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Updated Preliminary Project Description for the Doris North Project Miramar Hope Bay Limited

Submitted to:

Nunavut Impact Review Board

Submitted by:

Miramar Hope Bay Limited

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EXECUTIVE SUMMARY – UPDATED PROJECT DESCRIPTION - DORIS NORTH PROJECT

Miramar Hope Bay Limited (MHBL) is proposing to construct, operate and reclaim a small underground gold mine (the Doris North Project) on the Canadian mainland in the West Kitikmeot region of Nunavut approximately 110 km southwest of Cambridge Bay and 75 km northeast of Umingmaktok. The Project is located on Inuit Owned Land at 68 09" deg. N x 106 40" deg. W, 5 km south of the head of Roberts Bay, an extension of Melville Sound which connects with Bathurst Inlet about 80 km west of the Project.

Mineral exploration on the 80 km long Hope Bay greenstone belt has been ongoing since the 1990's. MHBL has been exploring for commercial mineral deposits on this belt since 2000 when it acquired the right to conduct such exploration through the purchase of these rights from BHP Minerals Ltd. A number of prospective gold deposits have been identified on the belt. To date, three significant mineralized areas have been identified: the Boston area, the Doris North area and the Madrid area (the Madrid area includes the Naartok, Suluk and Madrid mineralized resource areas). Exploration work indicated that the Doris North area appeared to have a higher potential ore grade than the Boston or Madrid mineralized areas and thus offered Miramar an opportunity to reach commercial production at the lowest capital outlay. A feasibility study was completed in late 2003 and indicated that the Doris North resource could be economically developed as a small tonnage underground mine.

The Doris North Project will consist of an underground mine with a single adit and ramp access. The ore will be brought to surface where it will be stockpiled and processed through a crushing and milling plant with a nominal capacity of 668 t/day (design capacity of 800 TPD and an operating factor of 83.5%). The product will be shipped off site in the form of dore bars. This Project is expected to operate for 24 months, process 467,000 tonnes of ore yielding approximately 306,830 ounces of gold. The site is remote and there are no permanent or winter roads that link it to any neighbouring communities or facilities. Currently, there is no infrastructure development on the site, with the exception of an exploration camp on the east shore of Windy Lake, located approximately 10 km west of the project site. The primary access route to the property for fuel, equipment and supplies will be via the Arctic Ocean (sealift). The proposed mill site is located approximately five kilometres from Roberts Bay. This area is accessible by ships and barges for a short ice-free shipping season. A jetty will be constructed in Roberts Bay as a landing facility for the sealift vessels. Equipment will be offloaded and stored in a lay down area close to the shore. Annual fuel supply will be pumped from the sealift vessels to an eight million litre tank farm on the shore.

A 4.8 km all-weather road will link the Roberts Bay sealift landing site with the mill and camp location, allowing year-road haulage of fuel and supplies from the sealift landing site laydown area and fuel storage tanks. The mill, crushing plant, camp, office complex, workshops, power generation plant, sewage treatment plant and all other operational mine infrastructure will be located in a central location adjacent to the underground mine adit. An all-weather airstrip, suitable for small aircraft will be constructed along the alignment of the main road between the plant site and Roberts Bay. During summer months the site will also be serviced by float planes and for that purpose a dock will be constructed on the shore of Doris Lake. This dock will be linked to the mill site with an all-weather road. During winter months an airstrip capable of handling larger aircraft will be constructed on the ice on Doris Lake and the site serviced from this airstrip.

Tailings produced during the milling process will be deposited in Tail Lake about five kilometres from the proposed mill location. Tailings deposition will be sub-aqueous, requiring the construction of two water retaining structures: the North and South Dams. The tailings will be contained in Tail Lake by constructing a low permeability dam across the outlet of Tail Lake to the north and by a second dam constructed across a topographic low point at the south end of the lake. The proposed dams will be constructed as rock fill structures with a geosynthetic clay liner (GCL), filter and transition zones and a frozen key trench founded on non-organic permafrost soils and/or bedrock. The North tailings dam will have an operational spillway on the right abutment excavated in bedrock.

The Concept of frozen core dams is to maintain both the core of a dam and the foundation in a frozen state, which will provide an impervious barrier to water. Frozen core dams thus requires that the foundation be saturated and frozen, and that the core of the dam be constructed with soils capable of retaining water sufficiently long to enable the pore water to freeze in a quasi-saturated state.

The frozen pore water, once saturated, provides two benefits: strength and an impervious media. The strength is achieved by the frozen pore water that acts as a bonding agent to the soil. The frozen pore water will block the pathways for groundwater seepage by filling the air voids, thus enabling imperious conditions over the frozen zone. Additionally, the frozen foundation does not require extensive excavation and grouting because of the rigid and impervious nature of the frozen ground along the foundation. It is however essential that the ground is saturated with pore ice to achieve impervious conditions.

Five frozen core dams were successfully constructed at the Ekati Mine (Hayley et al. 2004). The configuration of these dams consists of a central frozen core that is encapsulated with a rockfill shell. The material consists of a central frozen core that is encapsulated with a rockfill shell. The material consists of processed crushed rock to obtain the required gradations. The central core was appended with water to achieve the proper level of saturation prior to placement. The construction was performed in winter which enabled the introduction of cold temperatures in the dam, thus establishing the frozen condition as the dam was built. Thermosyphons were installed at the warm permafrost during construction. These conditions are not present at the dam locations at Tail Lake since there is no talik and that the permafrost is cold, thus providing a sufficient margin of safety.

The construction of the dams is scheduled for winter to benefit from the cold climate, thus achieving the coldest conditions possible. The winter construction is the most economical approach to create a frozen core. It also provides a safeguard against introducing heat into the foundation material and impacting the thermal regime of the existing permafrost.

The spillway has been sized to pass a 24-hour storm event with a 1:500 year recurrence interval. The spillway will be 20 m wide and will have a constant grade of 2%. Decant from Tail Lake will be achieved through a system of pumps, which will be synchronized to match the annual Doris Lake outflow hydrograph. Flow measurements at the Doris Lake outflow location will be used to trigger the pump(s) that will transfer the appropriate decant volume from Tail Lake to a discharge point approximately 50 m downstream of Doris Lake but upstream of the 4.5 m high waterfall in Doris Creek. An all-weather service road will be constructed along the east side of Tail Lake all the way to its southern end. The tailings pipeline will follow the roadway, and emergency tailings dump ponds will be constructed at strategic locations. Mill

tailings will be treated in a water treatment plant within the mill to destroy residual cyanide and precipitate heavy metals before the tailings are discharged into Tail Lake. The water quality eventually discharged from Tail Lake will meet discharge standards established under the Metal Mining Effluent Regulation. Water quality within Doris Creek downstream of the waterfalls will meet Federal water quality guidelines for the protection of freshwater aquatic life (fish and benthic invertebrates).

The Project is proposed to begin with initial equipment arriving by sea-lift in the fall of 2006. Development of the underground mine, construction of the jetty, road, building pads and fuel storage facilities would commence in the 1st quarter of 2007. A modular portable mill, the other infrastructure components, remaining equipment and the first year's operating supplies would arrive on the 2007 sealift. Production would commence at the end of 2007 and continue through the end of 2009. An initial workforce of 44 will complete construction and site development work from January through December 2007. Milling and processing will need an on site workforce of 30 from the 4th quarter of 2007 to the 1st quarter of 2010. Underground mining will require a peak workforce of 85 from mid 2007 through the end of 2009.The Project will generate approximately 4,800 person-months of employment. Workers will live in a 175 person camp and work on a 14 day in and 14 day out rotation. Water for the camp will be pumped from Doris Lake. All liquid effluent from the camp will be discharged with the mill tailings. All organic combustible camp waste will be incinerated. Waste oil will be consumed in a waste oil burner.

Project management will undertake a comprehensive program of environmental management. Approximately 35 ha of land will be disturbed during the course of developing and operating the Project. Water for processing the ore will be recycled from Tail Lake. Roughly 10% of the total ore will be treated with cyanide for gold extraction. All tailings that have been treated with cyanide will undergo cyanide destruction before discharge to Tail Lake. All hazardous waste will be disposed of appropriately. Hunting by workers will be prohibited; recreational angling will be discouraged.

The development of the Doris North Project is expected to be the first project to be developed on the Hope Bay Belt. MHBL intends to continue work at the Madrid and Boston deposits in order to justify development of these deposits. MHBL intends that ore from the Boston and Madrid deposits would be mined and then transported by truck to the Doris North Project mill. In this way support infrastructure and waste management facilities would be centred at one site, reducing the overall footprint of the Hope Bay Project. Supplies would continue to arrive by sealift through the proposed jetty at Roberts Bay. Milling of the ore would continue at the Doris North mill, however the mill will likely have to be expanded and modified to accommodate the specific characteristics of the various ores coming from the Madrid and Boston areas. Tailings would continue to be stored within the Tail Lake tailings impoundment however the impoundment would have to be expanded to accommodate the required increase in storage capacity. Some new infrastructure will have to be developed at each of the new mining sites specifically to support the mining requirements at each site. Any development beyond the present Doris North project proposal would of course be fully assessed as a new project and would include consideration of cumulative effects with the current proposal.

The development of the Hope Bay Project in phases, of which Doris North is the first phase, has a number of advantages. The Doris North Project provides MHBL with a sound economic foothold from which it can develop other gold resources on the Hope Bay greenstone belt. It will provide MHBL with a cash flow from which it can finance further development of other

mineralized areas on the belt. The Project provides Nunavut and the Inuit of the West Kitikmeot with the first commercial mining development on Inuit owned land. The project will provide employment and business opportunities to the Inuit and other residents of the Kitikmeot. The Project will provide direct employment income to the region. The Project will provide royalty and other revenue streams direct to the Inuit organizations as established under the NLCA to be used to further the development plans of the Inuit of this region. The Project will provide tax revenue to the Federal Government to fund provision of Federal and Territorial Government supplied services to the residents of the region.

The phased development, starting with a relatively small 2 year underground mine at Doris North, expanding to additional development on the Madrid and possibly the Boston mineralized areas provides the Inuit and other residents of the West Kitikmeot with an opportunity to train and maximize employment and business opportunities and spread the benefits over a longer period. This approach allows time for the people of the West Kitikmeot to see how these projects develop, to assess the impacts and to adjust their conditions for subsequent development in the region, learning from their past experience with mine development.

The development of the Doris North Project as a first phase of mining development at the Hope Bay Project will allow the Nunavut Impact Review Board and other regulatory agencies the opportunity to assess the environmental and social impacts from a mining operation in the Kitikmeot region and to assess the effectiveness of the measures meant to mitigate any negative impacts.

ATANIUYUNUT NAINAQHIMAYUQ – NUTANGUQHIMAYUQ HAVANGUYUMUT UNNIQTUUT - DORIS NORTH HAVANGA

Miramar Hope Bay Nanminilgit (MHBL) uuktuutilgit hananianik, aulanianik tamnalu halumaqhaqnianik tamna mikiyuq guulinut uyagakhiuqvik (tamna Doris North Havanga) tahamani Kanatamiut iluiliani tahamani Uataani Kitikmeot nunaliit aviktuqhimaniani Nunavut mikhaniittuq 110 kilaamita kangiata uataani Ikaluktutiap tamnalu 75 kilaamita kitaata kivataani Umingmaktok. Tamna Havanguyuq inilik tahamani Inuinait Nanminigiyani Nunami 68 09” tiguriis N x 106 40” tiguriis W, 5 kilaamita kangiani taphuma hivunganit Roberts Bay, tamna ilagiyaa tahaphuma Melville Tagiungata tamna atakmiyuq tahamunga Qingaukmun mikhani 80 kilaamita uataani taphuma Havagiyauyup.

Havikhaqhiuqniq tahamani 80 kilaamita takiniani Hope Bay greenstone qimiani havakviuvakhaqtut pigiaqhugit 1990-nit. Miramar Hope Bay Nanminilgit havikhaqhiuqpaliqtut maniliugutikhanut havikhaqaqniqmi tahamani qimiqmi pigiaqhugu 2000-mit tapkuat pitagigamityuk havakniinik taimaittunik havikhaqhiuqniqmik tapkuat niuvigamityuk tahapkuat piyungnaqniit tapkunangat BHP Havikhaqhiuqtit Nanminilgit. Qaphit piqalaqniinik guulinik piqaqniinik naunaiqtauhimayut tahamani qimiqmi. Uplumimut tikittugu, pingahut angipyaktut havikhaqaqniit nunat naunaiqtauhimayut: tamna Boston inaa, tamna Doris North inaa tamnalu Madrid inaa (tamna Madrid inaa ilalik taphuminga Naartok, Suluk tamnalu Madrid havikhat piqaqniinik nunat). Havikhaqhiuqtut havaktaunia naunaigutauyuq tapkuninga tamna Doris North inaa takukhauyuq piqaqnianik piqaqniqpaamik havikhanik nakuuniqhanik taphumangaunganit Boston tamnaluniit Madrid havikhaqaqnii inai taimaittumik pipkaqtitai Miramar pivikhaitnik tikilaqniinik maniliugutinik hanayakhanik tapkuninga akikiniqhanik angiyunut pityutauniinik. Tamna atuguminaqnianik naunaiyaqtaunia iniqtauyuq nunguliqtitlugu 2003 tamnalu naunaigutaupluni tamna Doris North piqaqnia pilaqnianik maniliugutinik pivaliatitauniinik mikiyuuluni uqumaitniinik nunap iluani uyagakhiuqvikmik.

Tamna Doris North Havanga piqaqniaq taphuminga nunap iluani uyagakhiuqniqmik atauhiinaqmik angmaniqaqluni tamnalu iliuqaivikha pilaqviuluni. Tamna havikhaq agyaqtauniaq nunap qanganut tahamani katitauluni qaligiktigauniaq hanayaulunilu hiquptugauluni tamnalu havikhaliuqvik pivakniaqhuni anginiinik taphuminga 668 tansinik upluq tamaat (hanahimayuq pivaknikhaanik 800 tansinik upluq tamaat tamnalu aulataunianut pityutaa 83.5 pusamik).

Tamna hanayauyuq aulaqtitauniaq hanavikmin hanayauhimalutik kikkagiktunik guulinik. Una Hanayauyuq nigiugiyauyuq aulatauluni 24 tatqinik, hanalunilu 467,000 tansinik havikhanik pihimalutiklu mikhaani 306,830 aunsinik guulinik. Tamna havakvik ahiniittuq tapkuningalu piittuq hunnilaittunik tapkuatluniit ukiumi apqutmik tapkuat atatyutigiyai kitunutliqak hanianiittunut nunaliuyunut tapkunungalunit hanatyutinut. Tatya, piittuq nappaqhimayunik pivaliatitauhimayunik talvani havakvikmi, kihimik tamna havikhaqhiuqvikmun hiniktaumavik tahamani kivataata hinaani taphuma Windy Tahiq, inilik mikhaani 10 kilaamita uataani taphuma havakviup hannavianit. Tamna atuqniqhaq tikittagauniata apqutaa talvunga havakviuyumut ukhukhainut, hanatyutinut tapkuatlu atuqtakhainut piniaqtut tahamuuna Ukiuqtaqtup Tagiunagut (umiaqpakkut). Tamna uuktugauyuq havikhaliuqvikhaq iniqaqtuq mikhaani 5 kilaamitat talvangat Roberts Bay-min. Una inaa tikitaulaq umiaqpakkut kalitainutlu hivikittumik hikuititlugu umiakuqvianik auyaani. Tikiqqiuqhimayumik hanayuqaqniaq talvani Roberts Bay nunalitaqvikhainut hanatyutit tapkunangat umiaqpaknit akhalutainit. Hanatyutit uhiiyaqtauniat tapkuatlu tutquqhimalugit tahamani iliuqaqviani haniani hinaata. Ukiuq tamaat uqhukhat pakpagauniat talvangat umiaqpaknit tapkununga 8 milian liitamut uqhuqaqviknut tahamani hinaani.

Tamna 4.8 kilaamita ilihimainaqtukhaq apqut atatyutauniaq talvunga Roberts Bay umiaqpaknut nunalitaqvikhanut inikhaanut taphumunga havikhaliuqvikmun tamnalu hiniktaumaviknut inikhaanut, pipkaqlugitlu ukiuq tamaat-apqutmut agyaqtuiniqmun uqhukhanik atuqtakhaniklu talvanga umiaqpait nunalitaqvianit inaanit iliuqaqviuyumut tamnalu uqhukhat tutquqhimavianut qattaqyuknut. Tamna havikhaliuqvik, hiquptigivik, hiniktaumavik, aapisiqaqvik, hannavik, qulliliqutiqaqvik, anaqnut halumaqhaivik tapkuatlu tamaita ahii aulatyutinut uyagakhiuqvikmi havagutit iniqaqniat tahamani qitiqpani inaani nalaani taphuma nunap iluani uyagakhiuqviup itiqtaqvianit. Tamna ukiuq tamaat-ilihimainaqtukhaq mitvik, naamaktukhaq mikiyunut tingmitinut hanayauniaq tahamani nalaani taphuma atuqniqhauyup apqutip akungani taphuma hanaviuniqhap havakviani tamnalu Roberts Bay. Atuqtitlugit auyami tatqiqhiutit tamna havakvik ikayuqtauniaqmiyuq qayaliknit tingmitinit tapkuatlu pityutainut tamna tulaktaqvik hanayauniaq tahamani hinaani taphuma Doris Tahiq. Una tulaktaqvik atatyutauniaq talvunga havikhaliuqvikmun hannavikmun ilihimainaqtukhamit apqutmit. Atuqtitlugu ukiumi tatqiqhiutini tamna mitvik atuqtaulaq angitqiyanit tingmitinit hanayauniaq tahamani hikumi talvani Doris Tahiqmi tamnalu havakvik ikayuqtauniaqhuni talvangat mitvikmin.

Uyagaktaqnikut iqakui piyauyut atuqtitlugu havikihaliuqvikmun hanayaunii iqaqtauniat talvunga Tail Tahiqmun mikhaani 5 kilaamitat talvangat uuktugauyumit havikhaliuqvikhap inikhaanit. Uyagaktaqnikut iliuqaqnii pihimaniat imaqmiitlutik ilaa, piyaqaqhutik tapkuat hanayaunianik malguknik imaqmik katitiqvikhaknik hanalutik: tamna Kitaani tamnalu Kangiani Haputik. Tamna uyagaktaqnikuq hiamaktailiyauniaq talvani Tail Tahiqmi hanalutik pukkittumik mailaamik haputmik akimut taphuma imaiyaqviata taphuma Tail Tahiq tahamani kitaani tamnalu aipaa haput hanayauluni akimut taphuma nunaa pukkitgua tahamani kangiata ihuani taphuma tattip. Tapkuak uuktugutauyuk haputik hanayauniat uyaqiqtuqhimayumik hanahimayunik piqaqlutik nunaliqutinik maqittailitinik (GCL), halumaigipkutit tapkuatlu nuktigaqvii tapkuatlu qiqumayut atuqpiaqtut algakhimayut ilutuniit naniyauyut tahamani nauviuhimailguani qiqittaqniani nunap tamnalu/tapkuatluniit qaiqtut. Tamna kitaani haputauyuq uyagaktaqnikut iqakut pihimaniat aulataunianut kuvigaqvianut talvani taliqpiani piqunganiani kingikniani qaiqtup. Tamna kuvigaqvik anginilik atugaunianik 24-ikaqniqnik piqhiqqat pivikhaanik piluni 1:500 ukiumi atutqiknikhaanik akuttuniinut. Tamna kuvigaqvia piniaq 20 miitamik hanimuktigiluni tamnalu pihimainaqluni uvingania 2 pusauyumik. Kuvigaqnia talvangat Tail Tahiqmit piyauvakniaq atuqlugit pakpautit, tapkuat ihuaqhagauniat atauttikuqnikhai tapkuat ayyikkuhiqlugu tamna ukiuq tamaat Doris Tahiq kuuktaqnia imaliginiqmun. Kuuktaqnianut uuktugaqtaunii talvani Doris Tahiqmi kuuktaqviata inaanit atuqtauniat pigiagutainut tapkuat pakpautit, tapkuat nuktiqniaqtai tapkuat naamakhilugit kuviyaqniata anginia talvangat Tail Tahiqmit talvunga kuviyaqnianut mikhaani 50 miitat kuukiqniata ataani Doris Tahiq kihimik qulaani kuukiqniata taphuminga 4½ miitat puqtunia immap quqluqnia talvunga Doris Kuugauyaq. Tamna ilihimainaqtukhaq ukiuq tamaat apqut hanayauniaq tahamuuna kivataata mikhaani taphuma Tail Tahiq talvunga tikkikhalugu kangiata ihuanut. Tamna uyagaktaqnikut iqakuita huplua malikniaq tahamuuna apqutikkut, tamnalu igininaqtumut uyagaktaqnikut iqakut kuvigaqviit tahiqat hanayauniat ihuaqhaqhimayuni inikhaini. Havikhaliuqvikmin uyagaktaqnikut iqakut halumaqhagauniat imaqmut halumaqhaiviani talvani havikhaliuqvikmi ahiguqtigahuaqhugit tapkuat cyanide tapkuatlu piqaqniit uqumaitniqhat haviit hivuani uyagaktaqnikut iqakut kuviyauniahatitlugit talvunga Tail Tahiqmut. Tamna imaup qanugitnia kuviyauyuq talvangat Tail Tahiqmit naamakhihimaniat kuviyauyut atuqpaktainut pinguqtauhimayut malikhugit tapkuat Haviit Uyagakhiugauyut Imaqtai Halumaittut Maligait. Immap qanugitnia talvani Doris Kuugauyaq kuukiqniata ataani taphuma kuvigaqviuyup naamakhihimaniaq Kavamatuqatkut immap qanugitnianut pinahuaqniinik tapkununga hapuhimaniinut taphapkuat imatqiktut imaqmiuttat uumayut (iqaluit imaqmiittut uumayuvaluit).

Tamna Havanguyuq uuktugauyuq pigiagumaplugu tapkuat hivuliqmik hanalgutikhat tikititaunii umiaqpakkut talvani ukiakhaani 2006. Pivaliatitaunii tapkuat nunap iluani uyagakhiuqniq, hanayaunia tikiqqiuqhimayuq, apqut, igluqpait tungavikhai tamnalu uqhuqaqvikhaq tutquqhimaviit hanatyutai pigiaqniat talvani hivulliqmi nappaata nappaani taphuma 2007. Tamna iviqtiqhinnagianikhimayuq ahinuktainagialik havikhaliuqvik, tapkuatlu ahii hanatyutikhat ilagiyai, aulahimaittut hanatyutit tapkuatlu hivulliqmik ukiumi aulanianut atuqtakhat tikitniat talvani 2007 umiaqpakhaani. Hanayauvallianii pigiaqniat talvani nungutpaliatitlugu 2007 atuqtaunginaqlutiklu tamna nunguttiqlugu 2009. Hivulliqmik havaktikhai tapkuat 44 iniqtiqniaqtai hanayakhat tamnalu havakvikhaq pivaliatitauniinut hanayakhat talvangat Januari talvunga Tisaipa 2007. Havikhaliuqniq tamnalu hanayaunii piyaqaqtut tahamani havakvikmi havaktikhainik 30 talvangat hitamaani nappaata nappaani 2007 talvunga hivulliqmun nappaata nappaanut 2010. Nunap iluani uyagakhiuqniq piyagiaqaqniaq atuqpiaqniqhaani havaktikhainik 85 talvangat qitqanit 2007 talvunga nunguttiqlugu 2009.Tamna Havakviuyuq piliuqniaq mikhaani 4,800 inungnut-havakhainik havaktukhanut. Havaktut nayugaqaqniat talvani 175 inuqalami hiniktaumavikmi havaklutiklu tapkunani 14 uplut havaklutik 14 uplut nutqangalutik nikittaqnikhai. Imiqtaqniat taphumunga hiniktaumavikmut pakpagauluni talvangat Doris Tahiqmit. Tamaita imaqtai immat halumaittut talvangat hiniktaumavikmit kuvigagauniat ilagilugit havikhaliuqviup uyagaktaqnikut iqakut. Tamaita hunavaluit ikualalat hiniktaqvikmit iqakut ikualattiyauniat. Iqakut kiniqtut nungutigauniat talvani iqakut kiniqtunut ikualattiviani.

Havanguyup aulataunia piyauniaq tamatkiumayumik havagutainik tapkuat avatiliginiqmun aulatauniinut. Mikhaani 35 hiaktat nunamik qanguqtiginiat atuqtitlugu tapkuat piyaunii taphuma pivaliatitaunianut aulataunianutlu taphuma Havanguyup. Imaq havaguatuyukhaq tapkuninga havikhanik atutqiktagauniaq talvangat Tail Tahiqmin. Mikhaani 10 pusat tapkuat katitlugit havikhat halumaqhagauniat taphumunga cyanide guulit ahivaqtigahuaqhugit. Tamaita uyagaktaqnikut iqakut tahapkuat atuqhimayut cyanide-mik piyauniat cyanide-ngiyaqniinik hivuani kuvigaqtauniahaqtitlugit talvunga Tail Tahiqmun. Tamaita hivuuganaqtut iqakut iqaqtauniat naamaktumik. Angunahuaqtitnii havaktut pittailiyauniat; aliahukaphukhutik iqaqhaqtailiyauniat.

Tamna pivaliatitaunia taphuma Doris North Havaanga nigiugiyauyuq hivulliunia havanguyuq pivalliatitauyuq tahamani Hope Bay Qimingani. Miramar Hope Bay Nanminilgit piniaqhimayut

huli havainaqniinik tapkuat Madrid tamnalu Boston havikhaqaqnii tapkuat uyagakhiuqtauniat atuguminaquplugit pivaliatitaunii tahapkuat havikhaqaqnii. Miramar Hope Bay Nanminilgit piniaqhimayut tapkuat havikhait talvangat Boston tamnalu Madrid havikhaqaqnii uyagakhiuqtaulutik talvangat agyaqtaulutik akhaluutikkut talvunga Doris North Havangani havikhaliuqvikmun. Taimaatut ikayuqhiuhimaniat hanayauyut tapkuatlu iqakut aulatauniinut hanatyutit talvani qitiqpaniitniaqmata atauhiqmi havakvikmi, mikhityutaulutiklu tupligaqniinut tahamani Hope Bay Havaangani. Atuqtakhai tikittainaqniat umiaqpakkut tahamuuna uuktugutauyukkut tikiqqiuqhimayukkut talvani Roberts Bay. Havikhaliuqtaunii tapkuat havikhat huli piyauniat talvani Doris North havikhaliuqviani, kihimik tamna havikhaliuqvik attaqtuhivaliqniagunaqhiyuq nutanguqtaulunilu pilagiakhainut tapkuat taihimayut qanugittuunii tapkuat allatqiit havikhat tikittaqnii talvangat Madrid tamnalu Boston nunainit. Uyagaktaqnikut huli piniat tutquqtigaulutik talvani Tail Tahiqmi hiamaktailiviani kihimik tamna hiamaktailivik attaqtuhivaligiaqaqniaq tapkuat ihuaqhagahuaqlugit piyaqaqniit aglivaliqniinianik tamna tutquqhimmaviup ilulilaqnia. Ilai nutaat hanatyutikhat pivaliatitauyaqaqniat tapkunani atuni nutaani uyagakhiuqvikni havakviini taihimayumik tapkuat ikayugutikhat tapkununga uyagakhiuqviknut atugiaqaqniinut talvani atuni havakvikni.

Tapkuat pivaliatitaunii taphuma Hope Bay Havaangata pityuhikhai, tamna ilagiyaa Doris North hivuliuyuq pityuhikhaq, pilik qaphinik ihuaqutikhainik. Tamna Doris North Havaanga piqaqtitiyuq Miramar Hope Bay Nanminilgit nakuuyumik maniliugutikhainik pilaqniinik tapkuat pivaliatitaunii ahii guulit piqaqnii tahamani Hope Bay greenstone qimiani. Piqaqtitniaqtai Miramar Hope Bay Nanminilgit maniqaqnikhainik tapkunangat akiliqtuutikhainik huli [ivaliatitakhanut tapkuat ahii havikhaqaqniuyut tahamani qimiuyumi. Tamna Havaanguyuq piqaqtitiyuq Nunavutmik tapkuatlu Inuinait tapkuatlu ahii nunaliuyut tahamani Uataani Kitikmeot taphuminga maniliugutauyumik uyagakhiuqvikmik pivaliatitaunianik Inuinait nanminiani nunami. Tamna havaanguyuq piqagutauniaq havakhanik tapkuatlu nanminilgit pivikhaitnik tapkuat Inuinait ahiil;u nunaliuyut tahamani Kitikmeotni. Tamna Havaanguyuq piqagutauniaq havaktitauniinit maniliuqniqmik tahamunga nunaliit aviktuqhimanianut. Tamna Havaanguyuq piqagutauniaq avikhiviuvakniinik maniktagauyut tapkuatlu ahii maniliugutaunii tugaqpiaqlutik tapkununga Inuinait timiinut pinguqtauhimayunut malikhugit tapkuat Nunavutagutit tapkuat atuqtauniat huli pivaliatitauvaliqniinut upalungaiyautit tapkuat Inuinait tahamani nunaliit aviktuqhimaniani. Tamna Havaanguyuq piqaqtitiniaq tax-ngiyautainik maniliugutinik tapkununga Kavamatuqatkut Kavamainut maniqaquplugit atuqnigiyai tapkuat Kavamatuqatkut tapkuatlu Nunaliit

Aviktuqhimanianut Kavamagiyauyut piqaqniqnut ikayugutai tahamaunga nunaliuyunut talvani nunaliit aviktuqhimaniani.

Tamna havakhaq pivaliatitaunianut, pigiaqluni taphuminga mikipyaktumik 2 ukiuknik nunap iluani uyagakhiuqniqmik talvani Doris North, attaqtuhivalliqnianik tapkuat ilagiagutikhai pivaliatitauniinut talvunga Madrid tamnaluniit ilaukmiluni Boston havikhaqaqnia inai piqaqtitilat tapkuninga Inuinait tapkuatlu ahii nunaliuyut tahamani Uataani Kitikmeot tapkuninga pivikhainik ayuiqhaqniqmun tapkuatlu havakhaqattiaqtitnahuaqhugit tapkuatlu nanminilgit pivikhaitnik tapkuatlu aviktuqtitnahuaqhugit ihuaqutikhat tapkununga atukhaqniqhaupkagahuaqhugit. Una pityuhiq pivikhaqaqtitiyuq tapkununga inuqutainut tahaphuma Uataani Kitikmeot takuniinik qanuqtut tahapkuat pivaliatitnii, tapkuat pilaqnikhai tapkuat aktuaniit tapkuatlu ihuaqhaqniinik qanugitnii tapkununga kinguagut pivalianiinik tahamani nunaliit aviktuqhimaniani, ilittugivigilugit tahpkuat atuqpakhimayaqtik tapkununga uyagakhiuqviit pivaliatitaunii.

Tamna pivaliatitnia taphuma Doris North Havaanga hivulliuyuq havaguhiani taphuma uyagakhiuqniup pivaliatitauniani talvani Hope Bay Havaangani piyungnaqtitniaqtai tapkuat Nunavut Avatiligiyit Katimayit tapkuatlu ahii aulattiyiuyut havaktii tapkuninga pilaqniinik tapkuat naunaiyaqniinik tapkuat avatiliginiqmik tapkuatlu inungnut aktuanii tapkunangat uyagakhiuqniqmun aulatauniinut tahamani Kitikmeot nunaliit aviktuqhimaniani tamnalu naunaiyaqniinik tapkuat atuttiaqnii tahapkuat uuktugutai qanugityutaunii tapkuat ihuaqhaqniiniki kitutliqak ihuilgut aktuaniit.

ᐊᖏᔪᖅᑐᕕᓄᑦ ᓴᐅᑭᓇᖅᑐᒥᔪᖅ - ᓄᓇᕗᑦᑐᒥᔪᖅ ᐱᓕᕆᔨᒃᑲᓂᕐᒥᑦ ᑲᓂᖅᑲᐅᑦ - ᐊᐃᓗᓐ ᓄᐊᖅ ᐱᓕᕆᔨᖏᑦ

ᒥᖏᒃ Hᐅᐊ ᐅ ᓇᒥᓂᑦ (ᒥᖏᒃᔨᑦ) ᑲᑎᒪᔨᑎᖅᑐᑦ ᓴᓇᓂᖏᓂᖅ, ᐊᐅᓪᓂᖏᓂᖅ ᐊᖏᓪᓗ ᓴᓪᒪᓴᖅᐃᓂᖏᓂᕐᓄᑦ ᑭᓇ ᒥᑭᔪᖅ ᓄᓇᑦ ᐃᓪᐊᓂᖅ ᔪᓪᓕᓂᑦ ᑲᑎᒪᔨᑦᑎᐅᖅ (ᑭᓇ ᐊᐃᓗᓐ ᓄᐊᖅ ᐱᓕᕆᔨᖏᑦ) ᑕᒫᓂ ᑲᓇᑕᒥᑦ ᐃᓪᐃᓕᖏᓂ ᑕᒫᓂ ᑲᓕᖏᓂ ᖃᑎᖅᒥᑦ ᓄᓇᓕᑦ ᐊᐱᑎᖅᓯᒪᓂᖏᓂ ᓄᓇᕘᑦ ᒥᓴᓂ 110 ᑭᓪᓕᒥᑦ ᑲᖏᐊᑕ ᑲᐊᕆᖏᓂᖏᓂ ᐃᖅᓚᑎᑦᑎᐊᖅᑐ ᐊᖏᓪᓗ 75 ᑭᓪᓕᒥᑦ ᑭᑦ ᑭᕐᕿᓂ ᑲᒥᖓᓪᓕᑎᑦ. ᑭᓇ ᐱᓕᕆᔨᒃᑲᖅ ᐃᓂᖅᑎᑦ ᐃᓄᐃᓗ ᓇᒥᓂᖅ ᓄᓇᒥ ᑕᓕᓂ 68 09" ᑎᒍᓴᓗ ᑭᑦᓂ ᐊᖏᓪᓗ 106 40" ᑎᒍᓴᓗ ᑲᐊᕆᖏᓂᖏᓂ, 5 ᑭᓪᓕᒥᑦ ᖃᖏᐊᓂ ᑭᓇᓗᒪ ᓂᐅᕐᑐᖏᑕ ᔭᐅᔪᓐ ᐅᑦ, ᐊᑕᐅᖏᖓ ᑭᓇᓗᒪ ᒥᒻᒪᓴᓕ ᑕᓚᐅᖏᑕ ᑭᓇᓗᓐ ᐊᑕᓕᖅ ᑭᓇᓗᒪᖏᓐ ᑎᖏᐅᓕ ᒥᓴᓂ 80 ᑭᓪᓕᒥᑦ ᑲᐊᕆᖏᓂᖏᓂ ᑭᓇᓗᒪ ᐱᓕᕆᔨᒃᑲᓂᕐᓄᑦ.

ᓴᓕᓴᓂᓕ ᓴᓕᓴᖏᓂᐅᕐᓂᖅ ᑕᒫᓂ 80 ᑭᓪᓕᒥᑦ ᑕᑭᓂᖏ ᐃᓕᑦ ᐅ ᔪᓚᓐᓂᔪᑎᓐ ᖃᒥᖏᖓ ᐱᓕᕆᓵᐅᔪᑐᖅᖅ ᐱᒋᐊᖅᓴᔪ ᑭᓇᓂᐅᓂ 1990-ᓂ. ᒥᖏᒃᔨᑦ ᓴᓕᓴᖏᓂᐅᕐᓂᖅᓯᒪᔪᑦ ᑮᓇᐅᔭᓂᐅᑎᑦᑎᓴᓕᓂ ᓴᓕᓴᖏᖅᓂᐅᔪᓂᓕ ᑭᓇᓂᓯᒪᓂ ᖃᒥᖏᓕᓂ ᐱᒋᐊᖅᓴᔪ 2000-ᒥ ᐱᑕᓚᒋᑦᓯᒃ ᑭᓇᐊᑦ ᐱᔪᖅᓇᐅᑎᖓᑦ ᐱᓕᕆᓂᖓᓂᓄᑦ ᑕᒪᐊᐊᓴᐃᑦ ᓴᓕᓴᖏᓂᐅᕐᓂᖅᓂᖅ ᑭᓇᐊᑦ ᓂᐅᐱᖅᓂᖓᓂᓄᑦ ᑕᒪᐊᑦ ᐱᔪᖅᓇᐅᑎᖓᑦ ᑭᓇᐊᖅᓂᖓᓂ ᐱᖓᐱ ᓴᓕᓴᖏᓂᑦ ᓇᒥᓐᓄᑦ. ᖃᓄᐃᑦ ᑭᓇᐊᑦ ᐱᑕᖃᓴᖅᓂᖓᓂᖅ ᔪᓚᑕᖃᖅᓂᐅᔪᓂᑦ ᓇᓚᓇᐃᖅᑕᐅᓂᒪᔪᑦ ᑕᒪᐊᓂ ᖃᒥᖏᓕᓂ ᐱᒋᐊᖅᓴᔪ ᑭᓇᐊᑦ ᓂᐅᐱᖅᓂᖓᓂᓄᑦ ᑕᒪᐊᑦ ᐱᔪᖅᓇᐅᑎᖓᑦ ᑭᓇᐊᖅᓂᖓᓂᓄᑦ ᐱᖓᐱ ᐱᓕᕆᖏᓂᖅ: ᑭᓇᓗ ᑮᓵᑦᓂ ᐃᓂᖅᓗ, ᑭᓇᓗ ᐊᐃᓗᓐ ᓄᐊᖅ ᐃᓂᖅᓗ ᐊᒪᓗᓚ ᑭᓇᓗ ᒪᐊᑎᑦ ᐃᓂᖅᓗ (ᑭᓇᓗ ᑕᐃᓚᑦ ᐃᓂᖅᓗ ᐃᓪᓕᖅᑕᐅᑦ ᑮᓇᐅᑦ ᓇᓵᔭᓐ, ᓂᓪᓕ ᐊᒪᓗᓚ ᒪᐊᑎᑦ ᓴᓕᓴᖏᓂᖅᖅᓂᐅᔪᖅ ᐱᓕᕆᖏᓂᖅ ᓄᓇᑦ ᖃᐅᔨᓴᖅᓂᐅᔪᖅ). ᓴᓕᓴᖏᓂᐅᕐᓂᖅᓂᖅ ᓴᓇᔨᓐ ᓇᓚᐃᐱᕐᐅᔪᓂᑦ ᑮᓇᐅᑦ ᐊᐃᓗᓐ ᐃᓂᖅᓗ ᑕᓄᐊᓕᖅᑐᓂᖅᓂᖅ ᓴᓕᓴᖏᓂᖅ ᑮᓇᐅᑦ ᓇᓵᔭᓐ ᓄᓇᑦ

ᑭᓪᓕᒃᑖᓂ ᓯᓚᖅᑐᓂ ᑕᑯᓯᒪ ᓇᖅᑎ ᑕᓯᖅ, ᐃᓂᖅᖃᑐᖅ ᒥᔪᖅᓂ 10 ᑭᓪᒥᑕᑦ ᐅᐊᓕᖅᑐᔪᖅᓂ ᑕᑯᓯᒪ ᐱᓕᕆᓂᕐᓂᖅ ᓴᖅᓇᐃᖅᑐᓂᑦ. ᑕᑯᓚ ᐊᑐᖅᓂᖅᓴᖅ ᑎᑭᑦᑕᖅᓂᖅ ᐊᑦᕋᓯᑦ ᑕᑲᖅᓂᖅ ᐱᓕᕆᓇᐅᔨᒧᑦ ᐅᖅᓯᐅᓴᓂᑦ, ᓴᓇᑦᔨᑎᓂᑦ ᐊᒪᓚᓐ ᐊᑐᐅᓴᕐᓗᓂᑦ ᑕᒪᓐᓇᑐᒍᑎᓪᓗᒍ ᐅᑭᐅᖅᑕᖅᑐᒥ ᑕᓚᐅᖅᓯᒪᔪᖅ (ᐅᒥᐊᖅᔨᐊᓇᑦ). ᑕᑯᓚ ᐅᓂᒃᑳᐅᔨᖅ ᓴᐃᓴᓕᐅᖅᓇᐃᓴᖅ ᓴᓇᓴᖅ ᐃᓂᖅᖃᑐᖅ 5 ᑭᓪᒥᑕᑦ ᑕᓯᖅᓯᒪᓂ ᖃᐅᔨᖅ ᐃ. ᐅᓚ ᐃᓂᖅᓂᖅ ᑎᑭᑕᐅᔨᖅᓴᖅᑐᖅ ᐅᒥᐊᖅᔨᐊᓇᑦ ᐊᒪᓚᓐ ᑲᓕᑦᔨᒥᓂᖅ ᓯᐊᑭᑦᑐᒥᑦ ᓯᓇᖅᓴᑦᑐᑦᓗᒍ ᐅᒥᐊᖅᔨᐊᓇᓱᖅᓚᓐᓂᖅᓂᖅ ᐊᑦᕋᓯᑦ ᐊᐅᓚᑦᓯᐊᓂᖅ. ᑎᑎᖅᑭᐅᓯᓯᖅᓴᖅ ᓴᓇᓴᖅ ᐃᓂᖅᖃᑐᖅ ᑕᑯᓯᒪ ᐊᑦᕋᓯᑦ ᐊᑐᐅᓴᕐᓗᓂᑦ ᐊᑦᕋᓯᑦ ᐃᓂᖅᖃᑐᖅ ᐊᑐᐅᓴᕐᓗᓂᑦ ᑕᑯᓯᒪ

ᐊᐱᑦᑕᕐᓂᖅᓂᒃ ᑕᒪᓐᓂ ᑕᓚᕐᓂᖅᓂ ᕿᑎᒃᓂᖅᓂ ᐊᓚᑦᓯᒪᔪᒥ ᕿᐃᕐᑐᓂ 24 ᐃᑲᖏᓕᑦ ᐱᕐᓂᖅ ᑭᓴᐱᐊᑦ ᐊᓂᔪᓯᓚᕐᓂᖅᓄᑦ 24 ᐃᑲᖏᓕᑦ ᐱᕐᓂᖅ ᐊᑐᕐᓂᖅᓂᒃ ᐊᐱᕐᓂ 1:500 ᐊᖏᔪᒥ ᐊᑐᑲᓂᔪᓯᓚᕐᓂᖅᓄᑦ ᐊᐱᓂᖅᓂᒃ. ᑭᒃᓗ ᐱᐊᑦᑕᕐᐊᖅᓂ ᐱᓕᓂᐊᕐᓂ 20 ᒥᑦᑕᒥᒃ ᓴᓂᔪᑐᓂᕐᓚᓂ ᐊᓚᒪᓚ ᐱᑦᕐᓚᓂ ᓯᐊᖅᓂᕐᐃᓇᕐᓚᓂ 2 ᐳᓴᐅᔨᒥᒃ. ᐱᐊᑦᑕᕐᓂᐊ ᑕᓯᖅᓂᑦ ᐅᓂᖏᑕᕐᓂᐱᑦ ᐱᐊᖏᕐᐊᖅᓂ ᑕᓯᕐᒥᑦ ᐱᓂᐅᓂᐊᕐᓂ ᐊᑐᕐᓂᖅ ᐊᑐᓚᑦ ᐱᓕᓂᒪᓂᖅᑐᑦ ᐊᑐᑦᑕᓂᖅᓂᑦ ᑐᓴᐅᒪᓂᖅᓂᑦ ᐊᑐᑦᑕᓂᖅᓂᑦ ᐊᖏᔪᓕᒫᓂᑦ ᑐᓴᐅᒪᓂᖅᓂᑦ ᐊᑐᑦᑕᓂᖅᓂᑦ ᐊᐱᕐᓂᖅᓂᒃ

ᐃᖃᓇᐃᑦᓴᓂᖅ. ᐃᖃᓇᐃᑦᖃᖓᑦ ᑐᐊᖃᒥᐃᖃᕐᓯᒪᓕᑦ ᑕᑯᓂ 175 ᐃᓄᖕᓄᑦ ᓯᓂᕐᑕᒪᓐᓇᑎᒥ ᐊᑦᒪᓗ ᓴᓇᓗᑎᒃ ᑕᕆᓂᖕᖓ 14 ᐅᕐᓗᑦ ᑎᑭᓯᒪᓗᑎᒃ ᐊᑦᒪᓗ 14 ᐅᕐᓗᑦ ᐊᖏᖕᖓᖃᓯᒪᓗᑎᒃ ᓂᑭᑕᖃᓂᕐᓄᑦ. ᐃᒪᓴᖓ ᑕᕆᓂᖕᖓ ᓯᓂᕐᑕᒪᓐᓇᑎᒍᑦ ᕿᓴᕐᖓᐅᓂᐊᖃᖅ ᑕᑯᖓᑦ ᑕᓯᒥᒥᑦ. ᑕᒪᐃᑦ ᐃᒪᖃᑕᖏᑦ ᓴᓗᒪᐃᑦᑐᑦ ᑕᑯᓂᖕᖓ ᓯᓂᕐᑕᒪᓐᓇᑎᒥᑦ ᐊᔪᕐᓇᖅᑐᓂᖅ ᕿᓂᖅᓯᒪᓂᑦ ᐊᖃᖅᓴᓕᖅᑎᑦ ᐱᖓᓱᖃᐊᖅᑐᑦ ᐊᔪᕐᓇᖅᑐᓂᖅ ᓂᐱᑦᓯᖅᓂᒃᑯᑦ. ᐃᒪᓴᖓ ᑕᕆᓂᖕᖓ ᐃᔪᐊᓕᐊᓂᓐᓇᖅᑎᑦ. ᐊᑦᒪᓗ ᐅᑭᐅᖅᑯᓂᖅ ᐃᔪᐊᓕᐅᑎᓐᓇᖅᑎᑦ. ᐊᑦᒪᓗ ᐅᑭᐅᖅᑯᓂᖅ ᐃᔪᐊᓕᐅᑎᓐᓇᖅᑎᑦ ᐊᑦᒪᓗ ᐃᔪᐊᓕᐅᑎᓐᓇᖅᑎᑦ ᐃᓕᖅᑐᓂᖅ