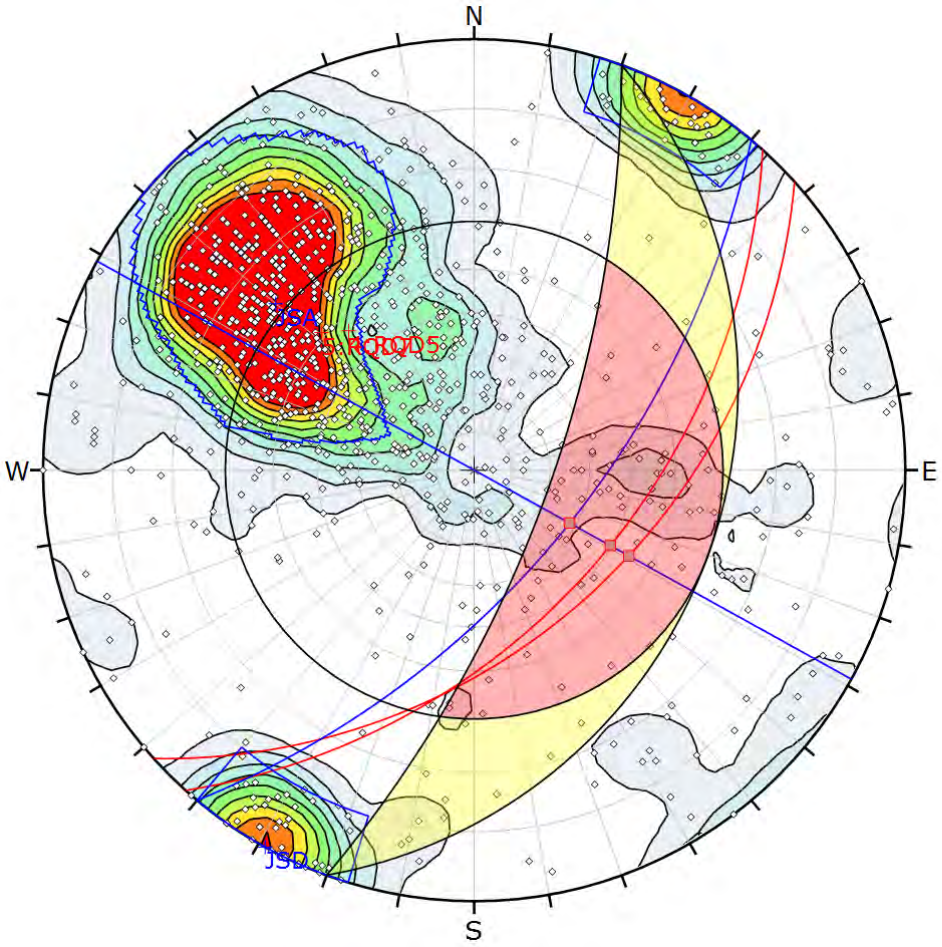
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	55
Slope Dip Direction	110
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	10166	36112	28.15%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Intersection Mode	Set 1 vs Set 2 Planes
Intersections Count	36112
Hemisphere	Lower
Projection	Equal Angle

3.2 East-North: Wedge
User and Mean Set Planes



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

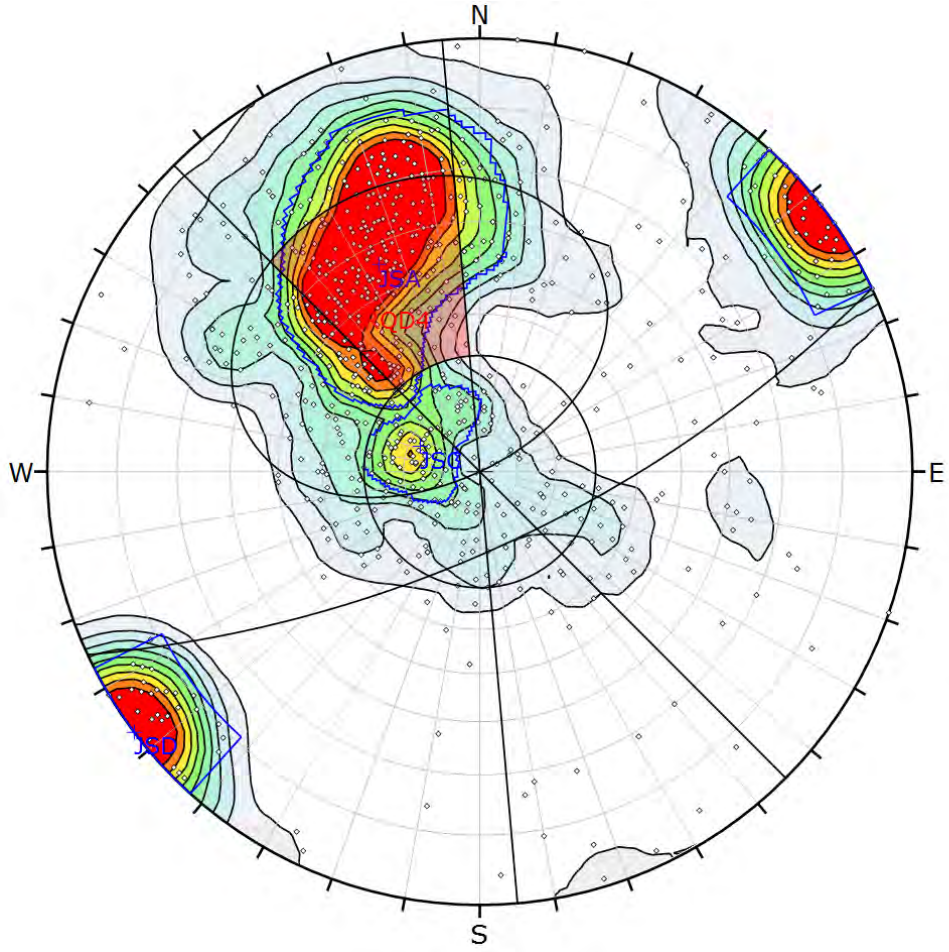
Maximum Density	9.07%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	110
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	3	6	50.00%

Plot Mode	Pole Vectors
Vector Count	1003 (1003 Entries)
Intersection Mode	User and Mean Set Planes
Intersections Count	6
Hemisphere	Lower
Projection	Equal Angle

1. Central-North: Planar Analyses



Symbol	Feature
◦	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

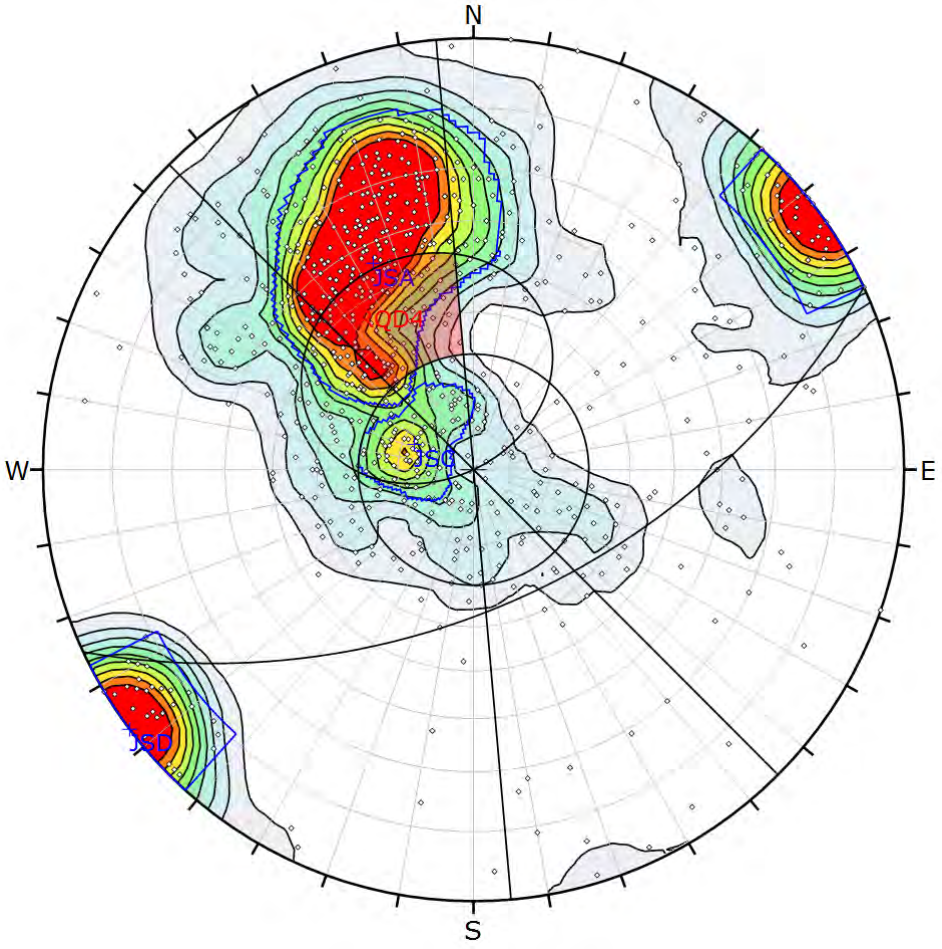
Maximum Density	7.26%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	155
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	200	740	27.03%
Planar Sliding (Set 1)	194	309	62.78%

Plot Mode	Pole Vectors
Vector Count	740 (740 Entries)
Hemisphere	Lower
Projection	Equal Angle

1.1 Central-North: Planar Analyses



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

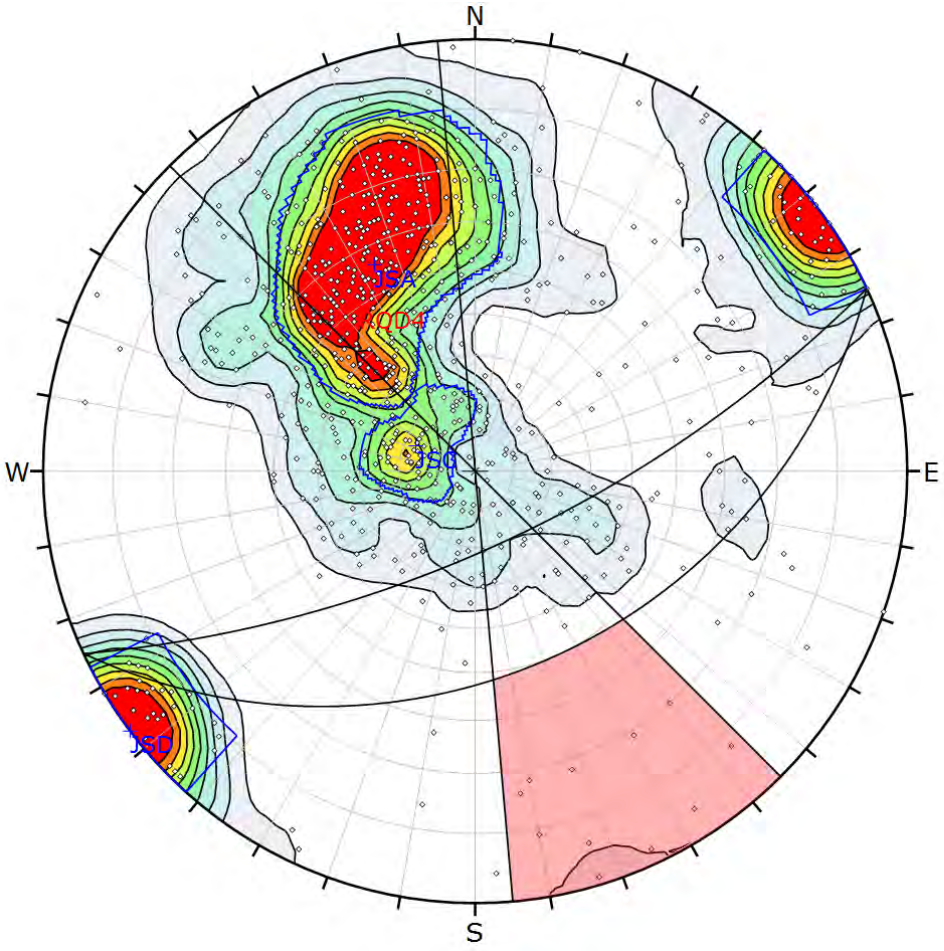
Maximum Density	7.26%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	55
Slope Dip Direction	155
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	82	740	11.08%
Planar Sliding (Set 1)	76	309	24.60%

Plot Mode	Pole Vectors
Vector Count	740 (740 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. Central-North: Toppling Analyses



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

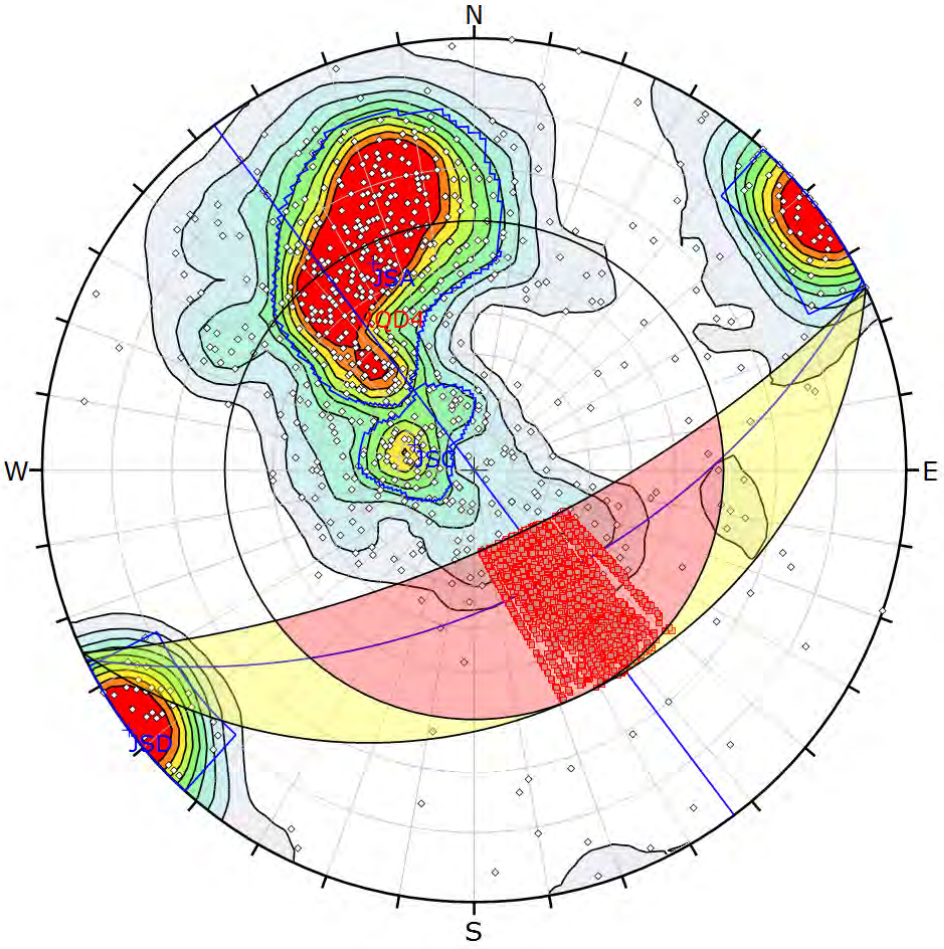
Maximum Density	7.26%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	155
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	11	740	1.49%

Plot Mode	Pole Vectors
Vector Count	740 (740 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 Central-North: Wedge Analyses
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

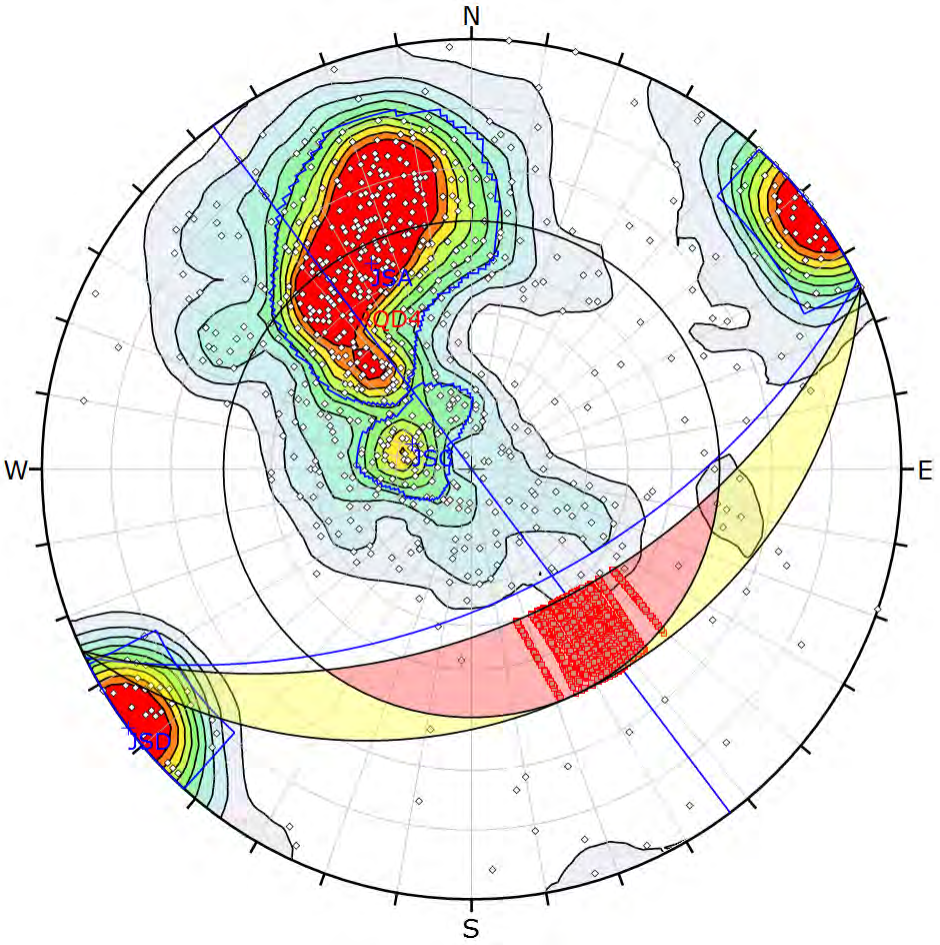
Maximum Density	7.26%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	155
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	18670	22248	83.92%

Plot Mode	Pole Vectors
Vector Count	740 (740 Entries)
Intersection Mode	Set 1 vs Set 4 Planes
Intersections Count	22248
Hemisphere	Lower
Projection	Equal Angle

3.1.1 Central-North: Wedge Analyses
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

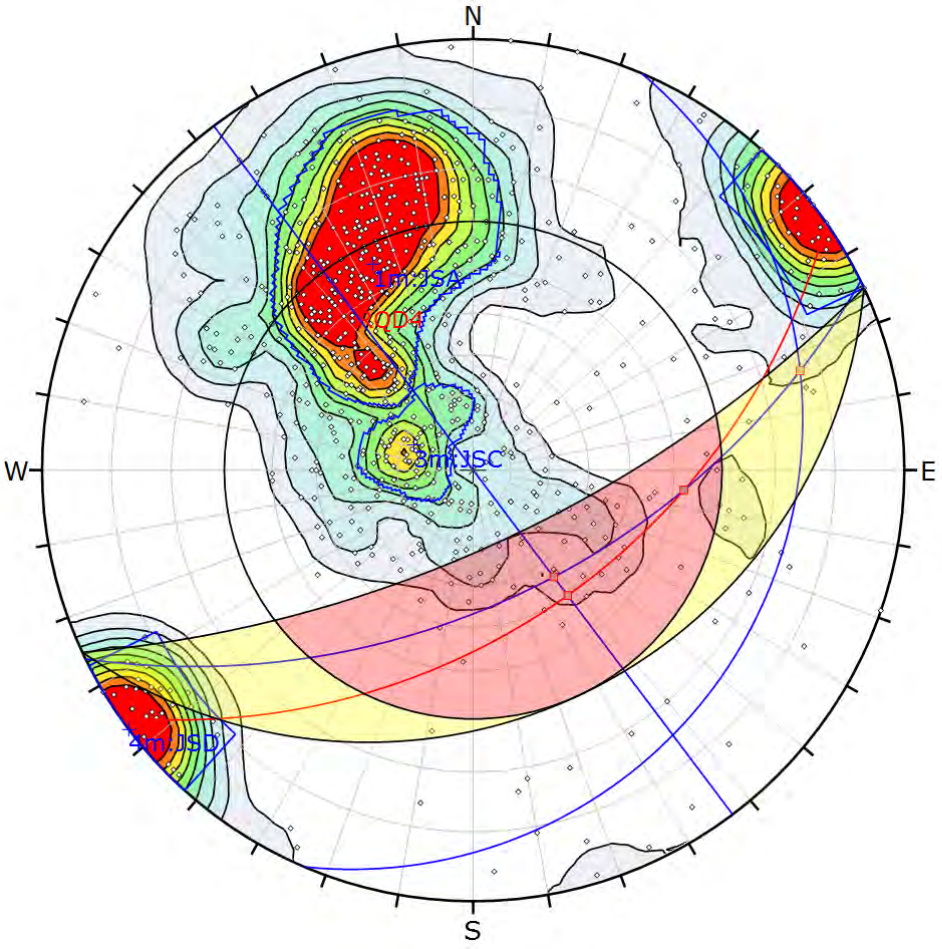
Maximum Density	7.26%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	50
Slope Dip Direction	155
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	5748	22248	25.84%

Plot Mode	Pole Vectors
Vector Count	740 (740 Entries)
Intersection Mode	Set 1 vs Set 4 Planes
Intersections Count	22248
Hemisphere	Lower
Projection	Equal Angle

3.2 Central-North: Wedge Analyses User and Set Mean Planes



Symbol	Feature
◇	Pole Vectors
□	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

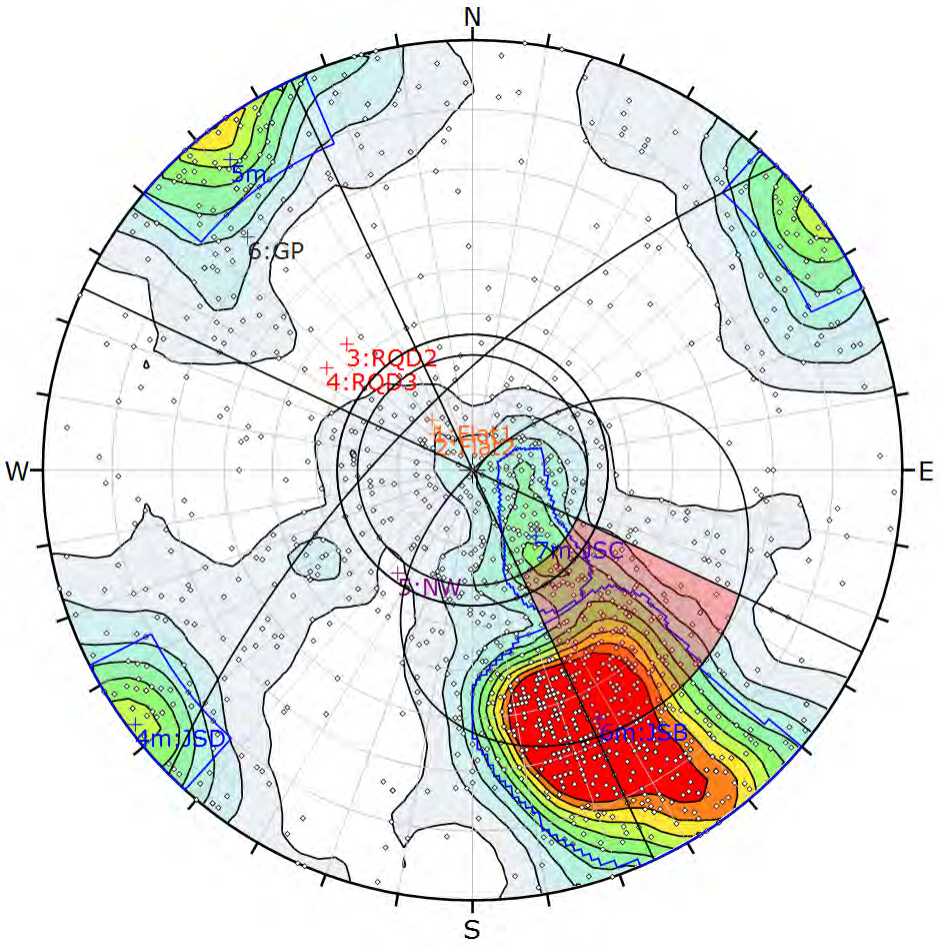
Maximum Density	7.26%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	155
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	4	6	66.67%

Plot Mode	Pole Vectors
Vector Count	740 (740 Entries)
Intersection Mode	User and Mean Set Planes
Intersections Count	6
Hemisphere	Lower
Projection	Equal Angle

1. Central-South: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

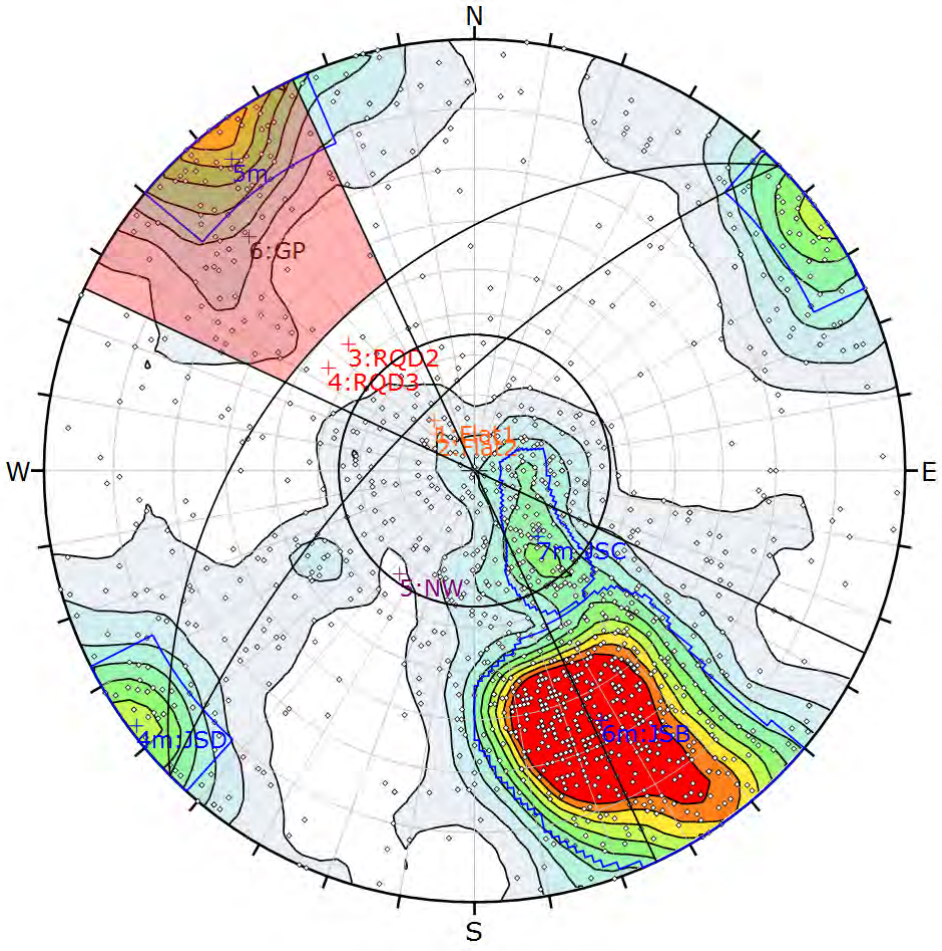
Maximum Density	8.09%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	315
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	209	1341	15.59%
Planar Sliding (Set 6)	151	507	29.78%
Planar Sliding (Set 7)	34	103	33.01%

Plot Mode	Pole Vectors
Vector Count	1341 (1341 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. Central-South: Toppling



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

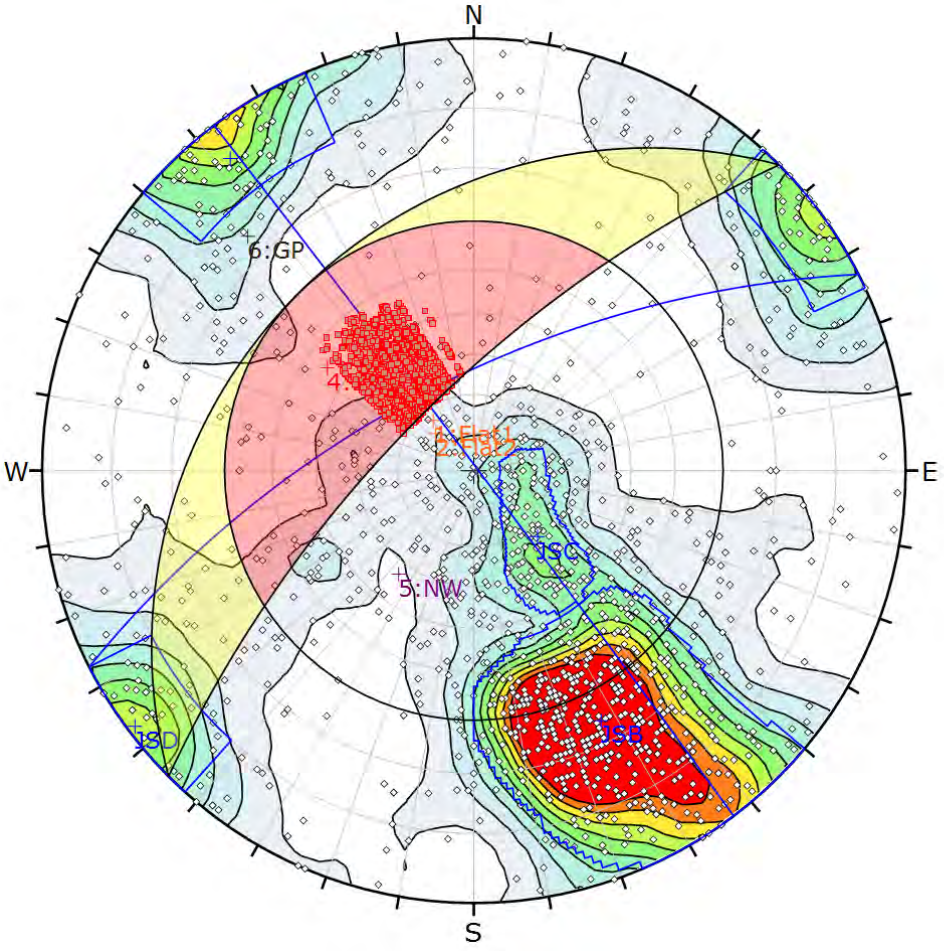
Maximum Density	8.09%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	315
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	94	1341	7.01%
Flexural Toppling (Set 5)	48	49	97.96%

Plot Mode	Pole Vectors
Vector Count	1341 (1341 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 Central-South: Wedge
JSB vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

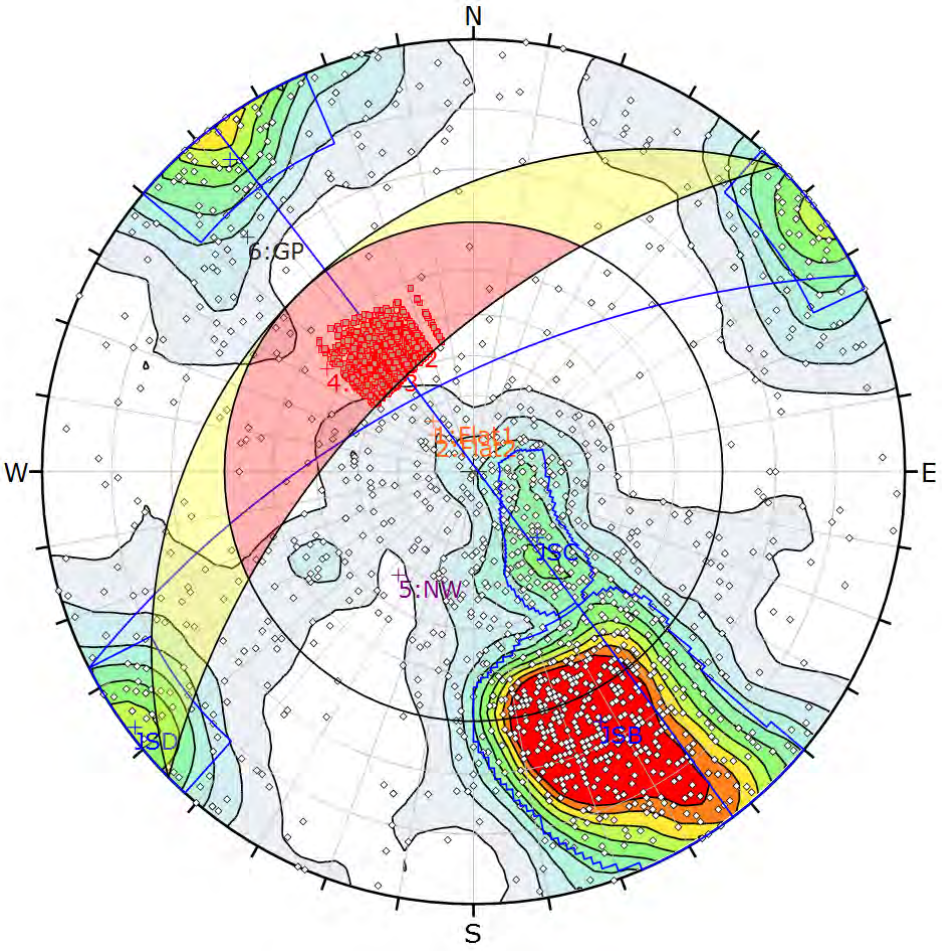
Maximum Density	8.09%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	315
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	21873	35490	61.63%

Plot Mode	Pole Vectors
Vector Count	1341 (1341 Entries)
Intersection Mode	Set 4 vs Set 6 Planes
Intersections Count	35490
Hemisphere	Lower
Projection	Equal Angle

3.1.1 Central-South: Wedge
JSB vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

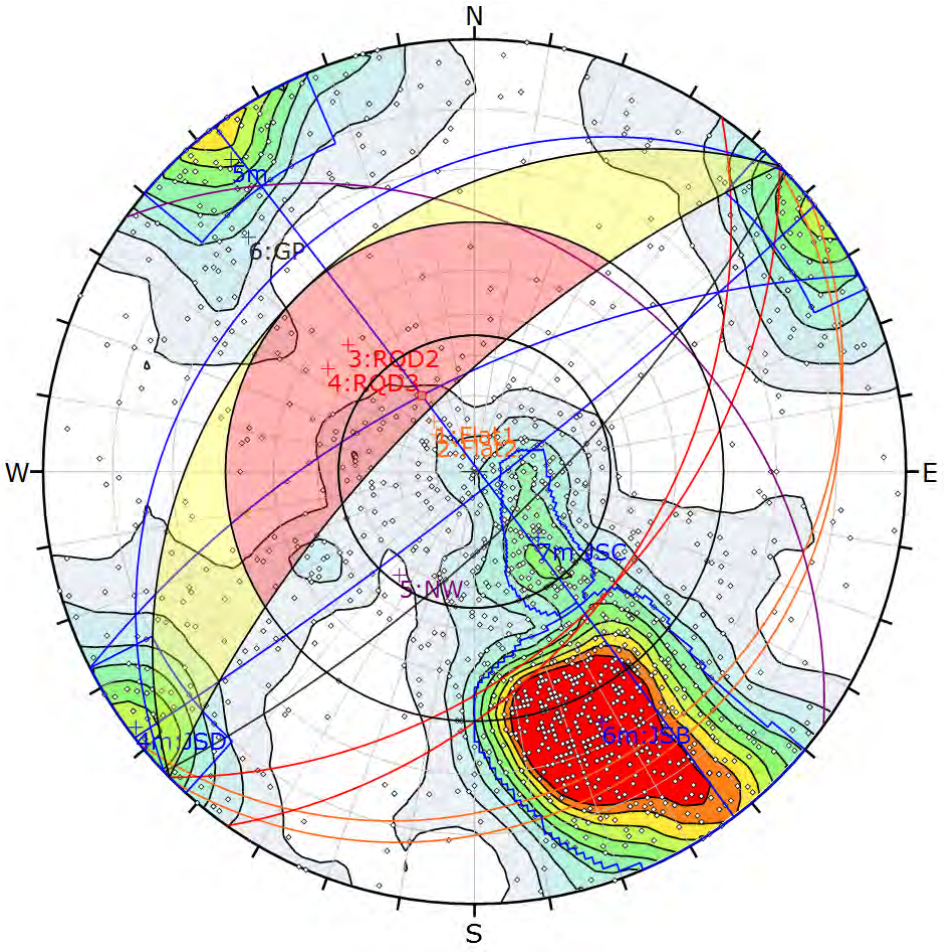
Maximum Density	8.09%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	60
Slope Dip Direction	315
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	11650	35490	32.83%

Plot Mode	Pole Vectors
Vector Count	1341 (1341 Entries)
Intersection Mode	Set 4 vs Set 6 Planes
Intersections Count	35490
Hemisphere	Lower
Projection	Equal Angle

3.2 Central-South: Wedge User and Mean Set Planes



Symbol	Feature
◇	Pole Vectors
■	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

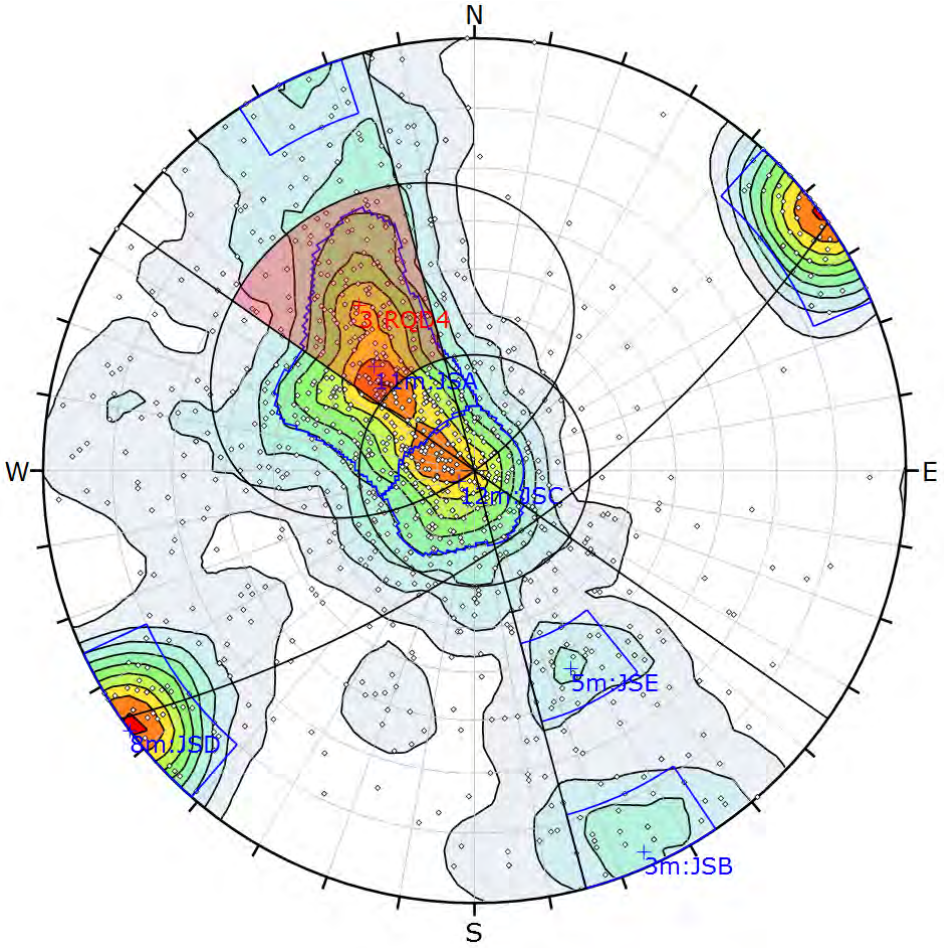
Maximum Density	8.09%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	315
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	1	45	2.22%

Plot Mode	Pole Vectors
Vector Count	1341 (1341 Entries)
Intersection Mode	User and Mean Set Planes
Intersections Count	45
Hemisphere	Lower
Projection	Equal Angle

1. West-North: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

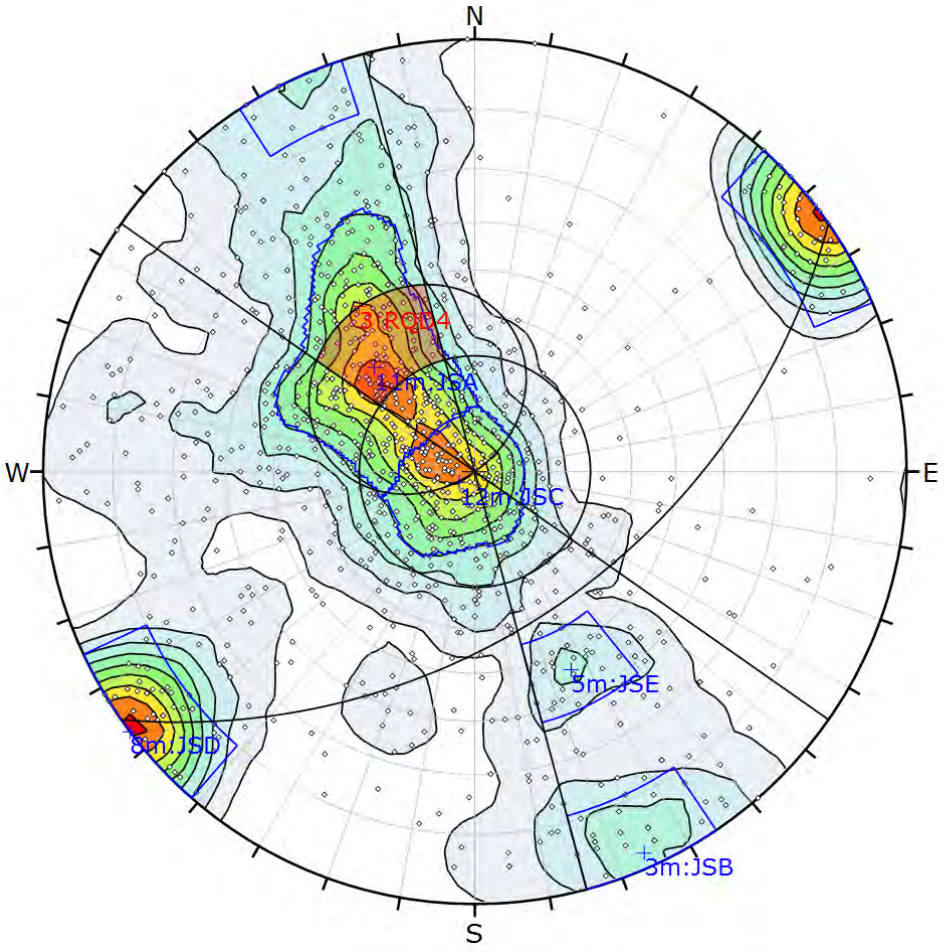
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	145
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	168	1033	16.26%
Planar Sliding (Set 11)	141	266	53.01%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

1.1 West-North: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

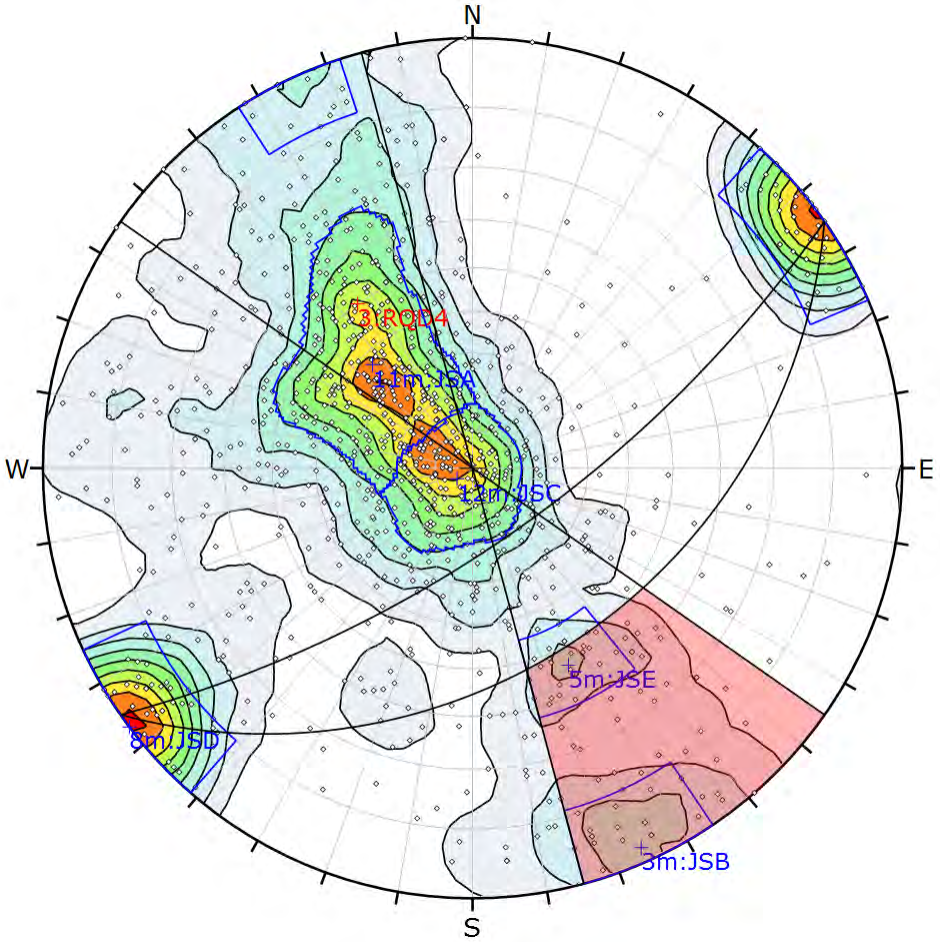
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	50
Slope Dip Direction	145
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	92	1033	8.91%
Planar Sliding (Set 11)	89	266	33.46%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. West-North: Toppling



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

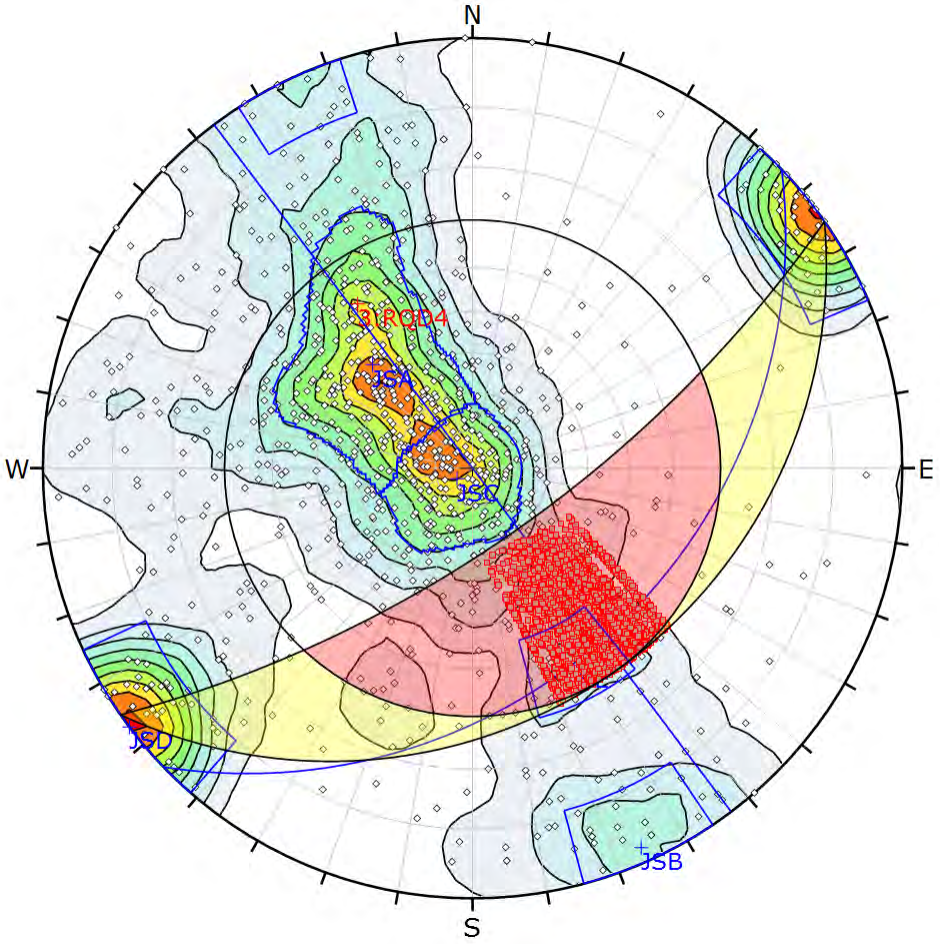
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	145
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	72	1033	6.97%
Flexural Toppling (Set 3)	18	29	62.07%
Flexural Toppling (Set 5)	21	26	80.77%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 West-North: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

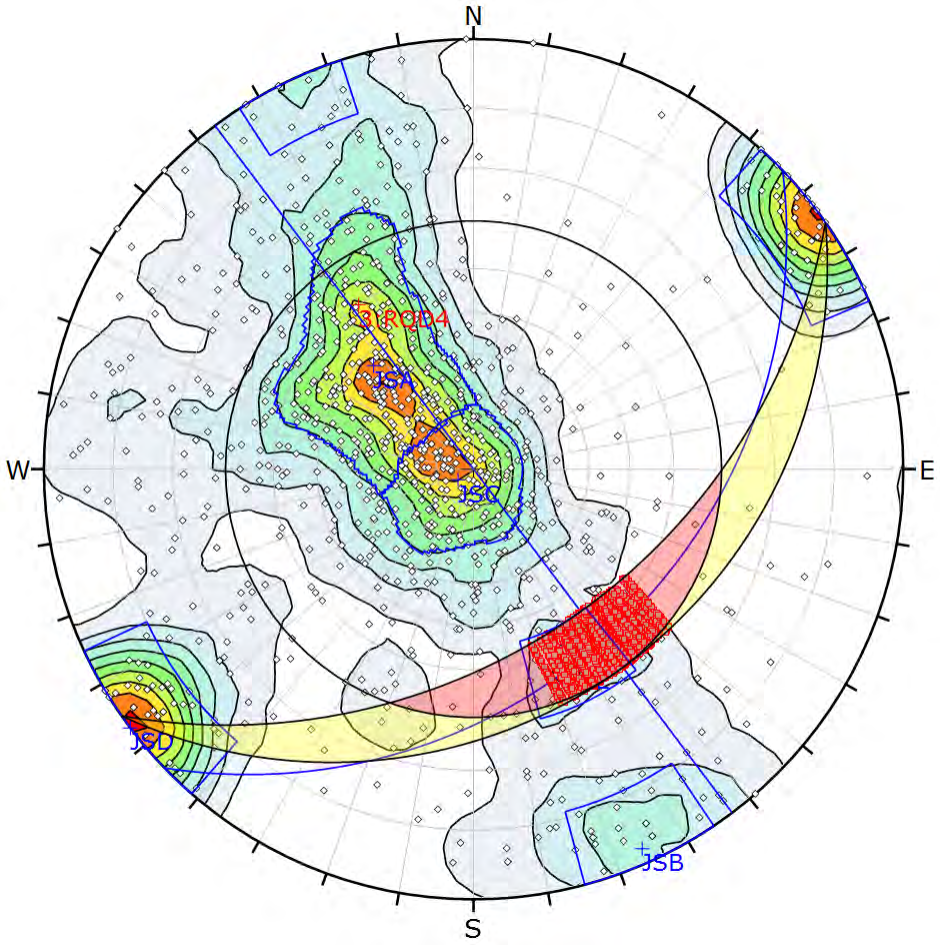
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	145
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	14149	21546	65.67%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	Set 8 vs Set 11 Planes
Intersections Count	21546
Hemisphere	Lower
Projection	Equal Angle

3.1.1 West-North: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

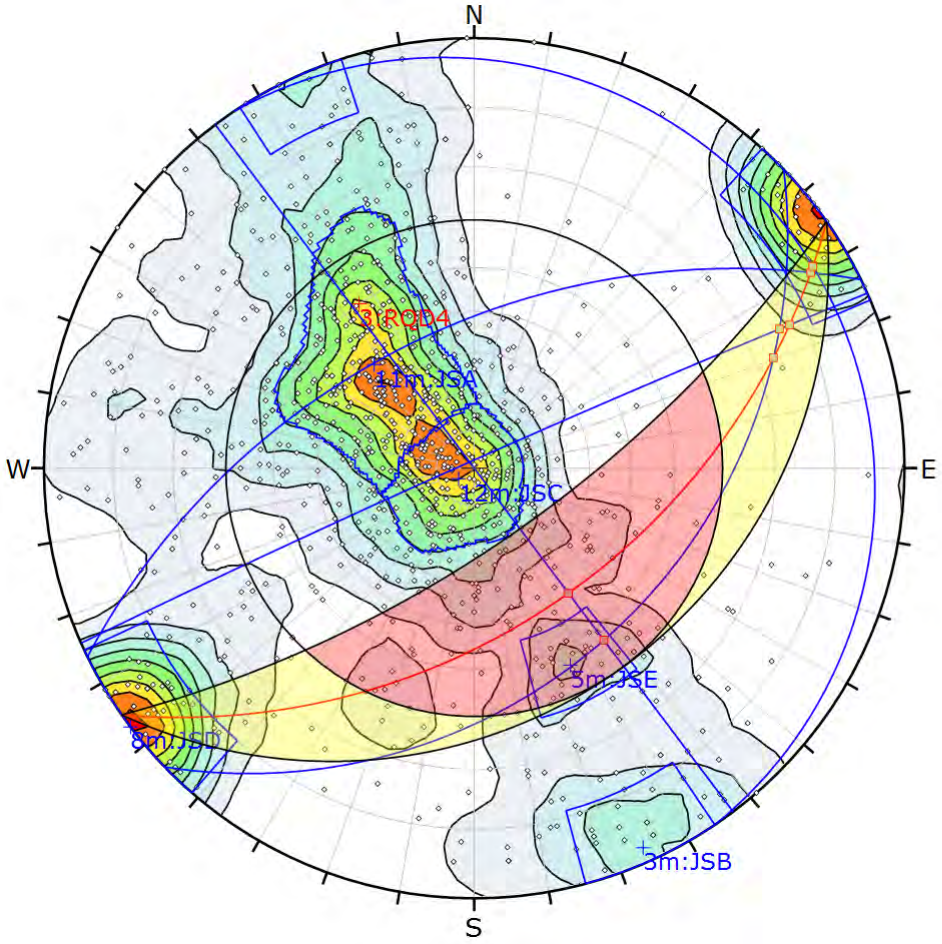
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	45
Slope Dip Direction	145
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	8043	21546	37.33%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	Set 8 vs Set 11 Planes
Intersections Count	21546
Hemisphere	Lower
Projection	Equal Angle

3.2 West-North: Wedge
User and Mean Set Planes



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

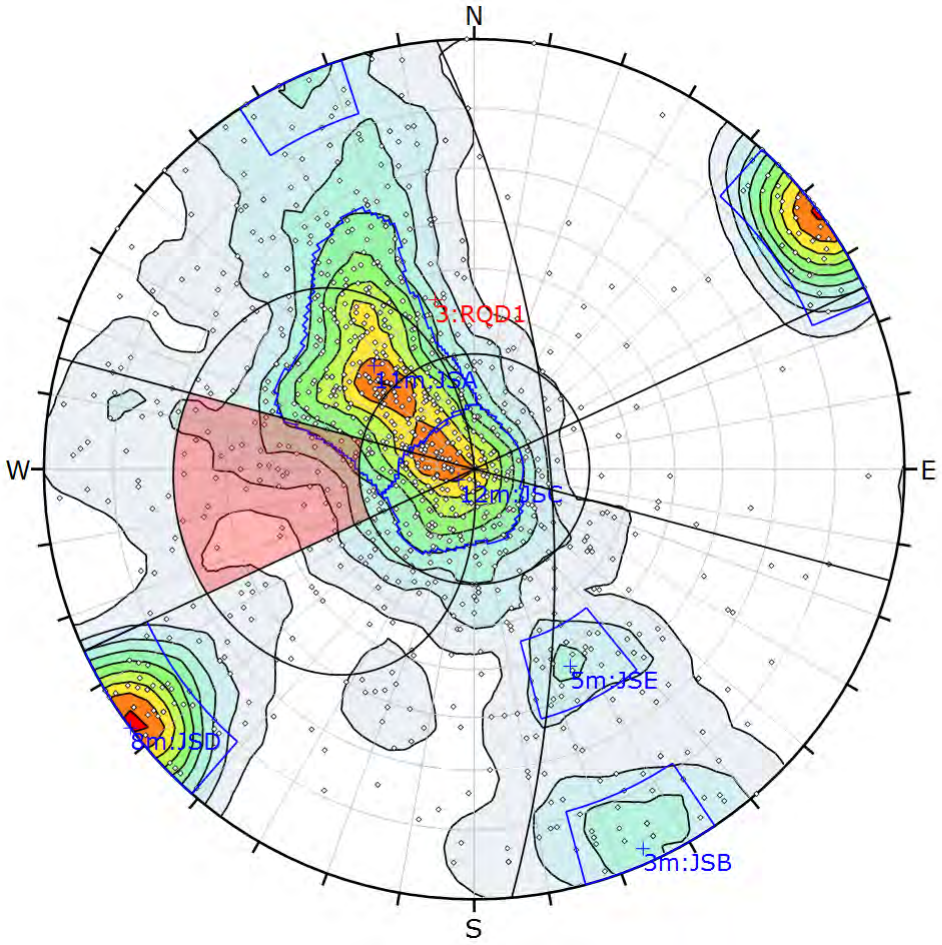
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	145
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	7	15	46.67%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	User and Mean Set Planes
Intersections Count	15
Hemisphere	Lower
Projection	Equal Angle

1. West: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

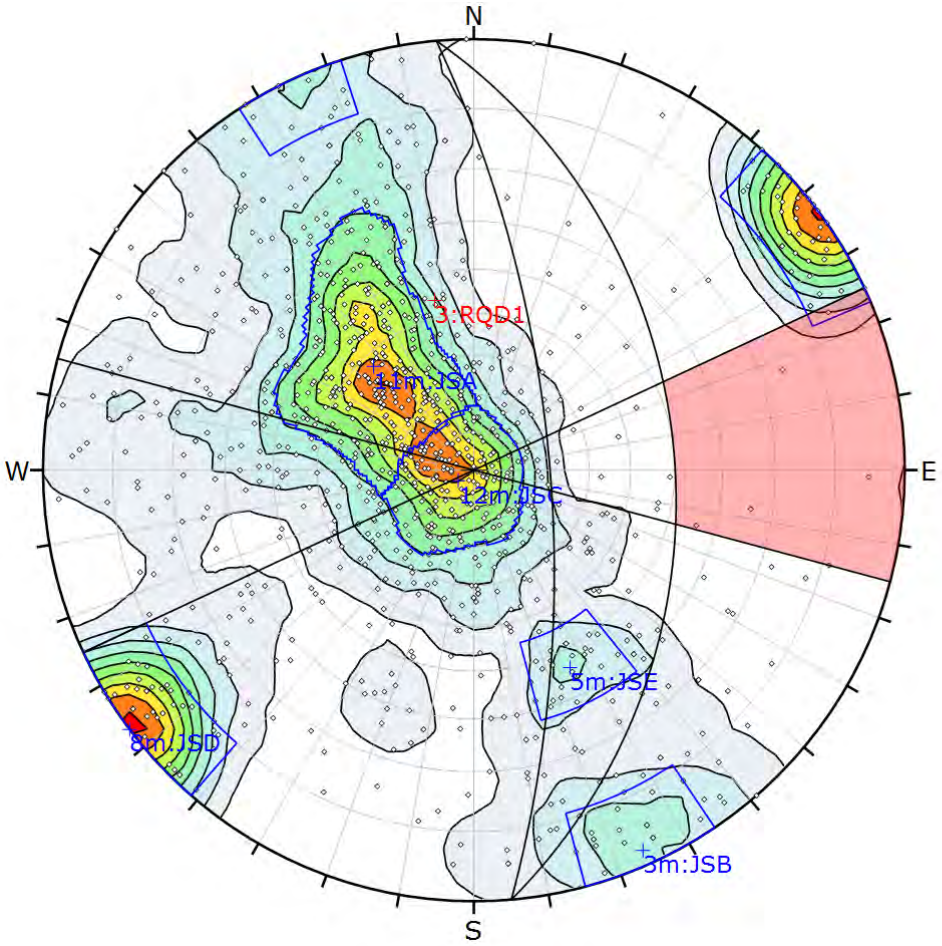
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	85
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	58	1033	5.61%
Planar Sliding (Set 11)	11	266	4.14%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. West: Toppling



Symbol	Feature
◦	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

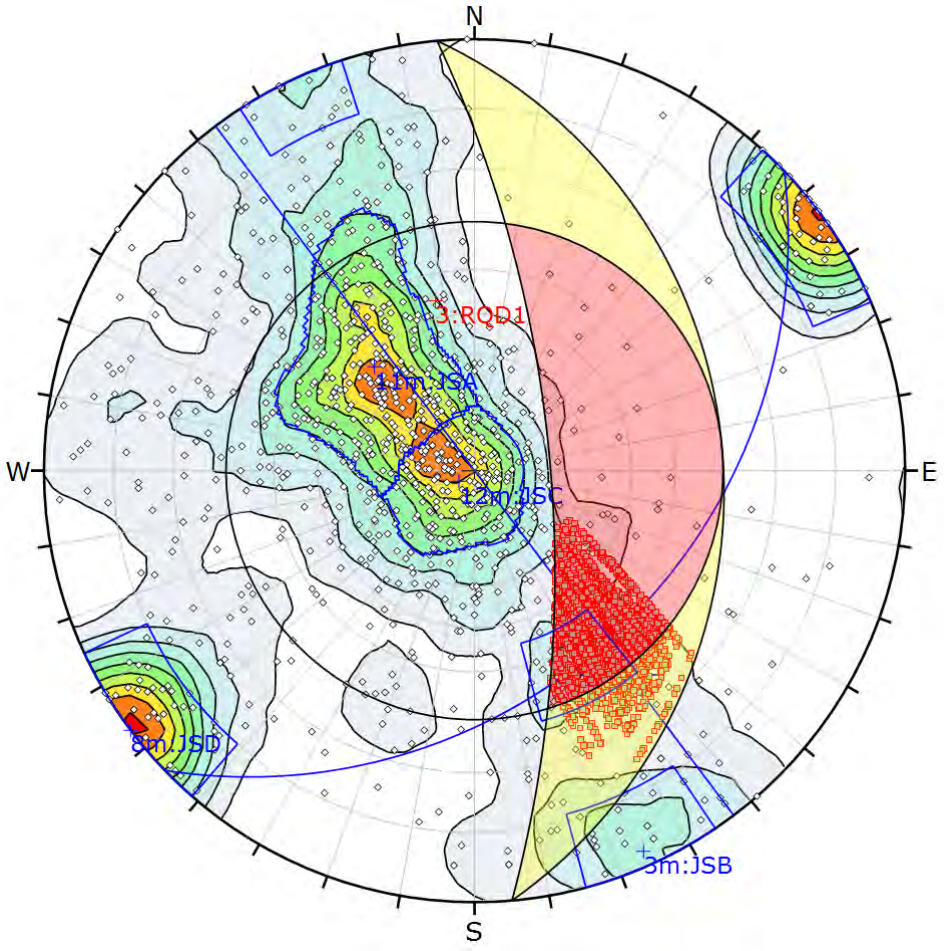
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	85
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	7	1033	0.68%
Flexural Toppling (Set 8)	2	81	2.47%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 West: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

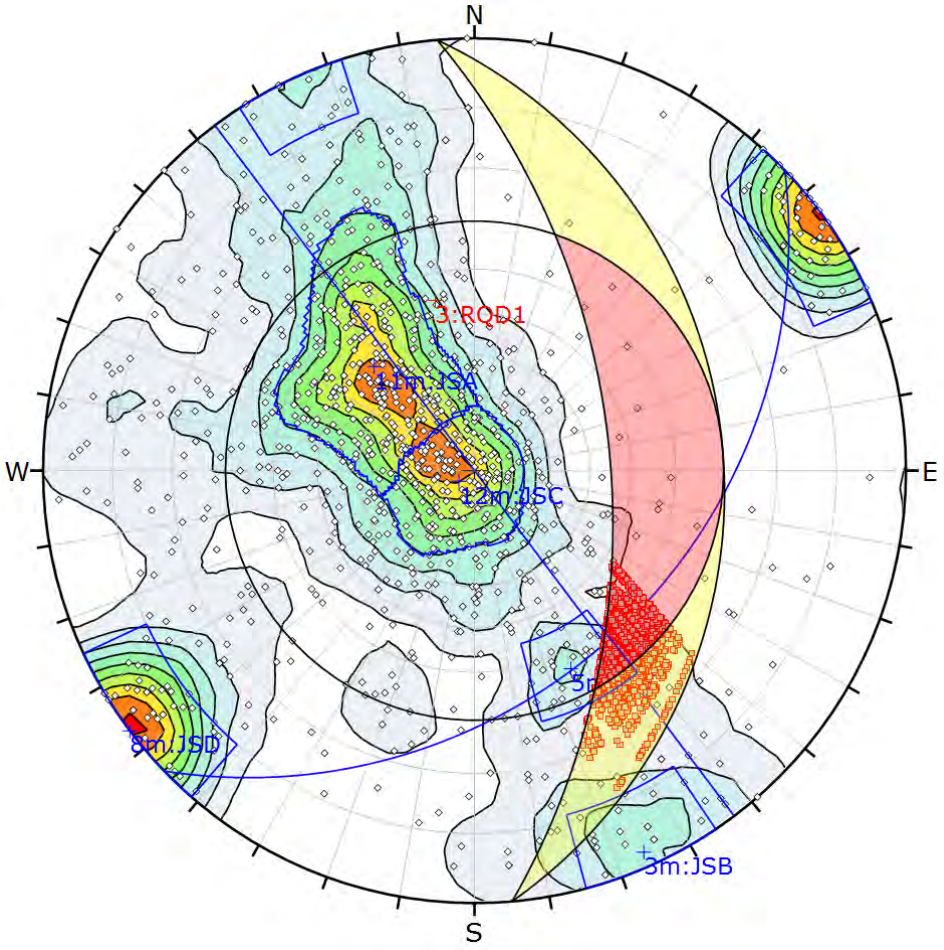
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	85
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	13104	21546	60.82%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	Set 8 vs Set 11 Planes
Intersections Count	21546
Hemisphere	Lower
Projection	Equal Angle

3.1.1 West: Wedge
JSA vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

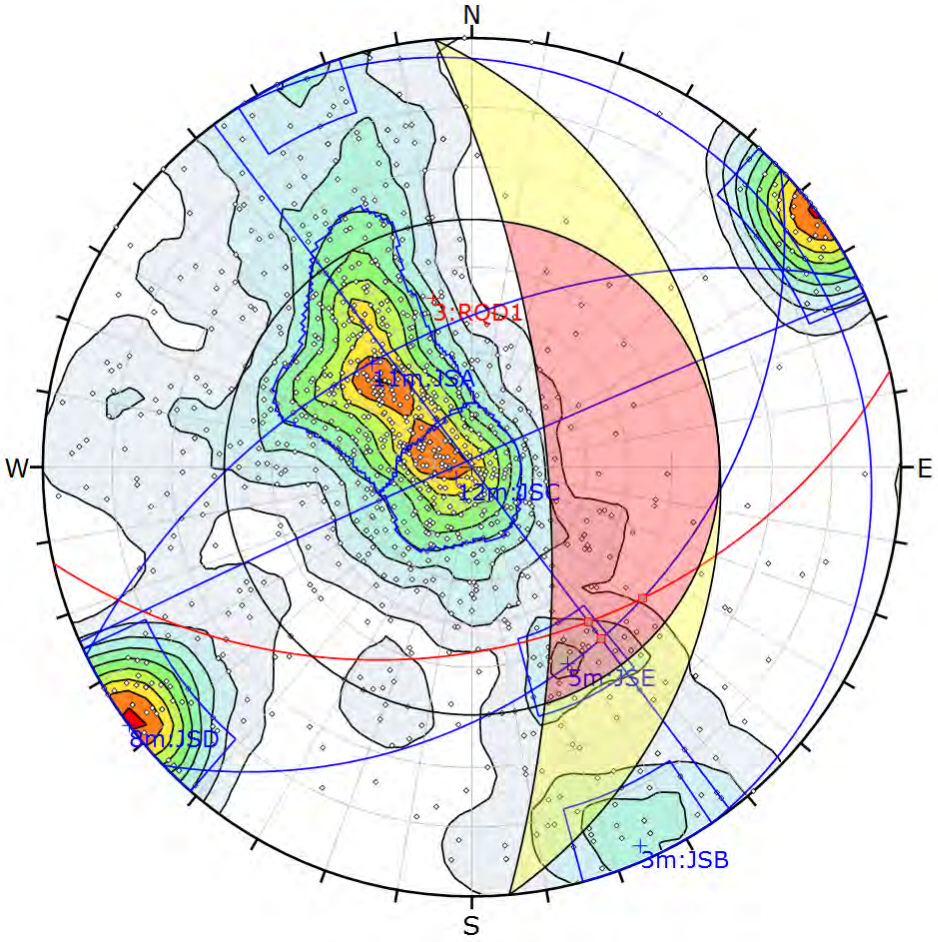
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	55
Slope Dip Direction	85
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	5381	21546	24.97%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	Set 8 vs Set 11 Planes
Intersections Count	21546
Hemisphere	Lower
Projection	Equal Angle

3.2 West: Wedge
User and Mean Set Planes



Symbol	Feature
◇	Pole Vectors
□	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

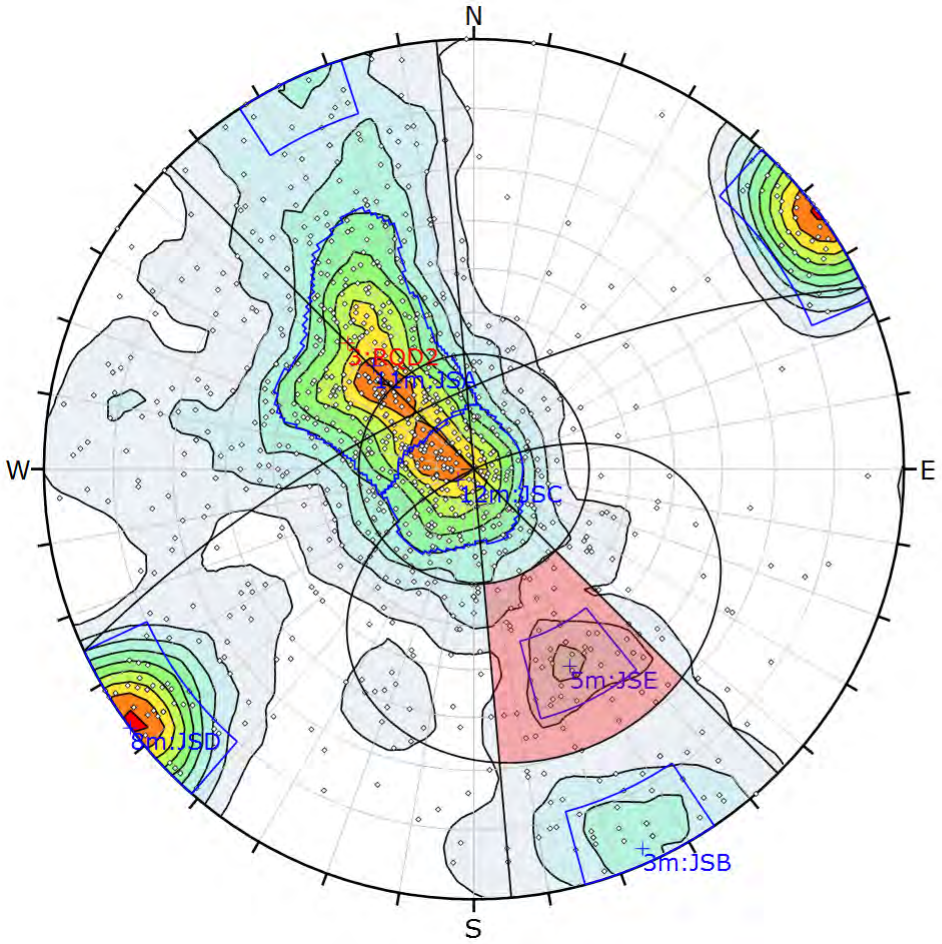
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	85
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	3	15	20.00%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	User and Mean Set Planes
Intersections Count	15
Hemisphere	Lower
Projection	Equal Angle

1. West-South: Planar



Symbol	Feature
◦	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

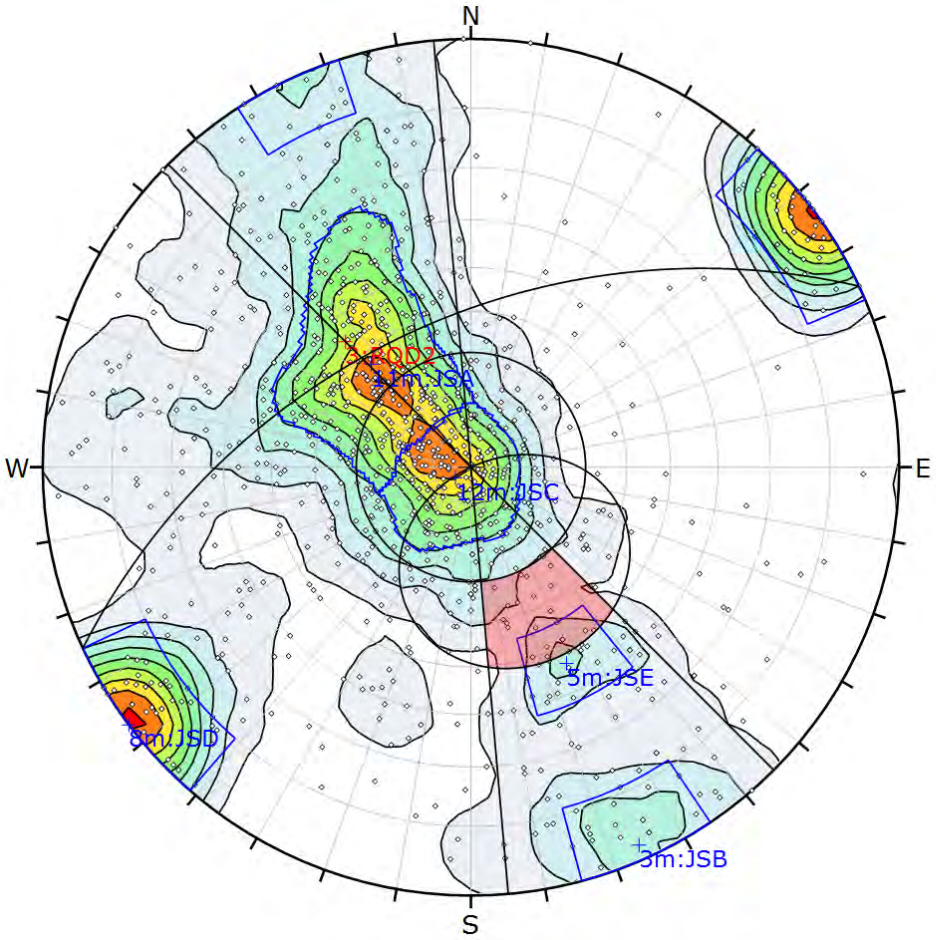
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	70
Slope Dip Direction	335
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	58	1033	5.61%
Planar Sliding (Set 5)	26	26	100.00%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

1.1 West-South: Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

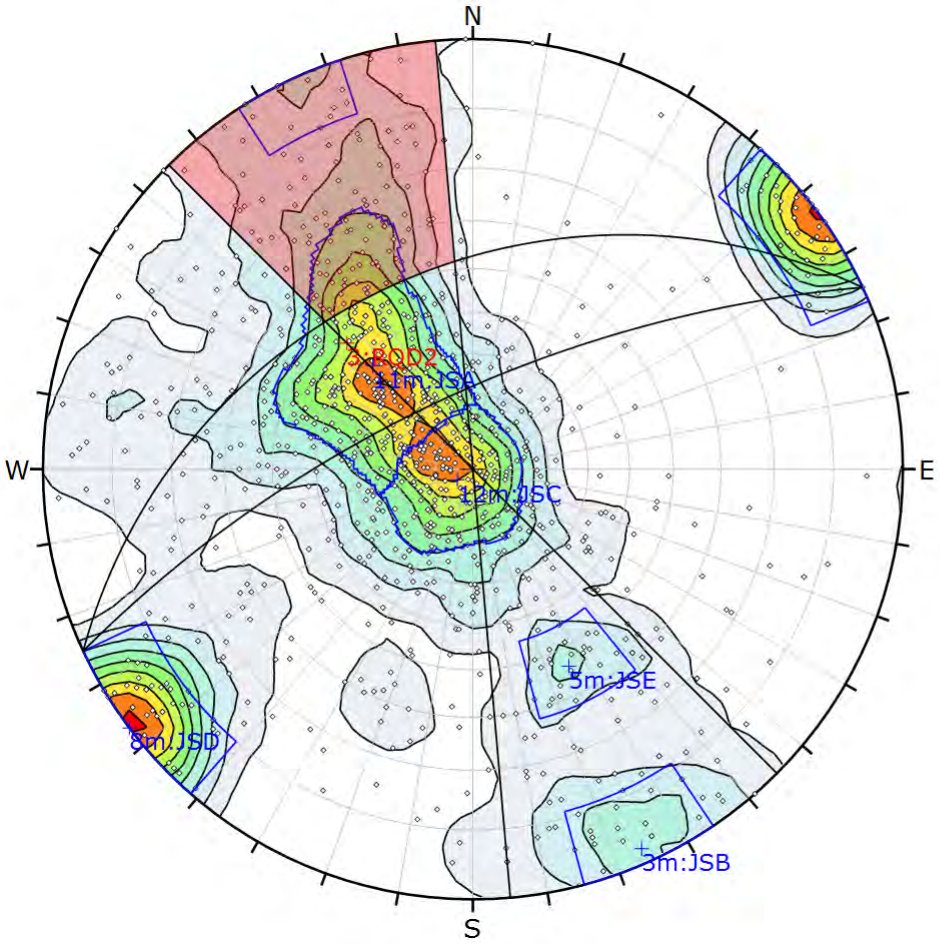
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	52
Slope Dip Direction	335
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Planar Sliding (All)	23	1033	2.23%
Planar Sliding (Set 5)	8	26	30.77%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

2. West-South: Toppling



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

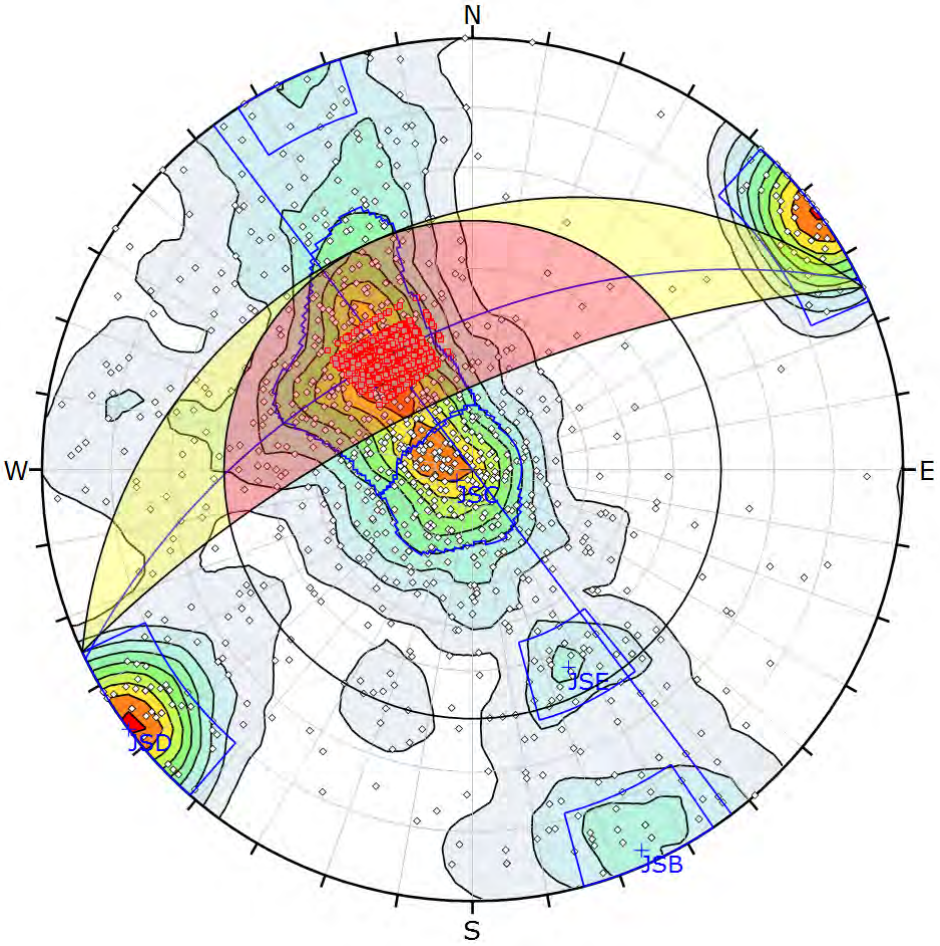
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Flexural Toppling
Slope Dip	70
Slope Dip Direction	335
Friction Angle	30°
Lateral Limits	20°

	Critical	Total	%
Flexural Toppling (All)	117	1033	11.33%
Flexural Toppling (Set 3)	11	29	37.93%
Flexural Toppling (Set 11)	44	266	16.54%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Hemisphere	Lower
Projection	Equal Angle

3.1 West-South: Wedge
JSE vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

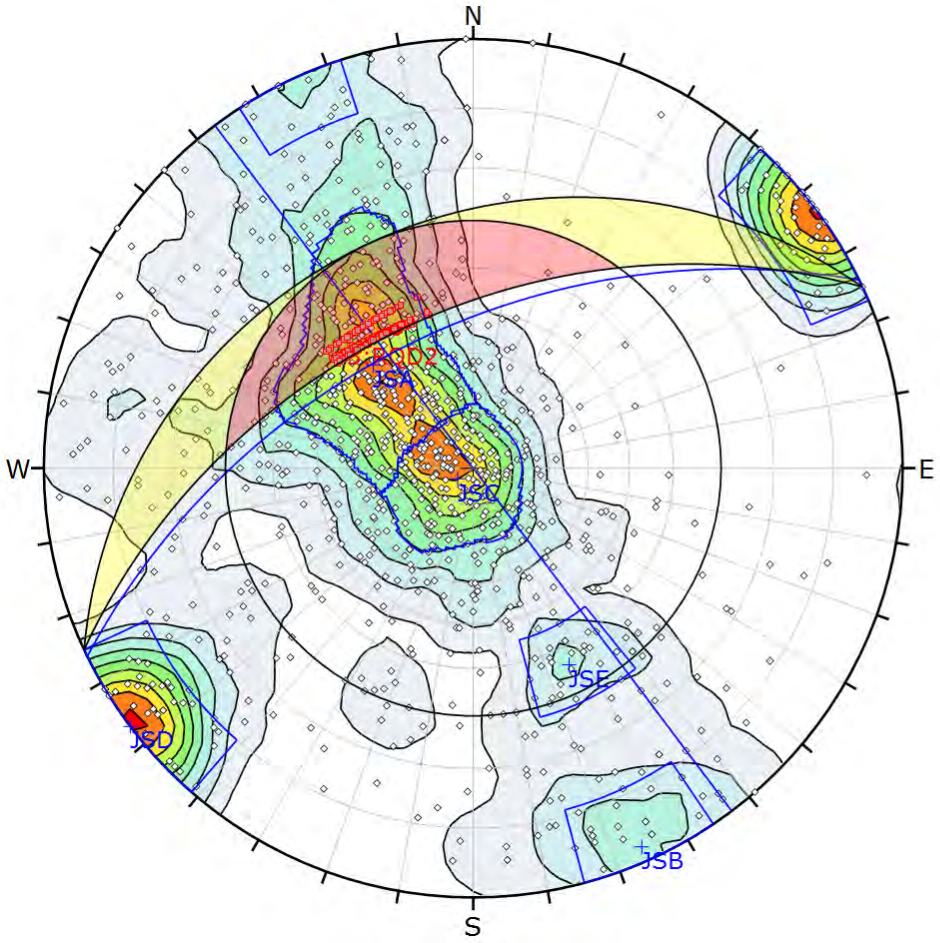
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	335
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	2106	2106	100.00%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	Set 5 vs Set 8 Planes
Intersections Count	2106
Hemisphere	Lower
Projection	Equal Angle

3.1.1 West-South: Wedge
JSE vs JSD



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

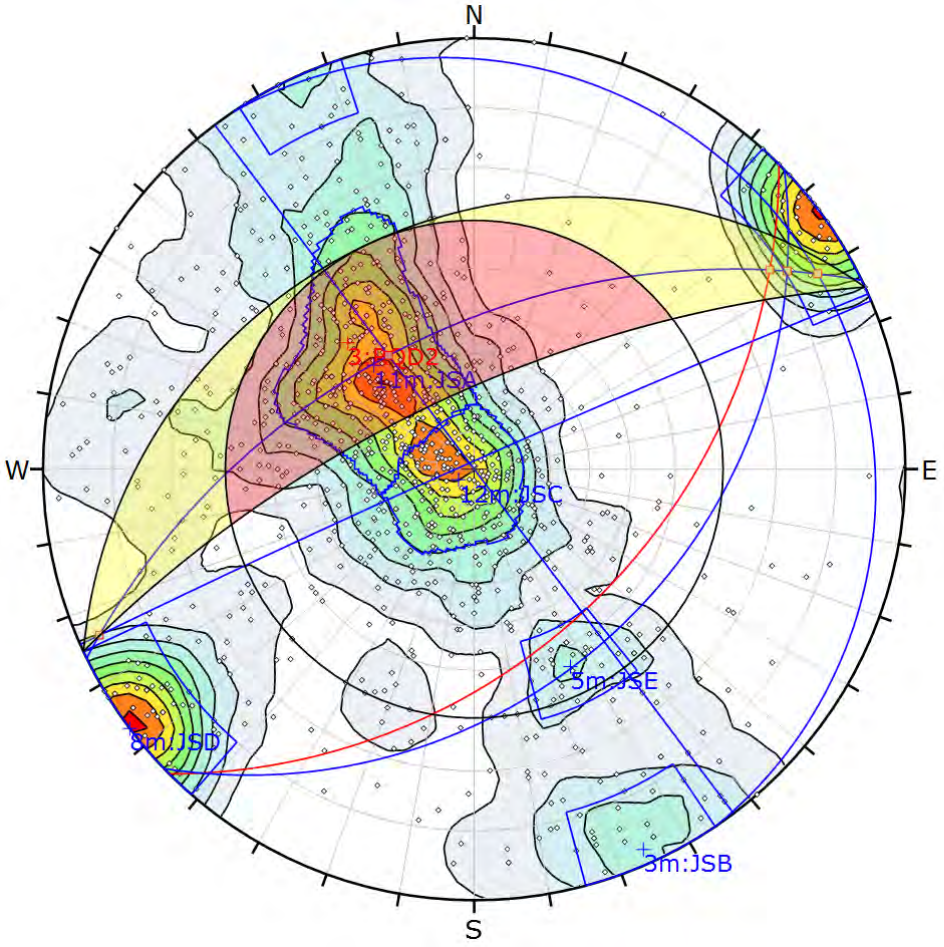
Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	50
Slope Dip Direction	335
Friction Angle	30°

	Critical	Total	%
Wedge Sliding	424	2106	20.13%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	Set 5 vs Set 8 Planes
Intersections Count	2106
Hemisphere	Lower
Projection	Equal Angle

3.2 West-South: Wedge
User and Mean Set Planes



Symbol	Feature
◇	Pole Vectors
□	Critical Intersection

Color	Density Concentrations
	0.00 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	2.00 - 2.50
	2.50 - 3.00
	3.00 - 3.50
	3.50 - 4.00
	4.00 - 4.50
	4.50 <

Maximum Density	4.63%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding
Slope Dip	70
Slope Dip Direction	335
Friction Angle	30°

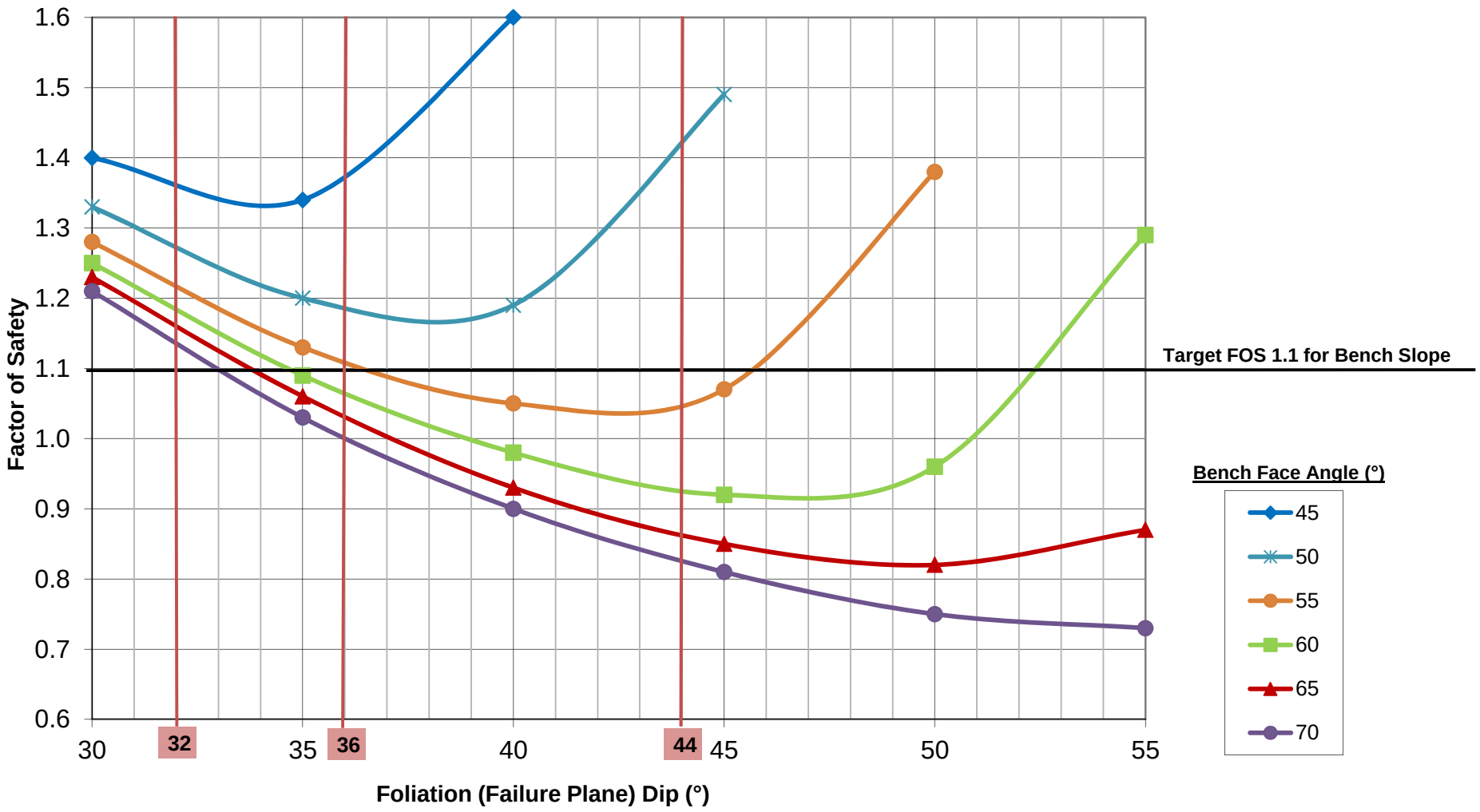
	Critical	Total	%
Wedge Sliding	5	15	33.33%

Plot Mode	Pole Vectors
Vector Count	1033 (1033 Entries)
Intersection Mode	User and Mean Set Planes
Intersections Count	15
Hemisphere	Lower
Projection	Equal Angle

APPENDIX E

ROCPLANE ANALYSES - RESULTS SUMMARY FOR WEST-NORTH SECTOR

(Page E-1)



NOTES:

1. BENCH SCALE PLANAR FAILURE ANALYSIS CARRIED OUT USING ROCPLANE 3.0 PROGRAM (ROCSCIENCE).
2. ANALYSES ASSUMES SLOPE DIP DIRECTION IS THE SAME AS THAT OF THE FOLIATION.
3. FRICTION ANGLE OF THE FOLIATION ASSUMED TO BE 30 DEGREES.
4. LIMITED COHESION OF 20 KPa WAS ASSUMED.
5. A DRY BENCH SLOPE WAS ASSUMED.
6."UNLIMITED" BENCH WIDTH CASE INDICATES THAT THE BENCH FAILURE PLANE CAN EXTEND BEYOND THE WIDTH OF THE BENCH, WHICH IS THE WORST CASE SCENARIO.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT	DAY	BDP

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION

WHALE TAIL PIT

BENCH SCALE PLANAR FAILURE ANALYSES FOR WEST-NORTH SECTOR FACTOR OF SAFETY VS FOLIATION DIP

Knight Piésold CONSULTING

P/A NO. NB101-622/3

REF. NO. 2

FIGURE E.1

REV 0

APPENDIX F

LIMIT-EQUILIBRIUM ANALYSIS - RESULTS SUMMARY

APPENDIX F1

LIMIT-EQUILIBRIUM ANALYSES - INTER-RAMP SLOPE RESULTS SUMMARY

(Page F1-1)

Knight Piésold CONSULTING

TABLE F1.1

AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN
LIMIT EQUILIBRIUM ANALYSES - INTER-RAMP SLOPE RESULTS SUMMARY

Print Nov/26/15 12:30:45

Groundwater Conditions	Domain	Slope Height (m)	INTER-RAMP ANGLE					
			40°	42°	45°	50°	52°	55°
Dry (Permafrost)	Greywacke	100						3.05
	Chert	100						3.92
	Ultramafics (North Limb)	75						2.18
		100						1.96
	Ultramafics (South Limb)	75						1.92
		100						1.74
	Altered Ultramafics	100						2.95
	Diorite	100						4.59
10 m Depressurized	Ultramafics (North Limb)	75					1.82	1.69
		100					1.53	1.43
	Ultramafics (South Limb	75					1.59	1.49
		100			1.61	1.42	1.34	1.26
Fully Saturated (Open Talik)	Greywacke	100						1.75
	Chert	100						2.42
	Ultramafics (North Limb	75				1.40	1.37	1.26
		100			1.44	1.25	1.19	1.14
	Ultramafics (South Limb	75		1.54	1.39	1.21	1.16	1.11
		100	1.47	1.37	1.23	1.08	1.05	1.01
	Altered Ultramafics	100						2.29
	Diorite	100						3.02

I:\1\01\00622\03\A\Report\Report 2 Rev 0 Updated Scoping Study\Appendices\F - L-E Analyses\[F1 - IRA Results.xlsx]Table - IRA Results

NOTES:
1. MODELS WERE CONSTRUCTED USING SLOPE/W (GEO-SLOPE, 2012).
2. ROCK MASS STRENGTH DERIVED USING THE HOEK-BROWN FAILURE CRITERION (HOEK ET AL., 2002).
3. MODELS ARE RUN USING A FULLY DISTURBED SLOPE (D=0.85 FOR ALL DOMAINS EXCEPT THE ULTRAMAFICS WHERE D=0.7 DUE TO LOWER ROCK MASS QUALITY).
4. TARGET FOS IS 1.2.

LEGEND:

FOS ≥ 1.4
1.3 ≤ FOS < 1.4
1.2 ≤ FOS < 1.3
1.1 ≤ FOS < 1.2
1.0 ≤ FOS < 1.1
FOS < 1.0

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	27NOV'15	ISSUED WITH REPORT NB101-622/3-2	ATJ	BDP

APPENDIX F2

LIMIT-EQUILIBRIUM ANALYSES - OVERALL SLOPE RESULTS SUMMARY

(Page F2-1)

Knight Piésold CONSULTING

TABLE F2.1

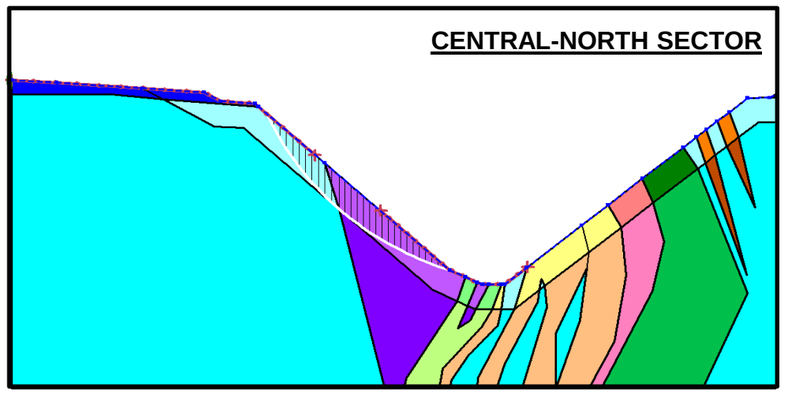
AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT

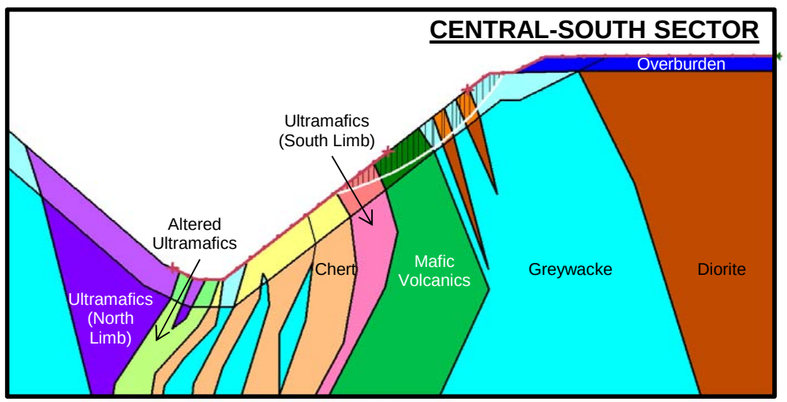
UPDATED SCOPING LEVEL OPEN PIT SLOPE DESIGN
LIMIT EQUILIBRIUM ANALYSES - OVERALL SLOPE RESULTS SUMMARY

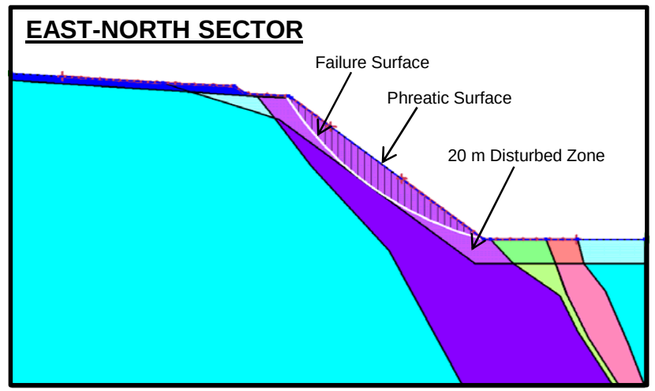
Print Dec/09/15 13:44:46

Sector	Model Height [3] (m)	Overall Slope Angle (°)		
		39	44	49
Central-North	160		**1.6**	
Central-South	165			**2.9**
East-North	130	**1.8**		

I:\1\01\00622\03\A\Report\Report 2 Rev 1 Updated Scoping Study\Appendices\F - L-E Analyses\[F2 - OSA LE Results.xlsx]OS FoS Matrix - Static







NOTES:

1. MODELS WERE CONSTRUCTED USING SLOPE/W (GEO-SLOPE, 2012) BASED ON THE PIT DESIGN PROVIDED BY AEM (SEP. 30, 2015) AND THE GEOLOGICAL MODELS PROVIDED BY AEM (SEP. 29, 2015). MODELS USE A SIMPLIFIED GEOMETRY.
2. SLOPE CONSERVATIVELY ASSUMED TO BE FULLY SATURATED.
3. MODEL HEIGHTS ARE BASED ARE MEASURED FROM THE TOE OF THE SLOPE TO THE TOP OF THE OVERBURDEN. DUE TO THE SIMPLIFIED MODEL GEOMETRY, THE MODEL HEIGHT MAY SLIGHTLY EXCEED THE HEIGHT OF THE ACTUAL PIT WALL.
4. ROCK MASS STRENGTH DERIVED USING HOEK-BROWN FAILURE CRITERION (HOEK, ET. AL., 2002).
5. MODELS INCORPORATE A 20 m BLAST DISTURBANCE ZONE PERPENDICULAR TO THE PIT FACE (D=0.85 FOR ALL DOMAINS EXCEPT THE ULTRAMAFICS WHERE D=0.7 DUE TO LOWER ROCK MASS QUALITY).
6. TARGET FOS IS 1.3.
7. CRITICAL SLIP SURFACE FOR EACH MODEL IS DISPLAYED AND REPORTED. ALL MODELS EXCEEDED THE TARGET FACTOR OF SAFETY OF 1.3.

LEGEND:

- FOS ≥ 1.4
- 1.3 ≤ FOS < 1.4
- 1.2 ≤ FOS < 1.3
- 1.1 ≤ FOS < 1.2
- 1.0 ≤ FOS < 1.1
- FOS < 1.0

REV	DATE	DESCRIPTION	PREP'D	RVW'D
1	11DEC'15	CLARIFICATION OF NOTE 3	ATJ	BDP
0	27NOV'15	ISSUED WITH REPORT NB101-622/3-2	ATJ	BDP

APPENDIX 1-E

Multiple Account Analysis

Title of document: **WATER MANAGEMENT MULTIPLE ACCOUNT ANALYSIS**

Client: **AGNICO EAGLE MINES LTD, MEADOWBANK DIVISION**

Project: **WHALE PIT PROJECT**
GEOTECHNICAL AND WATER MANAGEMENT INFRASTRUCTURE

Prepared by:	Angie Arbaiza, Jr. Eng	2015.12.09 14:39:29 -05'00'
Reviewed by:	Yohan Jalbert, Eng	2015.12.11 10:42:07 -05'00'
Approved by:	Yohan Jalbert, Eng	2015.12.11 10:43:05 -05'00'

REVISION INDEX

Revision #	Prep.	App.	Date	Pages Revised	Remarks
PA	AA	YJ	29/08/15	All	Internal coordination
PB	AA	YJ	01/12/15	All	Issued for comments
00	AA/YJ	YJ	09/12/15	All	Issued for client

NOTICE TO READER

This document contains the expression of the professional opinion of SNC-Lavalin Inc. (“SNC-Lavalin”) as to the matters set out herein, using its professional judgment and reasonable care. It is to be read in the context of the agreement dated February 23, 2015 (the “Agreement”) between SNC-Lavalin and Agnico Eagle Mines Limited, Meadowbank Division (the “Client”) and the methodology, procedures and techniques used, SNC-Lavalin’s assumptions, and the circumstances and constraints under which its mandate was performed. This document is written solely for the purpose stated in the Agreement, and for the sole and exclusive benefit of the Client, whose remedies are limited to those set out in the Agreement. This document is meant to be read as a whole, and sections or parts thereof should thus not be read or relied upon out of context.

SNC-Lavalin has, in preparing estimates, as the case may be, followed accepted methodology and procedures, and exercised due care consistent with the intended level of accuracy, using its professional judgment and reasonable care, and is thus of the opinion that there is a high probability that actual values will be consistent with the estimate(s). Unless expressly stated otherwise, assumptions, data and information supplied by, or gathered from other sources (including the Client, other consultants, testing laboratories and equipment suppliers, etc.) upon which SNC-Lavalin’s opinion as set out herein are based have not been verified by SNC-Lavalin; SNC-Lavalin makes no representation as to its accuracy and disclaims all liability with respect thereto.

To the extent permitted by law, SNC-Lavalin disclaims any liability to the Client and to third parties in respect of the publication, reference, quoting, or distribution of this report or any of its contents to and reliance thereon by any third party.

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LIST OF FIGURES

LIST OF TABLES

1.0 INTRODUCTION

Agnico-Eagle Mines Limited (Agnico Eagle) is currently developing a new gold project called Whale Tail Pit Project. The project is located approximately 50 km northwest of the current Meadowbank facilities. A Scoping Study of the Amaruq Project has been initiated in the fall of 2014. Part of this study is related to the surface infrastructure required to manage the water. Agnico-Eagle has mandated SNC-Lavalin Inc. (SLI) to perform the conceptual study of the geotechnical and water management infrastructure for the project as well as to complete permitting level engineering.

Following a site visit performed in the first week of September and the reception of the Photosat survey of the study area, a multiple account analysis (MAA) session was held on September 24, 2015 where options were evaluated and discussed. The objective of this document is to present the results of the MAA session, the options developed for the water management and the rationale behind the selected options according to four (4) pillars: economy, society, environment and viability.

This document presents an overview of the studied options, the methodology and results associated with the comparative analysis, and a discussion of the results.

2.0 DEFINITION OF OPTIONS

2.1 Option 1 – Pumping towards mammoth lake

This option represents the one developed during the Scoping Study. The concept is to block the flow of water with a dike 10 m high and 800 m long to obtain sufficient capacity to store storm water. The watershed for the remaining section of the Whale Tail Lake will have to be managed in order to safely operate the Amaruq open pits.

The storm water management concept for the option is to use the south basin, the southern section of Whale Tail Lake, to temporarily store surface runoff water for the selected design flood before it is pumped into Mammoth Lake, downstream of the Mammoth dike. The storage capacity of the south basin of Whale Tail Lake will be managed to sufficiently contain the inflow design flood and subsequent floods during the pond dewatering, while maintaining a level of water to ensure the resident fish population is protected (i.e. sufficient overwintering). The dewatering process consists of pumping the pond in order to be back to its initial water level within a preset time period.

2.2 Option 2 - Channel from Whale Tail Lake to Mammoth Lake

Similar to Option 1, Option 2 concept is to block the flow of water with a dike to promote its diversion via a diversion channel directed towards Mammoth Lake. The proposed dike would be about 6 m high and 750 m long (4 m lower than with option 1). The design of the channel will be based on the natural outlet of the Whale Tail Lake to respect the seasonal water level and to minimize impact on flora and fish habitats.

2.3 Option 3 – Rerouting Water towards Mammoth Lake

Option 3 consists of blocking the water flow with the construction of the Whale Tail Dike and rerouting the water flow towards the Northwest passage to Mammoth watershed. Whale Tail Lake will be raised to approximately 160 m to permit flow towards Mammoth Lake, where the new outlet will be constructed. Whale Tail Dike will be 1,500 m long and constructed ±14 m high, about 4 m higher than Option 1. The Whale Tail South Basin created by the construction of the dike will partially flood the upstream land. A freeboard dike will be constructed at the southern portion of the basin to maintain the water into the proper watershed. Access roads to the spillway will have to be constructed and maintained.

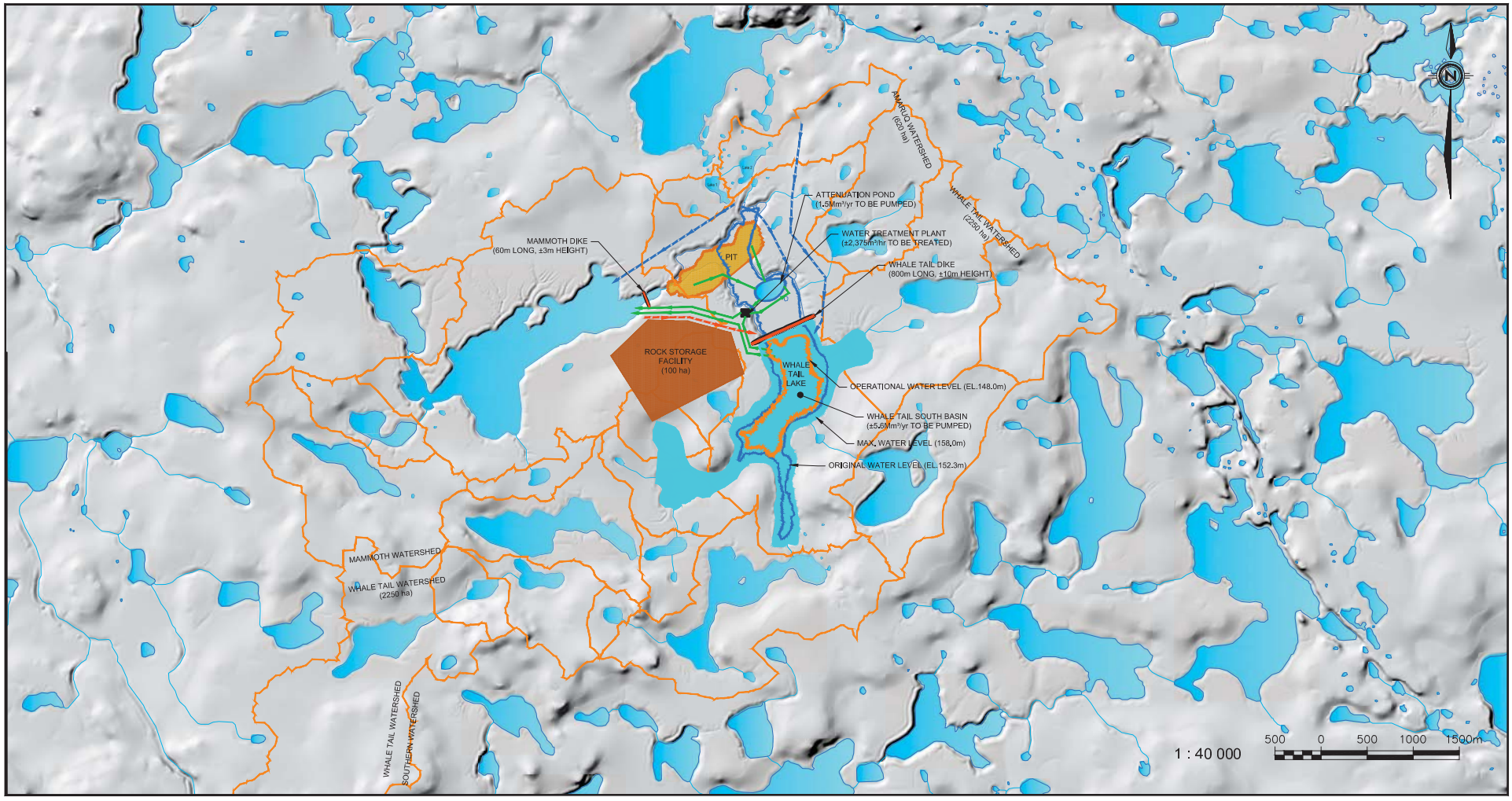
2.4 Option 4 – Rerouting Water towards Southern Watershed

Option 4 is similar to Option 3, but all water is rerouted towards the Southern watershed. The dike would need to be constructed at the same elevation than Option 3 (about 14 m high). In this option, the flow to the Northern passage will be blocked with a rockfill dike and the construction of a ditch and a spillway at the southern portion of the basin will be required. This option implies that the general water balance will be modified; about 5.6 Mm^3 of water will be added into the Southern watershed. This volume of water will be reduced to the Northern watershed.

2.5 Option 5 – Channel and rerouting water towards Mammoth Lake

Option 5 consists of blocking the water flow with the construction of the Whale Tail Dike, raising the water level of the Whale Tail Lake to approximately 156 m, and rerouting the water flow towards the Northwest passage to Mammoth watershed through a channel. This channel will be constructed to reduce the natural spillway at ±160 m (option 3) to 156 m. The Whale Tail Dike will be 800 m long and 10 m high.

Figures 2-1 to 2-5 illustrate the five (5) options described in the previous sections.



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Légende:

- WATERSHED LIMITS
- LAKE
- PROPOSED DIVERSION DITCH
- WATERCOURSE
- PROPOSED COLLECTION DITCH
- PROPOSED PIPELINES

Préparé par:

SNC·LAVALIN

Mines et Métallurgie
5500, boul. des Galeries, bur. 200, Québec (Québec), Canada G2K 2E2
Téléphone: (418) 621-5500, Télécopieur: (418) 621-8887

Préparé pour:

AGNICO EAGLE

Titre du projet:
AGNICO EAGLE - MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

Titre du dessin:
OPTION TO BE DEVELOPED
OPTION 1 - PUMPING TOWARDS MAMMOTH LAKE

Dessin.	Échelle:	Projet no:
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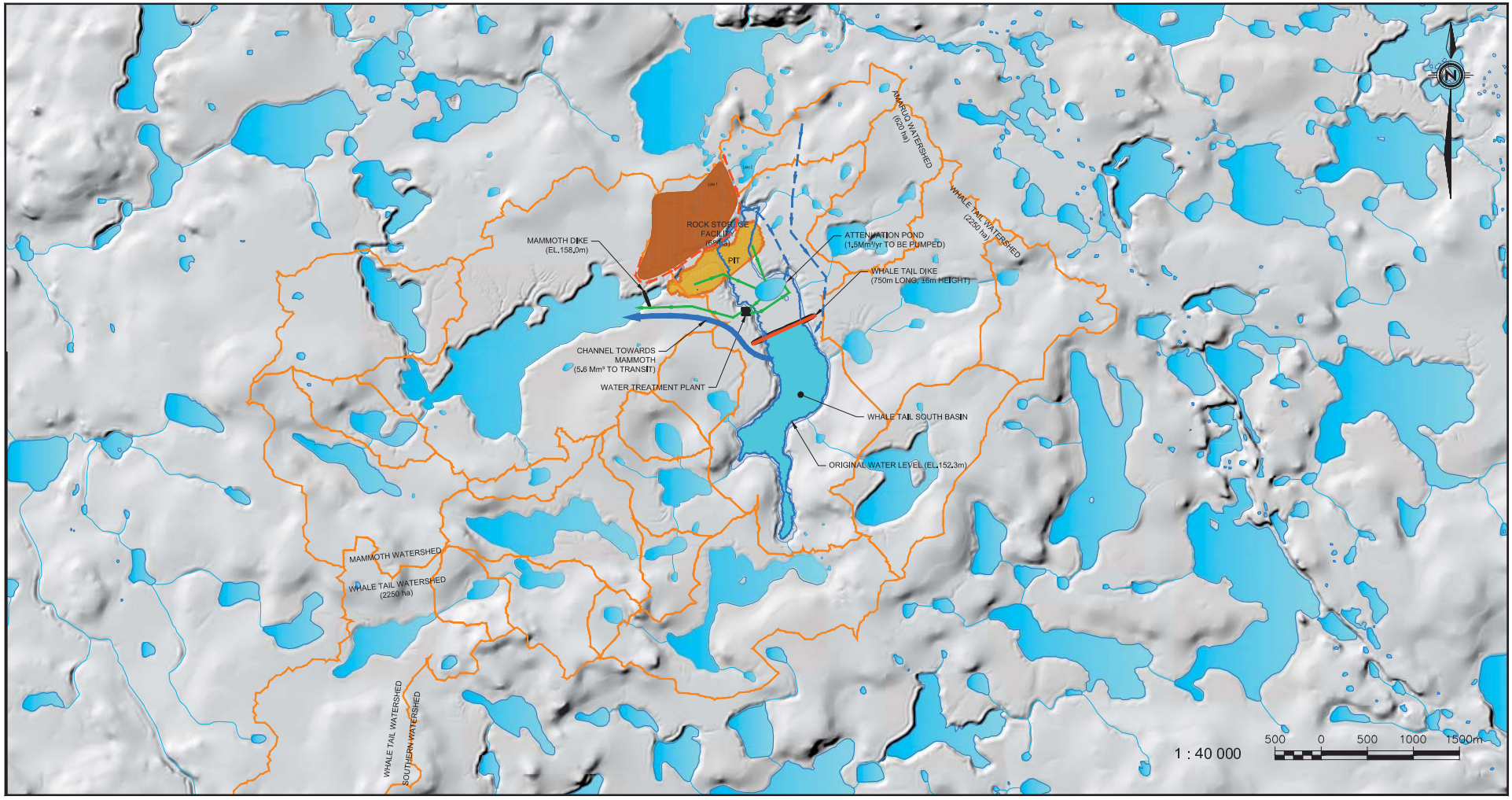
Vérif.	Date:	Figure no:
Y.J.	2015-12-01	2-1



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Légende:

- WATERSHED LIMITS
- LAKE
- PROPOSED DIVERSION DITCH
- WATERCOURSE
- PROPOSED COLLECTION DITCH
- PROPOSED PIPELINES

Préparé par:

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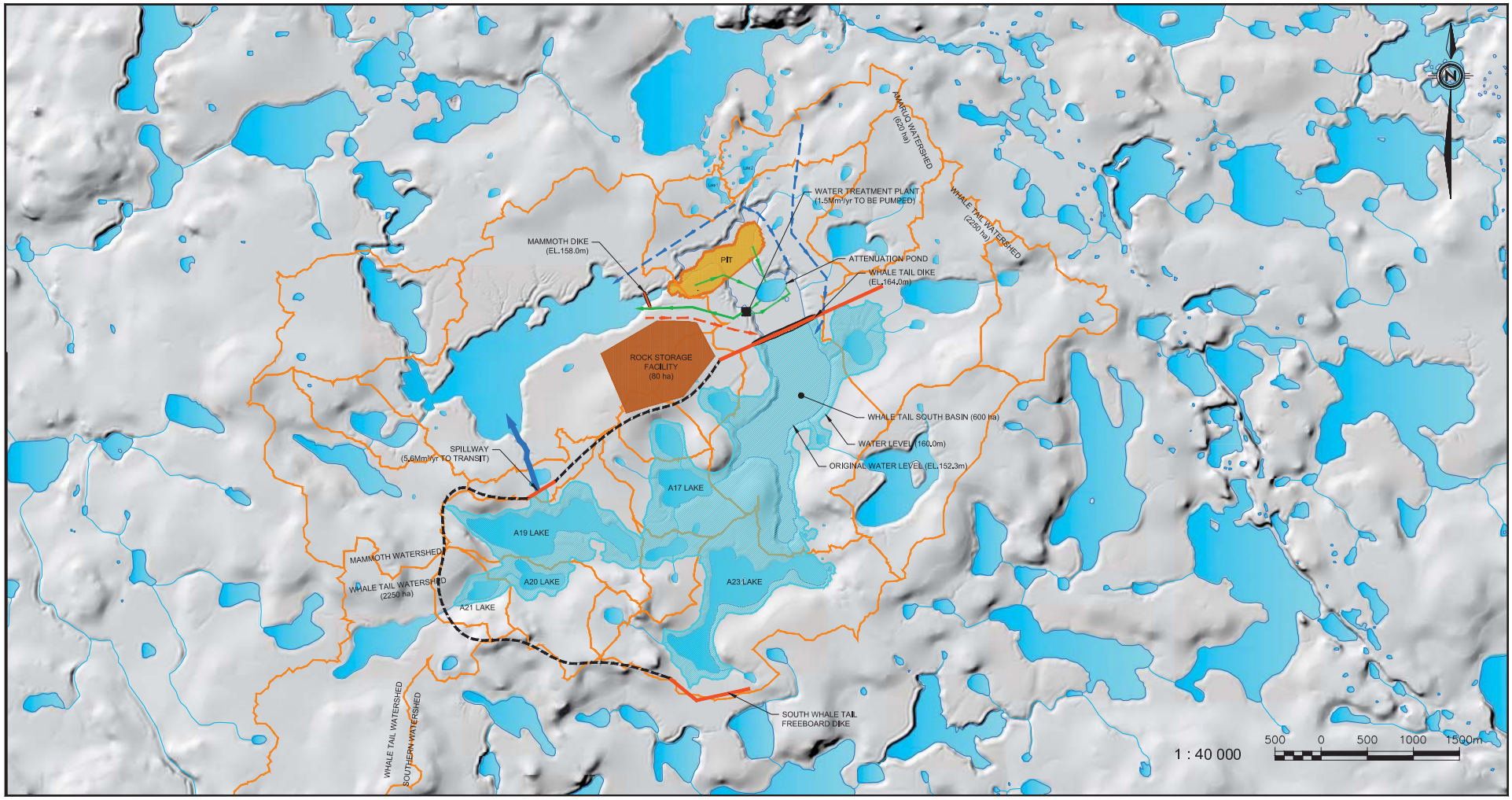
AGNICO EAGLE

Titre du projet:
AGNICO EAGLE - MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

Titre du dessin:
OPTION TO BE DEVELOPED
OPTION 2 - CHANNEL FROM WHALE TAIL LAKE TO MAMMOTH LAKE

Dessin.	Échelle:	Projet no:
E.R	1:40 000	627215
Vérif.	Date:	Figure no:
Y.J.	2015-12-01	2-2



\\acquet_lglprod\dessin\M_ET_M\PROJETS\627215_Amaruq_Geotech_Water_Management\40_INGENIERIE\40DD_DESSINS\PFS\TRADEOFF\VERSION 02\627215-3000-40DD-FIG 2-3_02.dwg

Légende:

- WATERSHED LIMITS
- LAKE
- PROPOSED DIVERSION DITCH
- WATERCOURSE
- PROPOSED COLLECTION DITCH
- PROPOSED PIPELINES
- ACCESS ROAD

Préparé par:

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Préparé pour:

AGNICO EAGLE

Titre du projet:
AGNICO EAGLE - MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

Titre du dessin:
OPTION TO BE DEVELOPED
OPTION 3 - REROUTING WATER TOWARDS MAMMOTH LAKE

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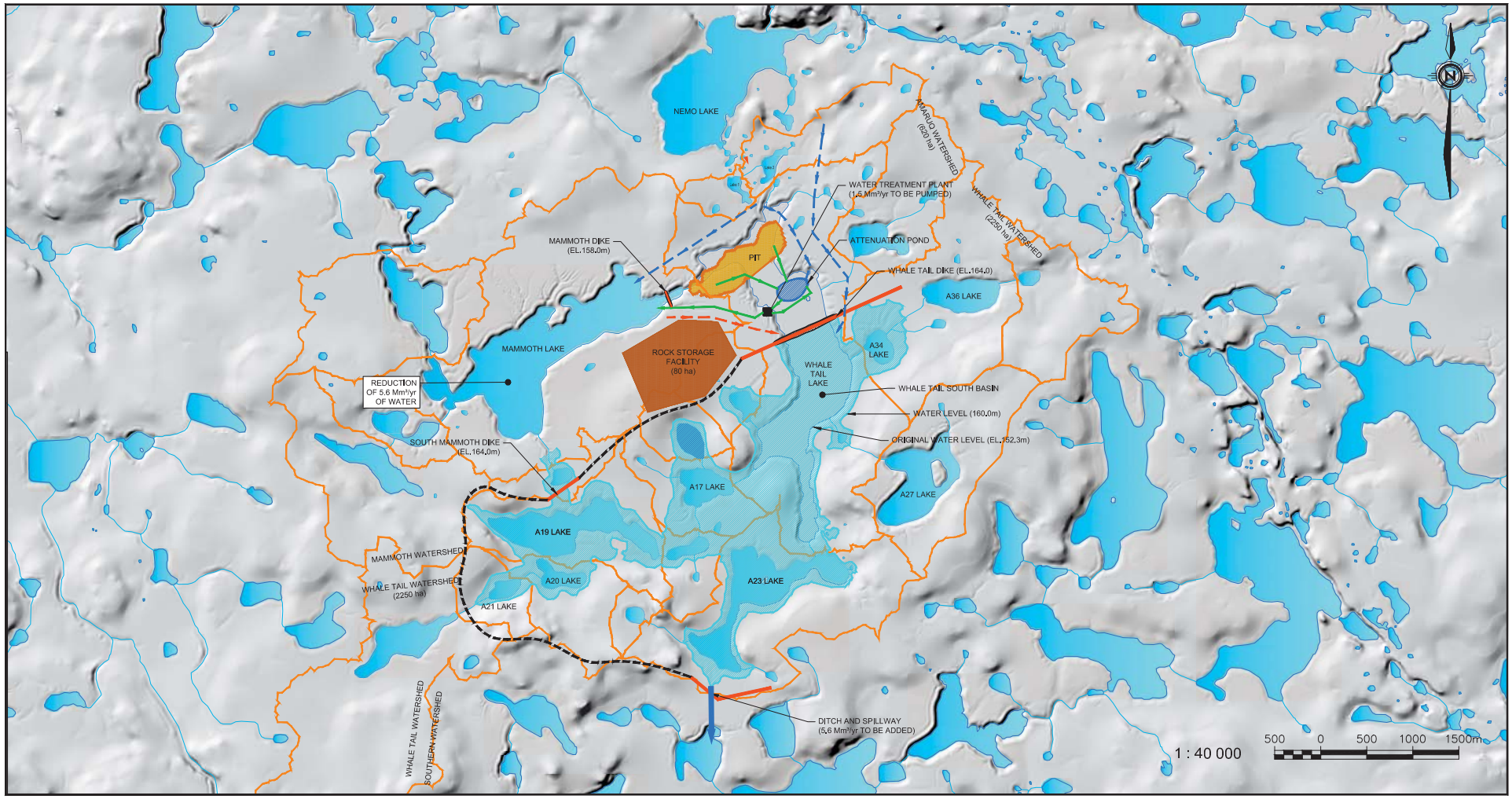
E.R	1:40 000	627215
Vérif.	Date:	Figure no:
Y.J.	2015-12-01	2-3



\\acquel_lgiprod\dessin\M_ET_M\PROJETS\627215_Amaruq_Geotech_Water_Management\40_INGENIERIE\40DD_DESSINS\PFS\TRADEOFF\VERSION 02\627215-3000-4GDD-FIG 2-4_02.dwg

Légende:

- WATERSHED LIMITS
- LAKE
- PROPOSED DIVERSION DITCH
- WATERCOURSE
- PROPOSED COLLECTION DITCH
- PROPOSED PIPELINES
- ACCESS ROAD

Préparé par:

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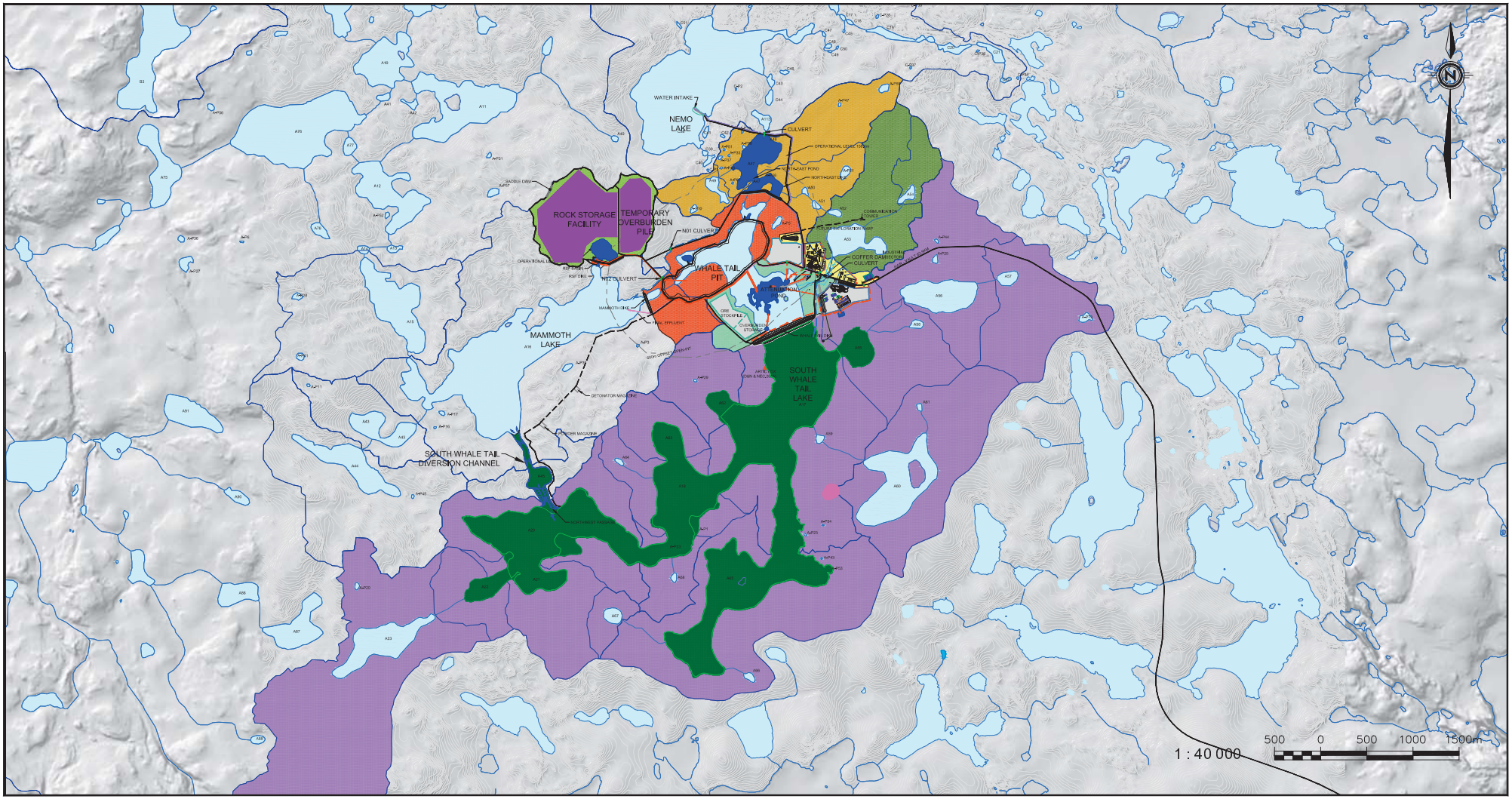
Préparé pour:

AGNICO EAGLE

Titre du projet:
AGNICO EAGLE - MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

Titre du dessin:
OPTION TO BE DEVELOPED
OPTION 4 - REROUTING TOWARDS SOUTHERN WATERSHED

Dessin.	Échelle:	Projet no:
E.R	1:40 000	627215
Vérif.	Date:	Figure no:
Y.J.	2015-12-01	2-4



Légende:

- WATERSHED LIMITS
- LAKE
- PROPOSED DIVERSION DITCH
- WATERCOURSE
- PROPOSED COLLECTION DITCH
- PROPOSED PIPELINES
- ACCESS ROAD

Préparé par:

SNC·LAVALIN

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Préparé pour:

AGNICO EAGLE

Titre du projet:
AGNICO EAGLE - MEADOWBANK DIVISION
WHALE TAIL PIT PROJECT

Titre du dessin:
OPTION TO BE DEVELOPED
OPTION 5 - CHANNEL AND REROUTING WATER TOWARDS MAMMOTH LAKE

Dessin.	Échelle:	Projet no:
E.R	1:40 000	627215
Vérif.	Date:	Figure no:
Y.J.	2015-12-04	2-5

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2.6 Pros and cons of options

The main advantages and disadvantages of the different options are presented in Table 2-1.

Table 2-1: Comparison of the different options

	ADVANTAGES	DISADVANTAGES
OPTION 1 PUMPING TOWARDS MAMMOTH LAKE	✓ Ease to adapt to an expansion phase ✓ RSF location more flexible	✓ Requires pumping in cold climate and year-round active water management ✓ High operational cost (pumps, treatment and maintenances) ✓ Water elevation of the basin highly variable (impact on traditional land use) ✓ Requires greater loss of fish habitat in southern portion of Whale Tail Lake ✓ Requires more staff to manage WTP (during operation and closure)
OPTION 2 CHANNEL FROM WTL TO MAMMOTH LAKE	✓ Passive water management (gravity) ✓ No impact on seasonal water level variations ✓ Requires lower dikes	✓ Requires large and deep trench into frozen ground ✓ Trench is not adapted to an expansion project ✓ May produce additional TSS during production and freshet ✓ Should be considered as an important engineering infrastructure ✓ RSF location to be adapted
OPTION 3 REROUTING TOWARDS MAMMOTH LAKE	✓ Passive water management ✓ Expansion project possible with the addition of a dewatering dike ✓ Adding fish habitats ✓ Ease of closure	✓ Requires large zone of land to be flooded (impact on traditional land use) ✓ Construction and maintenance of km's for access roads ✓ Important retaining structures (Whale Tail Dike about 4 m higher than Option 1).
OPTION 4 REROUTING TOWARDS SOUTHERN WATERSHED	✓ Passive water management ✓ No modification required for an expansion project ✓ Expansion project possible with the addition of a dewatering dike ✓ Adding fish habitats ✓ Ease of closure	✓ Requires large zone of land to be flooded (impact on traditional land use) ✓ Construction and maintenance of km's for access roads ✓ Impact on Whale Tail Watershed (negative water balance) and Southern watershed (positive water balance) is not evaluated
OPTION 5 CHANNEL AND REROUTING TOWARDS MAMMOTH	✓ Passive water management ✓ Expansion project possible with the addition of a dewatering dike ✓ Lower dike elevation than option 3 ✓ Ease of closure ✓ Adding fish habitats	✓ Requires large zone of land to be flooded (impact on traditional land use) ✓ Construction and maintenance of km's for access roads ✓ Construction of a channel to link South Whale Tail Lake to Mammoth can be challenging

3.0 METHODOLOGY

A MAA session with key members from Agnico Eagle and SLI was held on August 24, 2015, with the objective of choosing one option which will be brought to permitting level engineering.

The MAA session held online was conducted with the following participants:

Agnico Eagle	**Golder**	**SNC-Lavalin**
S. Ouellet	J. Lacrampe	A. Arbaiza
F. Petrucci		Y. Jalbert
R. Vanengen		

During the meeting, and built on previous discussions with stakeholders, the advantages and disadvantages of each option were presented. The option 4 was immediately discarded following a discussion on some of its major disadvantages. The reason being that this option could greatly impact the Whale Tail Watershed (negative water balance) and Southern watershed (positive water balance) and no baseline have been done for this southern watershed.

Following this first round of considerations, the remaining options were:

- Option 1 : Pumping towards Mammoth Lake
- Option 2: Channel from Whale Tail Lake to Mammoth Lake
- Option 3: Rerouting water towards Mammoth Lake
- Option 5: Channel and rerouting water towards Mammoth Lake

The session was then conducted using the Sustainability$^+$ option selection tool developed by SLI. In the Sustainability$^+$ tool, criteria are developed in the three (3) sustainable development pillars (Society, Environment and Economy) and a fourth engineering pillar (Viability).

Within these four (4) pillars, there are several categories that require evaluation. Each of these categories represents an essential aspect as part of an environment mining project. The following table summarizes those categories.

Table 3-1: Sustainability categories

	Society	Environment	Economy	Viability
Categories	Health and Safety Quality of life Employment Social Acceptability	Material Water Energy Air Biodiversity	Construction Capital Operating costs during construction Maintenance costs after reclamation	Technology Natural risks Flexibility Permits

One to six indictors are rated in each of these categories. The indicators have been chosen to be as unique as possible to each category to reduce bias in the analysis. A rating of -2, -1, 0, 1 or 2 can be assigned to each indicator. The following table shows the rating system for the indicators, which can be quantitative, qualitative or comparative. In this analysis, options have been compared relative to each other, rather than against a 'base case' option.

Table 3-2: Indicator Rating

Rate	Description
-2	Very bad performance
-1	Bad performance
0	Average performance
1	Good performance
2	Very good performance

Table 3-3 shows how the results are calculated.

Table 3-3: Calculation Methodology without Weighting

Pillar	Category	Indicator[1]	Calculation	Result
Society	Health and Safety	C1 C2 C3	X1 = average C1 to C3	Y1 = average X1 to X4
	Quality of live	C4 C5 C6	X2 = average C4 to C6	
	Employment	C7 C8 C9	X3 = average C7 to C9	
	Social Acceptability	C10 C11 C12	X4 = average C10 to C12	
Environment	Materials	C13 C14 C15	X5 = average C13 to C15	Y2 = average X5 to X9
	Water	C16 C17 C18	X6 = average C16 to C18	
	Energy	C19 C20 C21	X7 = average C19 to C21	
	Air	C22 C23	X8 = average C22 to C23	
	Biodiversity	C24 C25	X9 = average C24 to C25	
Economy	Capital cost	C26 C27	X10 = average C26 to C27	Y3 = average X10 to X13
	Operating cost during construction	C28 C29	X11 = average C28 to C29	
	Maintenance cost after reclamation	C30 C31	X12 = average C30 to C31	
	Reclamation capital cost	C32 C33	X13 = average C32 to C33	
Viability	Technology	C34 C35	X14= average C34 to C35	Y4 = average X14 to X17
	Natural Hazards	C36 C37	X15 = average C36 to C37	
	Flexibility	C38 C39	X16 = average C38 to C39	
	Permits	C40	X17 = average C40	
			Results by category [2]: Average of X1 to X17	Results by sustainable development pillar [2]: Average of Y1 to Y4

Notes: 1: The number of indicators by category vary from one to six
2: There are two ways to show the results: by category or by sustainable development pillar.

A sensitivity analysis is then carried on by applying weighting on some categories (where required). Weighting is decided according to the client's priority. The following table shows the weighting possibilities.

Table 3-4: Weighting

Weighting	Value
Low priority for the project	0,5
Required for the project	1
High priority for the project	2

As an example, if the category "water" is weighted as "high priority", the ratings of all the indicators in this category will be multiplied by 2. If the indicator's ratings are in the positive zone (from average to very good), the global result will be raised with a greater value, which will give an advantage to the option with good ratings in the "water" category.

Conversely, if the indicator's ratings are in the negative zone (average to very bad), the global result will be lowered with a greater value, which will penalize the option with bad ratings in the "water" category.

The maximal global grade of an option analyzed without weighting is 2, and the maximal global grade of an option analyzed with weighting is 4.

4.0 RESULTS

The weighing of each category has been decided during the MAA according to Agnico Eagle's priorities. However, in order to increase the speed of the exercise, SLI had identified indicators in each category prior to the MAA. During the session, each indicator was revised (refer to Figure 4-2 for the indicators that were used). The rating of each indicator was identified and revised for the 4 options in parallel.

A summary of results is provided in the following pages.

FIGURE 4-1: WEIGHTING SELECTED IN CLOSE COLLABORATION WITH AGNICO EAGLE AND GOLDER ASSOCIATES TEAM

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Step 1: Please provide information about the project and its options

PROJECT NO :	627215
DESCRIPTION :	PFS Water management options
OPTION 1 DESCRIPTION :	Pumping towards Mammoth
OPTION 2 DESCRIPTION :	Channel to Mammoth
OPTION 3 DESCRIPTION :	Rerouting towards Mammoth
OPTION 5 DESCRIPTION :	Channel and Rerouting towards Mammoth

Step 2 : Select a weight criteria for each category (green cells)

Weight criteria, the category is:

High Priority for the project, weight factor of 2
Required for the project, weight factor of 1
Low Priority for the project, weight factor of 0.5

	Category	Weight criteria	Weight factor
	SOCIETY		
A	Health and safety	High Priority	2
B	Quality of life	Required	1
C	Employment	Required	1
D	Social acceptability	High Priority	2
	ENVIRONMENT		
E	Materials	Required	1
F	Water	High Priority	2
G	Energy	Required	1
H	Air	Low Priority	0.5
I	Biodiversity	High Priority	2
	ECONOMY		
J	Capital cost	High Priority	2
K	Operating cost during construction	High Priority	2
L	Maintenance cost after reclamation	Required	1
M	Reclamation capital costs	Required	1
	VIABILITY		
N	Technology	Low Priority	0.5
O	Natural hazards	High Priority	2
P	Adaptability	High Priority	2
Q	Permits	High Priority	2

Figure 4-2: DETAILED RESULTS

PROJECT NO :	627215
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OPTION 1 DESCRIPTION :	Pumping towards Mammoth
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OPTION 3 DESCRIPTION :	Rerouting towards Mammoth
OPTION 5 DESCRIPTION :	Channel and Rerouting towards Mammoth

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			INDICATOR	OPTION 1						OPTION 2						OPTION 3						OPTION 5						COMMENTS
SOCIETY				GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	
A	Health and safety	High Priority	Level of danger for the population	2				2.0	4	-1		-1.0			-2	0					0	0					0	The population at low risk are the few hunters and trappers that may pass through the area. Option 1 does not present any risk to the population, Option 3 and 5 has an acceptable risk due to its infrastructures, Option 2 presents more risk due to the deep channel.
			Long-term safety for the population	2				2.0	4	0					0	2				2.0	4	2				2.0	4	No long term risk for the population for all options except Option 2, since the deep channel can present a risk.
			Contact with toxic and hazardous materials for the workers	0					0	1			1.0		2	1			1.0		2	1			1.0		2	Option 1 might present more risk to the workers due to the chemicals involved in the water treatment plant.
			Level of danger for the workers	-1		-1.0			-2	-2	-2.0				-4	-1		-1.0			-2	0					0	Option 2 presents high risk for workers due to the deep excavation into thick frozen OB for the channel. Option 1 presents a risk due to the variation of water level associated with pumping in cold climate with ice sheet non-supported. The height of the dike was taken into account for Option 3.
B	Quality of life	Required	Distance from resort areas (trails, snowmobile, etc.)	2				2.0	2	2				2.0	2	2				2.0	2	2				2.0	2	All options more than 10 km of distance.
			Site revaluation and accessibility after closure	0					0	-2	-2.0				-2	0					0	0					0	Option 1 , 3 and 5 allow safe access to the site. The channel of Option 2 might have to be filled for closure and might not be accessible.
C	Employment	Required	Quantity of workers	0					0	0					0	0					0	0					0	Moderate for all options
			Specialized contractor and professionals required	0					0	0					0	-1		-1.0			-1	0					0	More specialized contractors and professionals may be required for Option 3 due to the height of the dike (permafrost and talik foundation).
			Work adapted for locals	0					0	0					0	0					0	0					0	Moderate for all options.
			Long-term local economic growth	0					0	0					0	0					0	0					0	Average economic growth for all options.
			Availability of skilled labour	1			1.0		1	1			1.0		1	1			1.0		1	1			1.0		1	Available for all options.
			Local economic growth during construction	-1		-1.0			-1	0					0	1			1.0		1	-1		-1.0			-1	Local economic growth proportional to the complexity of the infrastructures, Option 3 being the highest, and Option 1 and 5 the lowest. Deep channel construction is taken into account.
D	Social acceptability	High Priority	Impact on archeological area	0					0	0					0	0					0	0					0	No archeological area found in the area of study.
			Impact on fishing area	-2	-2.0				-4	0					0	2				2.0	4	1			1.0		2	Water elevation highly variable for Option 1, impacting South Whale Tail Lake Basin. Option 2 does not impact the seasonal water level. Raising the water elevation (options 3 & 5) is seen as a positive aspect to create new fish habitats during operation.
			Impact on hunting area	-1		-1.0			-2	0					0	-2	-2.0				-4	-1		-1.0			-2	Option 3 has a higher impact due to the large zone of land that would be flooded. Option 2 has a lower impact since there is no variation on water levels.
			Social acceptability of the project	-1		-1.0			-2	-1		-1.0			-2	-1		-1.0			-2	0					0	Option 1 might not be accepted due to the pumping technology (compared to a passive system). Option 2 is a passive system but channel in thick and frozen overburden (thermal instability). Option 3 passive system but with large flooded area. Option 5 more acceptable since it is a passive system that does not require a deep long diversion channel, which is required for Option 2.

ENVIRONMENT				GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	
E	Materials	Required	Need to import materials	0					0	1			1.0		1	0					0	0					0	Less material to be imported for Option 2.
			Disposal of excavated material with no reuse	1			1.0		1	-1		-1.0			-1	0					0	1			1.0		1	Most of the material excavated for the channel (Option 2) cannot be reused (up to 10m of frozen soil). Option 1 and 5 imply more material to be reused.
			Waste generation during construction	-1		-1.0			-1	0					0	0					0	0					0	Option 1 involves more waste generation (mechanical waste such as pipes).
			Distance from source of granular material	2				2.0	2	2				2.0	2	2				2.0	2	2				2.0	2	Less than 10 km of distance for all options.
			Availability of borrow pits	-1		-1.0			-1	-1		-1.0			-1	-1		-1.0			-1	-1		-1.0			-1	Existing borrow pits must be completed by the opening of a new pit.
F	Water	High Priority	Impact on the natural water flow	-2	-2.0				-4	1			1.0		2	-1		-1.0			-2	-1		-1.0			-2	Water elevation highly variable for Option 1. Option 3 and 5 imply a large zone of land to be flooded: TBD if it would take 2 years before to fill the reservoir. Option 2 does not impact the seasonal water level.
			This option may contribute to the TSS to the Environment	-2	-2.0				-4	1			1.0		2	0					0	0					0	Variation of water level affect the water quality (generation of TSS), therefore Option 1 generates TSS. Option 2 does not affect the water level.
			Impact on the existing drainage network	1			1.0		2	1			1.0		2	-1		-1.0			-2	-1		-1.0			-2	Option 3 and 5 impact the existing drainage network due to the elevation of the bassins that will be disturbed.
G	Energy	Required	Energy consumption for the option	-1		-1.0			-1	2				2.0	2	2				2.0	2	2				2.0	2	Option 1 consummes more energy due to pumping during operation and closure (not post-closure)
			Use of motorized equipment during construction (hour*equipment/day)	-1		-1.0			-1	0					0	-2	-2.0				-2	-1		-1.0			-1	Based on volume of material to be placed for dike.
H	Air	Low Priority	Generation of dust during construction	0					0	-1		-1.0			-0.5	-1		-1.0			-0.5	-1		-1.0			-0.5	Option 2 and 3 imply significant generation of dust due to the complexity of its infrastructures. Option 3 & 5 implies significant generation of dust due to the long road to be constructed in order to reach the channel.
			Position relative to prevailing winds during operation	0					0	0					0	0					0	0					0	Neutral for all options
I	Biodiversity	High Priority	Number of ecological services impacted	-1		-1.0			-2	0					0	-2	-2.0				-4	-1		-1.0			-2	Proportional to variable water levels and footprint.
			Presence of endangered and vulnerable species and/or exceptional forest ecosystems near the site	2				2.0	4	2				2.0	4	2				2.0	4	2				2.0	4	Based on the "Amaruq Baseline Studies - Potentially Environmentally Significant Features" document, there is no presence of endangered or vulnerable species. Presence of arctic fox den nearby the dike.

Figure 4-2: DETAILED RESULTS

PROJECT NO :	627215
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OPTION 3 DESCRIPTION :	Rerouting towards Mammoth
OPTION 5 DESCRIPTION :	Channel and Rerouting towards Mammoth

			INDICATOR	OPTION 1						OPTION 2						OPTION 3						OPTION 5						COMMENTS
ECONOMY				GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	
J	Capital cost	High Priority	Risk of the option	2				2.0	4	-1		-1.0			-2	-1		-1.0			-2	0					0	Option 1 represents low risk (known operation with Meadowbank staff). Options 3 & 5 present risks associated with the permafrost degradation while flooding lands (mitigation plans might be required). Option 2 - Risk associated with exposed thick permafrost with the channel.
			Cost of the option	0					0	-2	-2.0				-4	-1		-1.0			-2	0					0	Option 1 and 5 are approximately the same cost (dike height). Option 2 has the highest cost due to deep excavation.
K	Operating cost during construction	High Priority	Water management	-2	-2.0				-4	-1		-1.0			-2	1			1.0		2	1			1.0		2	Option 1 requires water management during operation by pumping. Option 2 may require maintenance due to ice blockage / slump, etc.
L	Maintenance cost after reclamation	Required	Type of infrastructure to maintain on the long term	0					0	0					0	0					0	0					0	Only earthworks for all options.
M	Reclamation capital costs	Required	Reclamation capital costs	0					0	-1		-1.0			-1	0					0	0					0	Not evaluated yet. Option 2 has potentially a higher economical impact (plug for closure) .
VIABILITY				GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	GRADE					TOTAL SCORE	
N	Technology	Low Priority	Flexibility (expansion)	2				2.0	1	-2	-2.0				-1	2				2.0	1	2				2.0	1	Option 2 is not adapted to an expansion project. All the other options are flexible (Options 3 & 5 require additionnal dewatering dike), CAPEX not considered.
			Complexity of the expected work (constructability)	0					0	-2	-2.0				-1	0					0	0					0	Option 2 implies more complex infrastructres: it requires a large and deep trench into thick and frozen OB. Differences between channel & dike.
			Completeness and reliability of the data used for this concept	0					0	0					0	0					0	0					0	At this stage, data fairly complete and reliable for all options.
			Are the technologies used for this project well understood, tested and reliable?	1			1.0		0.5	0					0	0					0	0					0	Option 1 is the most reliable since it is a known operation by the client. Uncertainties related to channelling into frozen ground (and futher instability) and impact of raising water elevation (permafrost degradation).
O	Natural hazards	High Priority	Vulnerability to permafrost degradation?	0					0	0					0	-2	-2.0				-4	-1		-1.0			-2	The retaining structures of Option 3 are more vulnerable to permafrost degradation, followed by Option 5 (height of dike smaller than Option 3).
			Vulnerability to weather conditions (flooding, dryness, wind)?	0					0	-1		-1.0			-2	1			1.0		2	1			1.0		2	Option 3 and 5 can manage flooding easily whereas Option 1 needs more pumping. The channel in frozen ground (Option 2) is sensitive to extreme climate.
			Vulnerability to seismic risks (infrastructure and foundation)?	2				2.0	4	2				2.0	4	2				2.0	4	2				2.0	4	No infrastructure is vulnerable due to the location of the project.
P	Adaptability	High Priority	Integration with the client's current operations	0					0	-1		-1.0			-2	1			1.0		2	1			1.0		2	Ease to adapt pumping to the operation (Option 1) rather than maintaining a channel (option 2). Maintenance easier for options 3 & 5.
			Adaptability to sudden changes, economic constraints, materials shortage, gradual reclamation, etc.	0					0	0					0	0					0	0					0	Reasonably adaptable for all options.
Q	Permits	High Priority	Site property	0					0	0					0	0					0	0					0	Neutral for all options.
			Level of difficulty to obtain permits from government authorities	-1		-1.0			-2	0					0	-1		-1.0			-2	0					0	More difficult to obtain regulatory approval for Option 3 due to its footprint. Difficult also for Option 1 due to the variability of the water elevation that implies.

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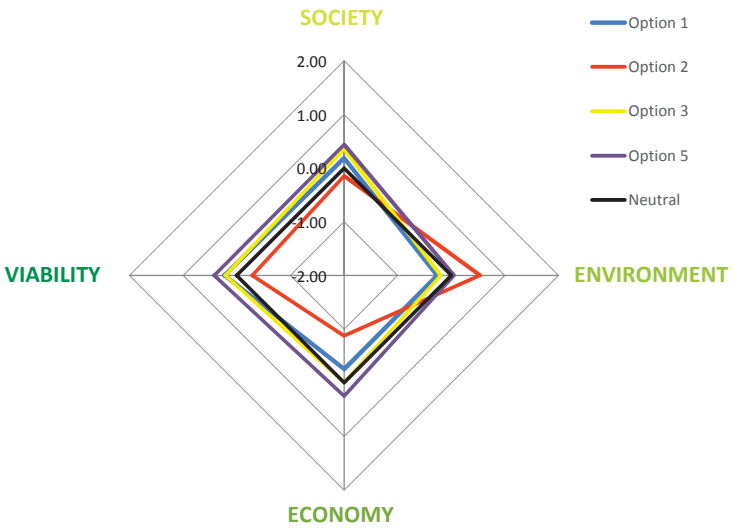
Non-weighted results by theme



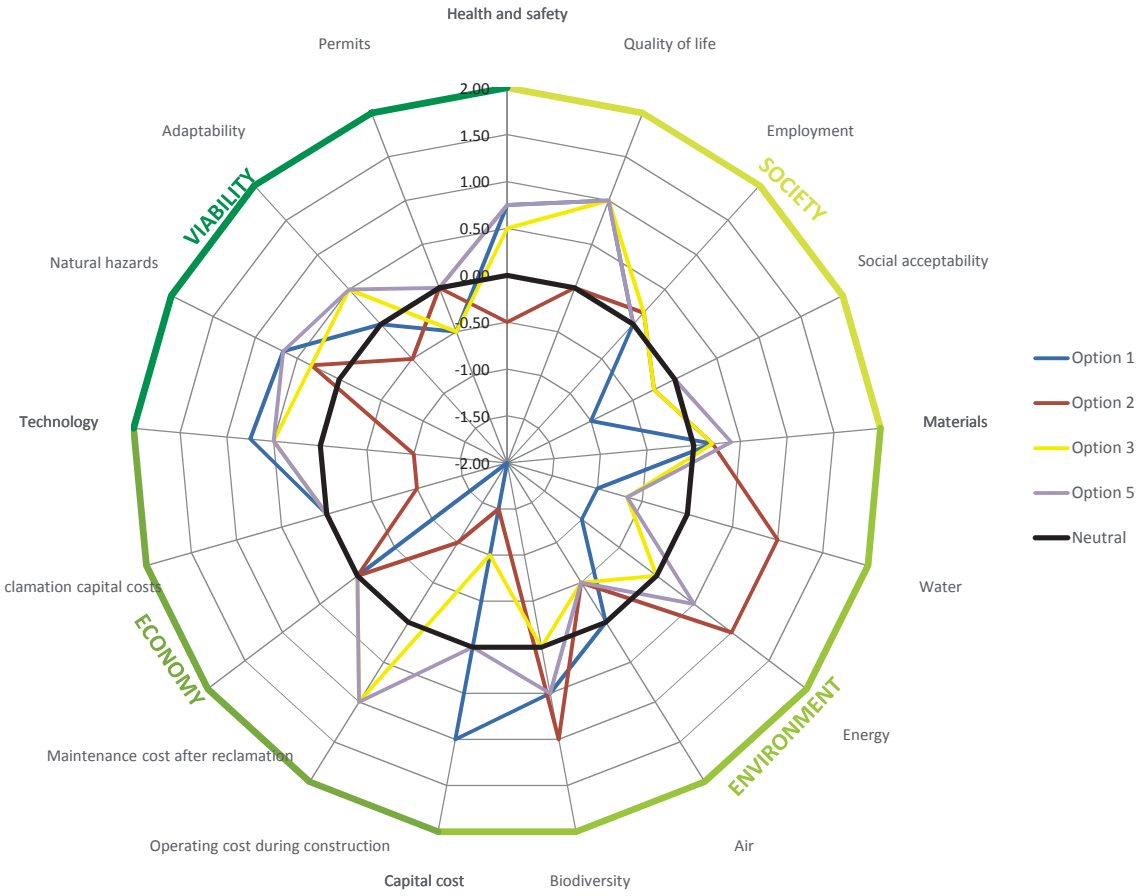
Non-weighted results by theme

	Option 1	Option 2	Option 3	Option 5
COMMUNITY	0.19	-0.15	0.35	0.44
ENVIRONMENT	-0.26	0.54	-0.19	0.05
ECONOMY	-0.25	-0.88	0.00	0.25
VIABILITY	0.23	-0.29	0.21	0.42
Average:	-0.02	-0.19	0.09	0.29

Non-weighted results by category

	Option 1	Option 2	Option 3	Option 5
Health and safety	0.75	-0.50	0.50	0.75
Quality of life	1.00	0.00	1.00	1.00
Employment	0.00	0.17	0.17	0.00
Social acceptability	-1.00	-0.25	-0.25	0.00
Materials	0.20	0.20	0.20	0.40
Water	-1.00	1.00	-0.67	-0.67
Energy	-1.00	1.00	0.00	0.50
Air	0.00	-0.50	-0.50	-0.50
Biodiversity	0.50	1.00	0.00	0.50
Capital cost	1.00	-1.50	-1.00	0.00
Operating cost during construction	-2.00	-1.00	1.00	1.00
Maintenance cost after reclamation	0.00	0.00	0.00	0.00
Reclamation capital costs	0.00	-1.00	0.00	0.00
Technology	0.75	-1.00	0.50	0.50
Natural hazards	0.67	0.33	0.33	0.67
Adaptability	0.00	-0.50	0.50	0.50
Permits	-0.50	0.00	-0.50	0.00
Average:	-0.04	-0.15	0.08	0.27

Non-weighted results by category



See detailed summary

See weighted graph

PROJECT NO :	627215
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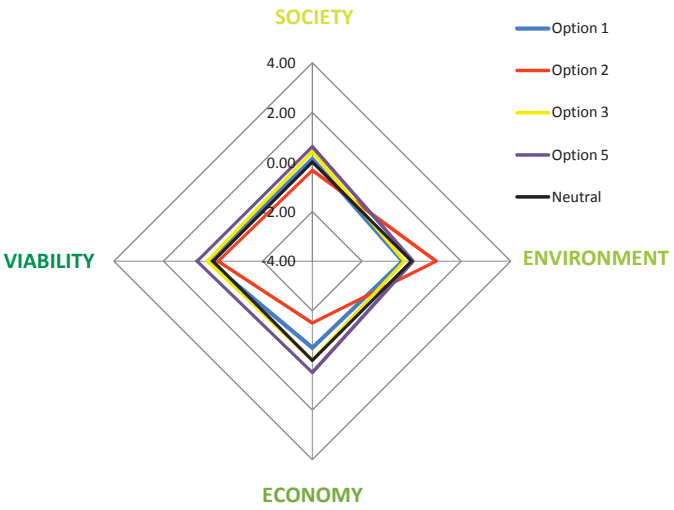
Weighted results by theme



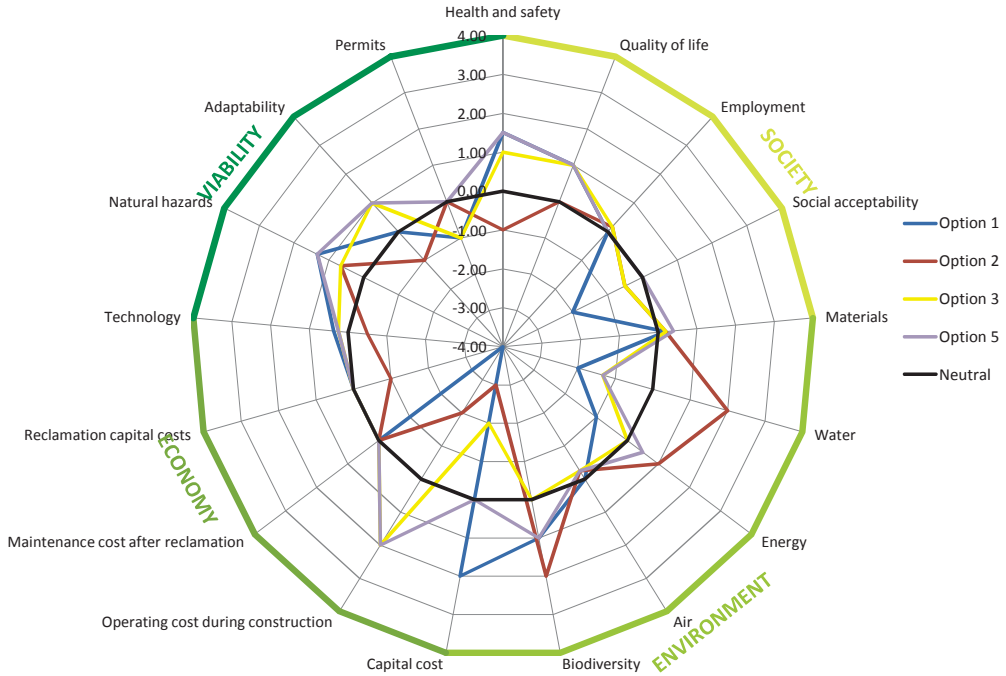
Weighted results by theme

	Option 1	Option 2	Option 3	Option 5
COMMUNITY	0.13	-0.33	0.42	0.63
ENVIRONMENT	-0.36	0.99	-0.28	0.06
ECONOMY	-0.50	-1.50	0.00	0.50
VIABILITY	0.18	-0.21	0.23	0.65
Average:	-0.14	-0.26	0.09	0.46

Weighted results by category

	Option 1	Option 2	Option 3	Option 5	Weight indicator
Health and safety	1.50	-1.00	1.00	1.50	High Priority
Quality of life	1.00	0.00	1.00	1.00	Required
Employment	0.00	0.17	0.17	0.00	Required
Social acceptability	-2.00	-0.50	-0.50	0.00	High Priority
Materials	0.20	0.20	0.20	0.40	Required
Water	-2.00	2.00	-1.33	-1.33	High Priority
Energy	-1.00	1.00	0.00	0.50	Required
Air	0.00	-0.25	-0.25	-0.25	Low Priority
Biodiversity	1.00	2.00	0.00	1.00	High Priority
Capital cost	2.00	-3.00	-2.00	0.00	High Priority
Operating cost during construction	-4.00	-2.00	2.00	2.00	High Priority
Maintenance cost after reclamation	0.00	0.00	0.00	0.00	Required
Reclamation capital costs	0.00	-1.00	0.00	0.00	Required
Technology	0.38	-0.50	0.25	0.25	Low Priority
Natural hazards	1.33	0.67	0.67	1.33	High Priority
Adaptability	0.00	-1.00	1.00	1.00	High Priority
Permits	-1.00	0.00	-1.00	0.00	High Priority
Average:	-0.15	-0.19	0.07	0.44	

Weighted results by category



See detailed summary

See non weighted graph

5.0 DISCUSSION

The channel and rerouting water from Whale Tail Lake to Mammoth Lake option (Option 5) obtained the best score, followed by the rerouting water towards Mammoth Lake option (Option 3). The pumping option (Option 1) obtained the third best score, followed by the channel option (Option 2). Table 5-1 summarizes the results for each option. Note that option 5 remains the best in the non-weighted and weighted results.

Table 5-1: Summary of the MAA Results

	Option 1 Pumping	Option 2 Channel	Option 3 Rerouting	Option 5 Channel and rerouting
Weighted results	**-0.14**	**-0.26**	**0.09**	**0.47**
Non-weighted results	**-0.02**	**-0.19**	**0.09**	**0.30**

The best option has been assigned this score mainly for its superior performance in the following categories: health and safety, social acceptability, operating cost during construction, natural hazards, adaptability and permits. In the society pillar, the Option 5 is more prone to be socially accepted as it is a passive system (a gravity fed channel) with a small channel, promoting employment and less risk for the workers. In contrast to Option 2, the construction of the small channel represents low risk for the workers since its construction is not a deep excavation into thick frozen overburden soil. In addition, the dike is not as high as the dike for Option 3, therefore the risk for the workers is reduced. In terms of economics, Option 5 suggests lower capital costs due to the height of the dike, and lower operating costs during construction. With respect to viability, this Option integrates with Meadowbank current operations and allows natural hazards to be better managed. It also proposes a smaller diversion channel (compared to Option 3) and uses a natural boulder-field to mimic the natural landscape. In addition, this option is likely to be positively received by regulatory agencies since this option uses a passive water management and creates additional fish habitat. Also, its passive water management will facilitate the closure and post-closure periods since the water accumulation from South Whale Tail Lake may be used to filling out the pit faster. Finally, the main disadvantage of Option 5 is the large zone of land to be flooded (water category), which impacts the seasonal water level and the existing drainage network due to the elevation of the basins that will be disturbed.

The rerouting towards Mammoth Lake option (Option 3) is the second best option according to the MMA performed. Since this option is very similar to Option 5, most of its strengths are similar to the preferred option. The main advantage of Option 3 compared to Option 5 is in the social acceptability category, since raising the water elevation of Whale Tail Lake will provide a passive management of water and will offset the loss of fish habitat. Nonetheless, Option 3 is not as suitable as Option 5 mainly because of the height of the dike; the construction of the dike represents a higher risk for the workers, higher energy required for the construction, and higher capital costs than the preferred option.

The main advantage of the pumping option (Option 1) is that it represents no risk to the population due to its simple infrastructure. It should be noted that traditional land use will be impacted under all scenarios (except with Option 2). However, because of the flooding of the area, less terrestrial habitat for wildlife (and therefore hunters) will be available during the summer period. Furthermore, Option 1 represents a low risk with respect to capital costs since the expected dike construction and pumping work is well understood by Agnico Eagle. The pumping option's main disadvantage is the long term operating costs for the water management and associated greenhouse gas emissions, as well as the water treatment process and maintenance during operation and closure. In addition, the high water level variability of the Whale Tail Pit South basin has a negative effect in the social acceptability, water and the permits category, as conceptual plans would require the loss of fish habitat in this basin.

For Option 2, the site visit performed during the first week of September, the reception of the Photosat survey of the area of study, and the thickness of frozen soil encountered into exploration boreholes provided a good understanding of the complexity of this option. It was concluded that the construction of the channel, which implies an important and deep excavation into thick frozen overburden soil and bedrock, is a significant challenge. The soil characteristic implies a high risk for the workers and is socially not acceptable due to the challenge in managing the discharge water quality in a long ditch that could be susceptible to thawing due to standing water. It was also noted that most of the material excavated for the channel could not be reused since most of the material is frozen soil or till (approximately 10 m). On the other hand, this option remains a strong alternative in terms of the environment since the channel respects the seasonal water levels in Whale Tail Lake South basin and minimizes the impact on flora and fish habitats. There is also less material to be imported for the construction of the channel (excavation).

In summary, the results of the MAA indicate that Option 5 (Channel and rerouting water towards Mammoth Lake) gets the best results for most of the pillars (viability, economy and society) except for the environment pillar, where Option 2 (Channel from Whale Tail Lake to Mammoth Lake) scored the best. However, the level of danger for workers and the complexity and vulnerability to weather conditions make Option 2 more risky. In overall, Option 5 proved to be the best option and has been carried forward into permitting level engineering and environmental impact assessment.