PROJECT DESCRIPTION FOR RENEWAL OF CHIDLIAK PROJECT TYPE B WATER LICENCE

Introduction

Peregrine Diamonds Ltd. (Peregrine) operates the Chidliak Project (Chidliak) on a block of 852 mineral claims on the Hall Peninsula, South Baffin Island, NU, approximately 75 km northeast of Iqaluit at the southwest corner and approximately 133 km south of Pangnirtung at the northernmost point (*see Map 1 below*). Exploration programmes commenced in summer 2008, following issuance of Type B Water Licence *#2BE-CHI0813* by the Nunavut Water Board (NWB) and Class A Land-Use Permit *#N2008C0005* by Aboriginal Affairs and Northern Development Canada (AANDC, formerly called INAC), and have continued to the present. Peregrine also holds current Land Licence *#Q10L1C008-Extension* from the Qikiqtani Inuit Association (QIA) for exploration on Inuit-Owned Surface Rights Lands (IOLs) within Chidliak and on the adjoining Qilaq Project (*see Map 1*).

Focus on What is New, Distinguishing between What is New and What is Not

Peregrine is seeking to renew its water licence and permit for an additional five years each; both current authorisations expire in June 2013. To allow regulators sufficient time for review in a climate of competing projects and strained resources, Peregrine is submitting its application well in advance of this date. This Project Description document will focus on permit renewal and, at NWB's request, focus will be on new or changed materials rather than repeating existing information; a similar approach has been requested by the Nunavut Impact Review Board (NIRB). For NWB's convenience, Peregrine will identify which adjustments to components are *new* and which are *existing*. A total of five proposed adjustments are discussed below, followed by itemisation of existing components and activities which Peregrine wishes to continue under a renewed licence and permit. The five adjustments sought break down as follows: (1) an additional contingency water source for CH-6; (2) use of the approved Equipment Trail to transport kimberlite bags off site by a CAT Challenger pulling a sleigh; (3) use of the approved Equipment Trail for return transport of the Challenger to site with a sleigh filled with fuel drums; (4) a contingency natural landing strip at Discovery Camp, for winter landings when a cross-wind prevents safe landing on the existing strip, and (5) several additional options for hole diameters for the bulk-sampling programme.

For the separate AANDC application, and at AANDC's request, *all* materials will be submitted *in full*, even where no changes are requested or anticipated.

Reason for Permit Renewal

The reason for the renewal is twofold: (1) so that Peregrine may continue exploration on the Project and (2) so that Peregrine may continue to conduct bulk-sampling of kimberlites with economic potential within the "Focus Area" in the Hall Peninsula (*see Map 1, Map 2)*. NWB approved bulk sampling via Amendment #4 in March 2012. The initial phase of the multi-year bulk-sample programme was postponed from winter 2012 to February-May 2013.

Objective: Continuation of Activities Already Approved

Peregrine is seeking a renewed five-year water licence and five-year land-use permit which allow continuation of activities and project components already approved over the life of *#2BE-CHI0813* and *#N2008C0005*, including bulk sampling and use of the existing water allotment . Work will remain within the approved Project Scope and Project Scope area, and no major changes are sought. Existing components of the Project already have been screened by NIRB as reported in screening decision *#08AN008,* dated 28 March 2008 and 18 December 2008, and in screening decision *#11EA050,* dated 20 February 2012.

What Is New:

Minor Adjustment #1: Adding a Second Contingency Water Source for *CH-6*

- **Site E Lake:** Based upon recommendation of the EBA consulting engineers who conducted the bathymetric study of prospective bulk-sample water sources in 2011, Peregrine would like to add an extra contingency water source for drilling the CH-6 kimberlite. This lake was part of the original study.

- **Why It is Needed:** This adjustment will provide a greater choice of source locations, due to variables such as weather and trail conditions, which otherwise might impact efficient conduct of drilling. This additional water source – Site E – (*cf. Appendix 9, Bulk-Sampling Monitoring Plan, Pages 11 and 13-14*) was part of the original survey and lies on an already-approved winter trail, 2.4km north of the "Blue Hole" (Site B), the main water-supply source for CH-6 drilling and the CH-6 Camp. (CH-6 lies approximately 13.75 km northwest of Discovery Camp.)

  Site E (Contingency Lake #2) compares favourably with all calculations for Site C (Contingency Lake #1) and has an overall volume approximately 64.18% larger than that of Site C. Site C has an under-ice volume approximately 10.4% smaller than that of Site E. Given the potential withdrawal volume, estimated conservatively at water for drilling 6 holes (*Bulk-Sampling Monitoring Plan, Table 4, Page 14)*, there is no potential of lake drawdown.

Minor Adjustment #2: Use of the Approved Equipment Trail to Haul out Bags of Kimberlite

- **Transporting bags of kimberlite off site:** It is proposed that the Equipment Trail between site and Iqaluit, approved for use to serve the bulk-sampling programme, also be used to haul bags of kimberlite chip sample to Iqaluit. This would be an adjunct to moving bags by DC-3 aircraft (aircraft transport of sample was approved in permit Amendment #3). An existing fuel sleigh (*with steel sidebars, as shown in photo below*), would be able to hold over 18 100kg. At approximately one tonne per sample bag, this allows for 18 bags per sleigh-load. Approximately 15 trips are envisioned, though the actual number could more or less, depending on factors such as weather, trail conditions and drilling progress; thus, permission is sought to haul kimberlite loads *as required*. The sleigh would be conveyed by a Challenger 875C, the model of equipment already approved. Potentially, **a second Challenger** would be brought to site and dedicated to this task. All existing Plans and Standard Operating Procedures, as well as a new Winter Trail Cleanup and Reclamation Stabilisation Plan (*see Appendix 14 accompanying the renewal application),* would apply to this usage of the Equipment Trail. AANDC had requested that this Trail Cleanup Plan be submitted with the water-licence and permit renewal applications.

Example: View of steel sleigh with sidebars used for hauling at another NU project served by Nuna Logistics.

Winter trail contractor, Nuna Logistics, an Inuit-registered firm, has many years of analogous experience with safe and environmentally-responsible hauling of sample bags, fuels and equipment across trails and winter routes in Nunavut (and in the Northwest Territories), and is highly adaptable to varying types of freight hauling and trail conditions. Examples would be use of plywood-panel inserts within the steel sidebars to better constrain various types of loads, strapping/tie-down of loads as required, complete spill-response equipment on board, maintaining radio or satellite-phone communications with site whilst travelling and real-time GPS tracking for navigation.

- **Why It is Needed:** This additional use will provide greater efficiency for movement of kimberlite (*i.e.*, potentially, a larger volume moved over the same period of time), especially at times when flight conditions may not allow aircraft to access site but yet ground conditions may allow safe and environmentally-acceptable ground transport. In addition, with a view to Project sustainability, less fuel use can be realised by vehicle transport than by aircraft transport.

Minor Adjustment #3: Use of the Approved Equipment Trail to Transport Fuel to Site

- **Bringing in fuel drums on backhauls:** It is proposed that the Equipment Trail between site and Iqaluit, approved for use to serve the bulk-sampling programme, also be used to bring in fuel drums on backhauls. The fuel sleigh with sidebars (*see photo on Page 2 above*) would be loaded with full, sealed drums, all checked for bung soundness at loading as already occurs with drums loaded onto aircraft for transport to site. Although a full diesel drum weighs approximately 180kg, and thus a fuel sleigh theoretically could carry 100 drums by weight, a typical load on backhauls would be considerably less, on the order of 30 to 50 drums, to allow for safe loading/unloading, with limited stacking of drums, especially where loads might have to be handled by hand. All existing Plans and Standard Operating Procedures, as well as a new Winter Trail Cleanup and Reclamation Stabilisation Plan (*see Appendix 14 accompanying the renewal application),* would apply to this usage of the Equipment Trail. AANDC had requested that this Trail Cleanup Plan be submitted with the water-licence and permit renewal applications.

- **Why It is Needed:** This additional use will allow wise deployment of resources, in that a sleigh would not be returning empty. Productivity also would be enhanced by ensuring a steady supply of fuel for site equipment and the bulk-sample drill. In addition, with a view to Project sustainability, less fuel use can be realised by vehicle transport than by aircraft transport.

Example: Kimberlite mega-bags from a 2011 mini-bulk sample.
(Bags would be filled to 0.9t or 1t capacity for bulk samples.)

Minor Adjustment #4: Adding a Contingency Natural Landing Strip

- **Discovery Camp Alternate Winter Airstrip:** Various infrastructure changes were approved for Discovery Camp over its life, commencing with the initial screening of the camp and airstrip component by NIRB (screening decision *#08AN008,* dated 28 March 2008). Expansion of the camp to serve the bulk-sampling programme, including use of the Discovery airstrip in winter conditions, was screened by NIRB more recently (screening decision *#11EA050,* dated 20 February 2012). All screened components form part of *#2BE-CHI0813* and *#N2008C0005.*

Based upon a favourable field assessment by Unaalik Aviation's DC-3 pilot Chuck Champoux on 21 April 2012, Peregrine has determined that it is both feasible and advisable to make provision for an alternate winter airstrip at Discovery Camp, should conditions so require. The strip length would be 1 000m and oriented NW/SE at an approximate angle of 131.1° (*see Map 3 below)*. The existing strip is oriented roughly N/S, at an angle of 185.7°. Co-ordinates for the contingency strip are: NW Point: 64° 14' 41.2" N lat. – 66° 21' 54.3" W long. and SE Point: 64° 14' 19.7" N lat. – 66° 20' 58.5" W long.

- **Why It is Needed:** Having a contingency landing area would facilitate winter DC-3 landings when cross-winds are present. The experienced Arctic pilot who viewed the site in winter conditions was satisfied that the general area surrounding Discovery Camp was level and presented no challenges.

Minor Adjustment #5: Adding Option of Larger Hole Diameters for Large-Diameter Drill Programme

- **Range of Hole Diameters for Bulk Sample Drilling:** Large-diameter drillhole (LDDH) drilling was approved with permit Amendment #3 in February 2012 and water-licence Amendment #4 in March 2012. The size of drillhole discussed in that application was 34cm, although the amendment granted did not specify a limit to hole diameter. Peregrine may find it advantageous to collect a larger volume of sample per hole during bulk-sample drilling and thus would like to advise that holes drilled into kimberlites may be larger in diameter than originally envisioned and, in fact, may be either 34cm (size noted in the amendment), 46cm or possibly 61cm in diameter, where warranted. The main change resulting from drilling larger-diameter holes would be additional water use, up from the $15m^3$ discussed in the application for Amendment #3; however, usage would not exceed the overall volume per day for drilling and ancillary uses already allowed under the water licence. (For example, if hole size of 46cm were to be used, water consumption would increase to a maximum of $35m^3$ per day. Adding in water usage for winter-trail preparation of up to $20m^3$ per day (as discussed in the amendment application), would yield a total non-domestic usage of approximately $55m^3$ per day.) A positive potential outcome may be that fewer holes per body are required, so that the overall number of holes in total in 2013 could decrease to a range of six to 15 holes, in comparison to the 12 to 15 holes estimated for 34cm-diameter holes in the amendment application.

Clarifications

In respect of components approved in the previous amendment, Peregrine would like to clarify two aspects – target sample volume in bulk-sample year 1 and status of the CH-6 Camp. In regard to the target sample volume, Peregrine wants to ensure that our regulators understand that a target volume is a theoretical estimate made in advance, and, in fact, final volume may vary depending on site conditions and the ease or difficulty of extracting sample, amongst other factors, so that a target 600t total sample could, in fact, be a range of volume from below 600t to upwards of 700t. In regard to the CH-6 Camp, Peregrine wants to ensure that our regulators understand that this is a seasonal camp like the other three. As with any seasonal camp, when CH-6 Camp is no longer required, it will be closed and removed.

What Is Existing: Summary of Approved Components Which Should Continue

The key components of the Project, which are listed below, already have been screened by NIRB (either as discrete items or as groups of items) or authorised directly by AANDC where no amendment was required. Peregrine requests that these components continue under a renewed permit and water licence:

- Prospecting and staking on the Hall Peninsula, NU, holdings. (Original permit, 18 April 2008).
- Exploration drilling – land. (Original permit, 18 April 2008).
- Drilling from ice. (Licence Amendment #1, 17 April 2009, and Permit Amendment #1, 29 December 2008).
- Airborne geophysics. (Original permit, 18 April 2008).
- Ground geophysics. (Original permit, 18 April 2008).
- Surficial sampling (including test-pitting) and heavy mineral sampling. (Original permit, 18 April 2008).

- Operation of a camp and airstrip [Discovery Camp, 24 people]. (Original permit, 18 April 2008).
- Operation of a second camp [Sunrise Camp, 24 people]. (Permit Amendment #1, 29 December 2008).
- Increase in water allotment from 60m^3/day to 95m^3/day. (Licence Amendment #1, 17 April 2009.)
- Operation of an on-ice airstrip at Sunrise Camp. (Licence Amendment #1, 17 April 2009, and Permit Amendment #1, 29 December 2008).
- Trenching. (Permit Amendment #1, 29 December 2008). [Associated water-licence Amendment #1, 17 April 2009, allowed 100t sample from 7 locations within footprint of CH-1 kimberlite.]
- Blasting. (Permit Amendment #1, 29 December 2008).
- Heavy equipment -- CAT Skidsteer 247B, to excavate sample and transport it. (Permit Amendment #1, 29 December 2008).
- Winter trail between CH-1 kimberlite and camp. (Permit Amendment #1, 29 December 2008).
- Drive-in of heavy equipment from Iqaluit via equipment trail. (Permit Amendment #1, 29 December 2008).
- Additional drilling equipment – Pionjar hand-held hammer drill to facilitate test-pitting and collection of mini-bulk samples in absence of trenching and blasting. (Notice to INAC inspectors, 17 June 2009 – amendment not required).
- Expansion of winter trail to CH-7, so that it is linked to Discovery Camp, and conduct of mini-bulk sample. (Land administrator authorisation, 30 January 2010 – amendment not required).
- Use of temporary shelters on ice [temporary core shack beside a lake-based drillhole and survival shelter]. (Land inspector's authorisation, 07 April 2010 – amendment not required).
- Operation of a third camp and on-ice airstrip [Aurora Camp, 20 people], with provision for on-ice strip at adjoining North Lake when longer landing area required]. (Permit Amendment #2, 10 November 2010, and Licence Amendment #3, 14 December 2010.)
- Increase of Aurora Camp size from 20 to 24. (Land administrator and inspectors' authorisation, 21 January 2011 – amendment not required).
- Additional heavy equipment – Kubota tractor BX2660 x 2. (Notice to INAC land administrators, inspectors, 12 January 2011 – amendment not required).
- Short-term allowance (for up to 14 days) of up to 6 additional occupants at camps in case of emergencies, weather or special activities. (Land inspector authorisation, 23 June 2011 – amendment not required).
- Additional drilling equipment – Northspan Hornet, waterless RC drill for condemnation drilling. (Notice to INAC land administrators and inspector, 13 July 2010 – amendment not required).
- Operation of a fourth camp and airstrip [CH-6 Temporary Camp, 30 people, to serve multi-phase winter bulk-sampling programme]. (Permit Amendment #3, 22 February 2012, and Licence Amendment #4, 09 March 2012.)
- Equipment for bulk sample – large-diameter Canterra RC drill and supporting equipment, Challenger tractor, Morooka, Sno-Cat and two CAT loaders. (Permit Amendment #3, 22 February 2012).
- Use of community trail (Pang-Suka Trail from Iqaluit to interior of Hall Peninsula, with spur route extension to Discovery Camp, as a winter equipment/haul trail, as originally approved in permit Amendment #1. (Permit Amendment #3, 22 February 2012).
- Increase of Discovery Camp from 24 to 40 persons and modifications to serve the bulk-sampling programme, including erection of an equipment shelter and Designated Fuel Station. (Permit Amendment #3, 22 February 2012).
- Expansion of winter-trail network across the Focus Area to serve the bulk-sampling programme, linking CH-6 in the west to Sunrise Camp in the east; network includes spur water-haul routes and spur routes to cuttings sumps. (Permit Amendment #3, 22 February 2012, and Licence Amendment #4, 09 March 2012.)
- Use of a temporary shelter on lake ice during building of a Hercules aircraft strip on Sunrise Camp Lake to serve bulk-sampling mobilisation. (Permit Amendment #3, 22 February 2012).

Monitoring Plans and Standard Operating Procedures and Their Status

The following Monitoring Plans and Standard Operating Procedures (SOPs) are either currently in effect or will go into effect with the 2013 bulk-sampling programme and will support the terms and conditions of the renewed water licence and permit. Peregrine is providing revision pages only of Plans and SOPs, where relevant, to NWB and NIRB, as they have requested, whereas AANDC has requested submission of all Plans and SOPs in full.

- "Spill Contingency Plan – Chidiak, Qilaq and Cumberland Projects, Baffin, NU" STATUS: In effect since 2008; current revision: Rev. 11 – 06 July 2012, accompanies the renewal application as *Appendix 7a* and as a Stand-Alone document.
  - SOP accompanying this Plan:
    - "Response Inventory Procedure for Mobile Fuel-Carrying Equipment" (April 2012). *Note: AANDC requested that this SOP be submitted to NWB.*
- "Emergency Response Plan" STATUS: In effect since 2008; current revision: 08 July 2012, accompanies renewal application as *Appendix 7b* and as a Stand-Alone document.
- "General Guidelines: Chidliak, Qilaq and Cumberland Projects, Baffin, NU – Abandonment and Restoration of Camp Facilities and Worksites" STATUS: In effect since 2008; current revision: Rev. 9 – 04 July 2012, accompanies the renewal application as *Appendix 6* and as a Stand-Alone document.
- "Bulk-Fuel Management Facility Monitoring Plan: Chidliak Project, Baffin, NU" STATUS: Went into effect with approval of INAC Amendment #3, 22 February 2012; current revision: Rev. 2 – 08 July 2012, accompanies the renewal application as *Appendix 10* and as a Stand-Alone document.
  - SOPs accompanying this Plan:
    - Enviro-Tank Fuel Procedure (January 2012).
    - Inspection Log Procedure – Designated Fuel Station (January 2012).
    - Drum Crushing Within a Berm (January 2012; Rev. 1 – 08 July 2012)
    - Inspection of Sleigh-Mounted Mobile Fuel Tank prior to Deployment via Mobile Fuel-Carrying Equipment (May 2012). *Note: AANDC requested that this SOP be submitted to NWB.*
- "Bulk Sampling Monitoring Plan: Chidliak Project, Baffin, NU" STATUS: Went into effect with approval of INAC Amendment #3, 22 February 2012; current revision: Rev. 2 – 22 June 2012, accompanies the renewal application as *Appendix 9* and as a Stand-Alone document.
- "Wildlife Management Plan – Chidliak Project and Area, Baffin Island, NU" STATUS: Went into effect in December 2012 during the NIRB screening process for the latest Chidliak amendment; current revision: Rev. 1 – 22 June 2012, accompanies the renewal application as *Appendix 13*.
- "Winter Trail Cleanup and Reclamation Stabilisation Plan: Chidliak Project, Baffin, NU" STATUS: Original plan, dated 21 June 2012, coming into effect with the bulk-sampling programme as requested by AANDC; accompanies the renewal application as *Appendix 14* and as a Stand-Alone document.

Supplementary Documents

The following are Supplementary Documents which accompany the permit and licence renewal applications:

- Supplementary Document #1 -- "Remediation Costs Estimate – Chidliak Project, NU, July 2012 (Updated for 2013)". [Update of the existing remediation costs estimate was requested by the NWB in issuing Amendment #4 on 09 March 2012.]
- Supplementary Document #3 -- "Waste Management Strategy: Chidliak Project, South Baffin Region, NU". [Summer 2012 update of the existing Chidliak Waste Management Strategy.]

Exploration in 2013 and Beyond

As time and resources permit, continuation of the existing Chidliak exploration programme apart from the bulk sample also may occur in winter 2013, consisting of drilling of selected lake-based targets, with associated winter water-quality sampling as per usual. Summer exploration, typically consisting of core drilling and waterless drilling (Hornet drill already approved under permit *#N2008C0005*), could commence in July 2013, with geophysical surveying, prospecting and surficial sediment sampling components as per usual. Exploration also is likely to continue in 2014 and beyond. Depending on results of the winter bulk sample, planning for the next phase of the multi-phase bulk-sampling programme in the Focus Area also would commence in 2013. Consideration will continue to be given to collecting kimberlite sample by the most efficient means, which may range from bulk-sample drilling to test-pitting to mini-bulk sampling to trenching – the means of extraction already permitted.

Timetable

A timetable of proposed 2013 activities between December 2012 and January 2014 – similar to the timetable presented in the last amendment application – is presented below as *Figure 1* on Page 8.

Consultation Activities

Consultation with the primary communities of Iqaluit and Pangnirtung will continue under a renewed permit and will consist of both community visits by Peregrine representatives and site visits by representatives of the communities (*e.g.*, elders, hunters/trappers, civic representatives, QIA).

Environmental Baseline and Archaeology in 2013 and Beyond

Environmental and archaeological baseline surveys will continue in 2013, as in past years since 2009. Final reports of 2012 field surveys will be available in late autumn 2012 or early winter 2013 and will be provided to regulators and local groups at that time. Surveys may expand or change focus as the multi-phase bulk-sampling programme progresses over the next few years and use areas are more defined.

Conclusion

Five maps which complement the Project Description follow on Pages 9-13. A full suite of 17 stand-alone maps accompanies the renewal application. As stated on Page 1 of this Project Description, the objective of the renewal application is the continuation of activities already approved under water licence *#2BE-CHI-0813* and permit *#N2008C0005*, along with securing approval of several minor adjustments to enhance the efficient operation of the bulk-sampling phase of the Chidliak Project. The socioeconomic goals of this phase will be to deepen the existing relationships with the closest communities of Iqaluit and Pangnirtung; to increase hiring whilst building a stable workforce; to expand use of local services as and if the Project advances, and to continue to work co-operatively with regulators to meet our stated commitments to safety and environmental protection.

-- S. Standafer-Pfister, Manager – Regulatory and Environmental Affairs
on behalf of Peregrine Diamonds Ltd. (25 July 2012)

FIGURE 1

PROPOSED TIMETABLE - 2013

- ***DECEMBER 2012-JANUARY 2013:***

-- **Aerial reconnaissance of Sunrise Lake ice. Herc strip construction (7 people) and camp opening (5 people).**

- ***15 FEBRUARY-01 MARCH 2013:***

-- **Mobilise by Herc: RC drill, 100 barrels of fuel, equipment not mobilised in 2012. Camp nos. = 16. Establish equipment haul trail and trail network. Bring in second Challenger for hauling kimberlite bags to town. Build drill pads. Open Discovery camp (18 people), build Fuel Station, groom Discovery airstrips for winter landings. Complete + open CH-6 camp. Transport drill to CH-6. Close Sunrise temporarily, if possible.**

- ***21 FEBRUARY-21 MARCH 2013:***

-- **Drill CH-6. Camp nos. = 30 (CH-6), 10 (Discovery). Close CH-6 camp.**

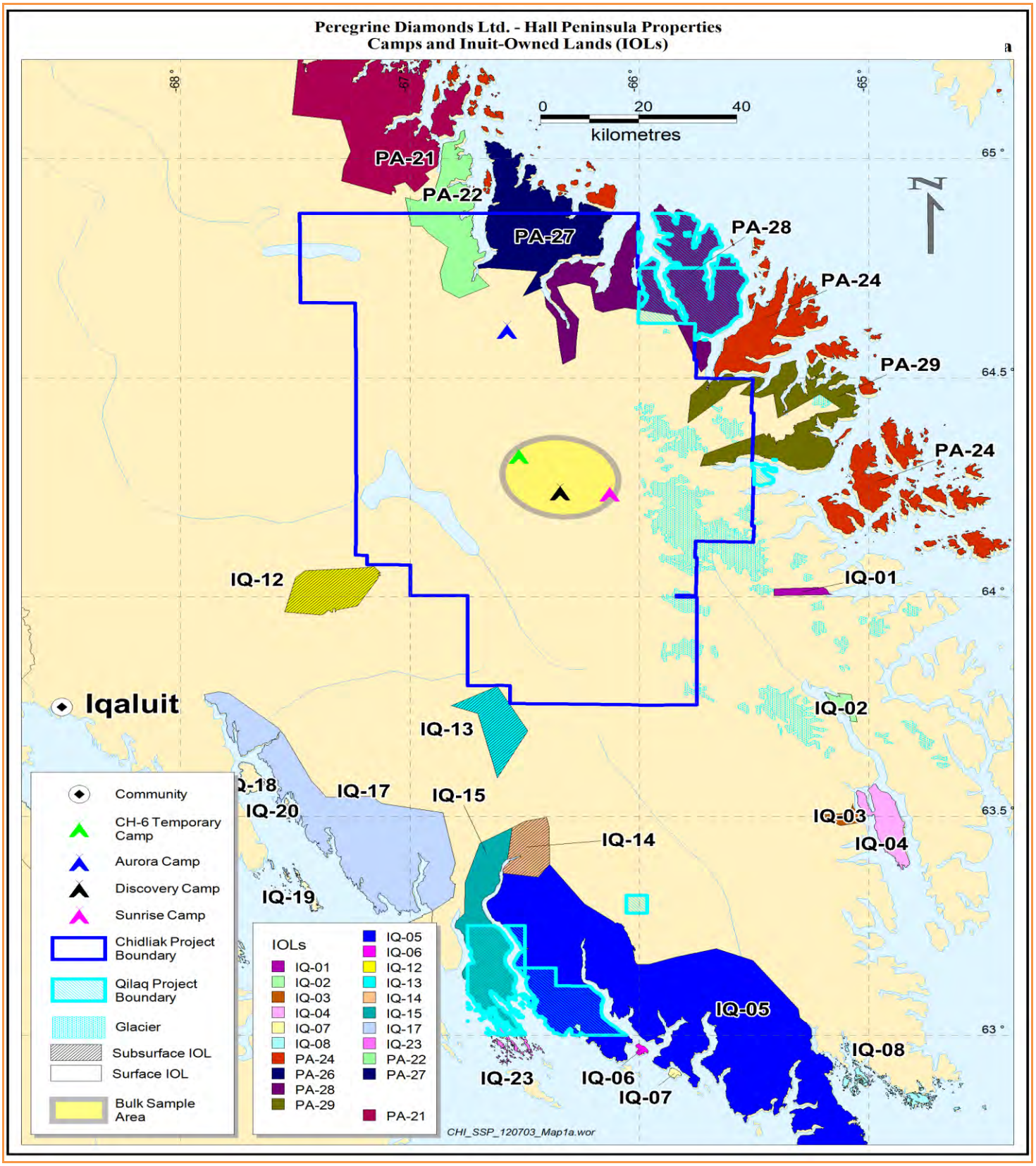
- ***21 MARCH-01 JUNE 2013*:**

-- **Drill CH-7 and one or more of CH-1, CH-44, CH-31 and/or CH-45, out of Discovery. Camp numbers = 40. Exploration drilling?**

- ***JULY-SEPTEMBER 2013: SEPTEMBER 2013-JANUARY 2014:***

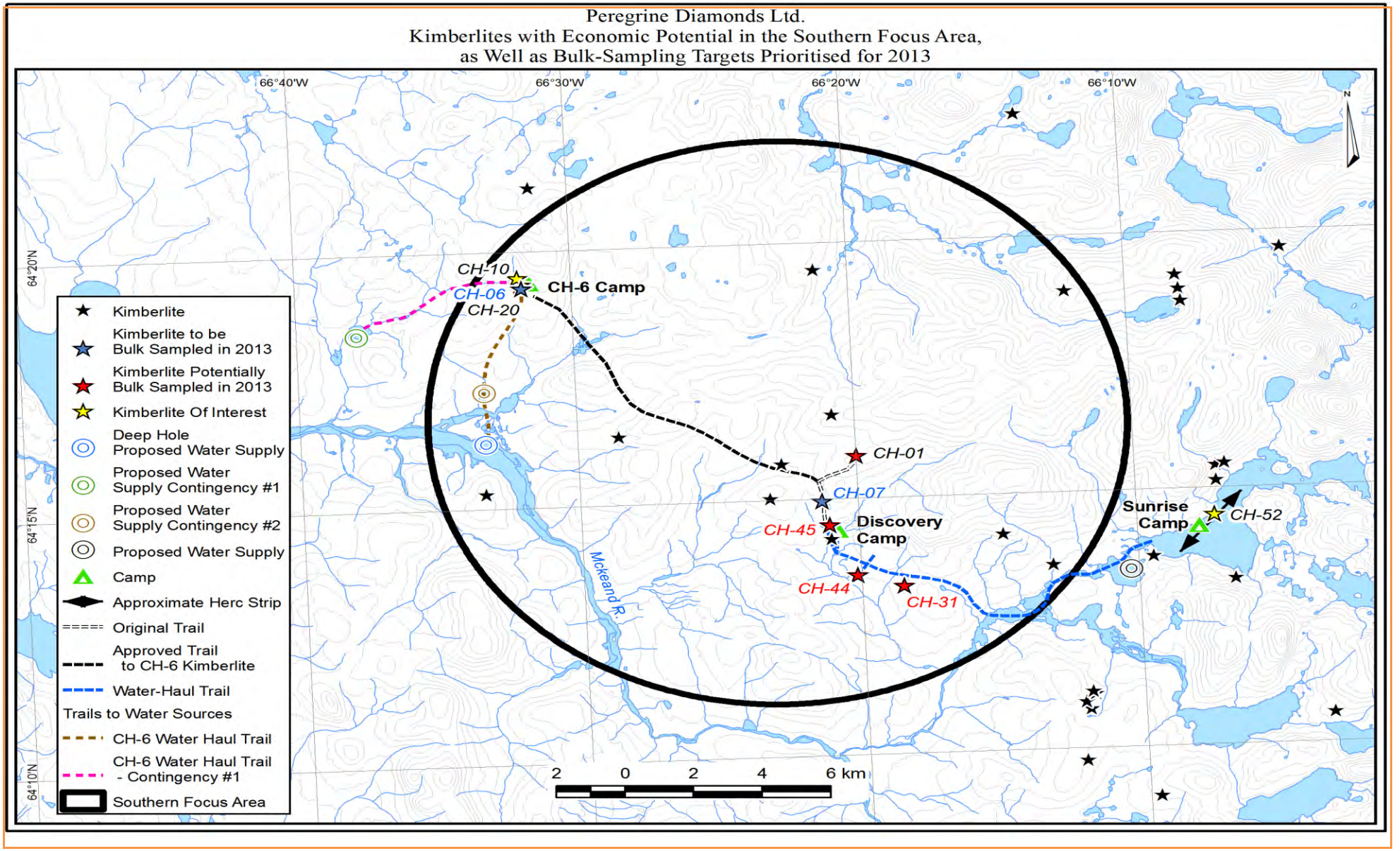
-- **Store RC drill and equipment at Discovery Camp. Summer exploration, enviro. baseline, archaeology. Review bulk-sample results: Begin planning for next sample phase?**

MAP 1



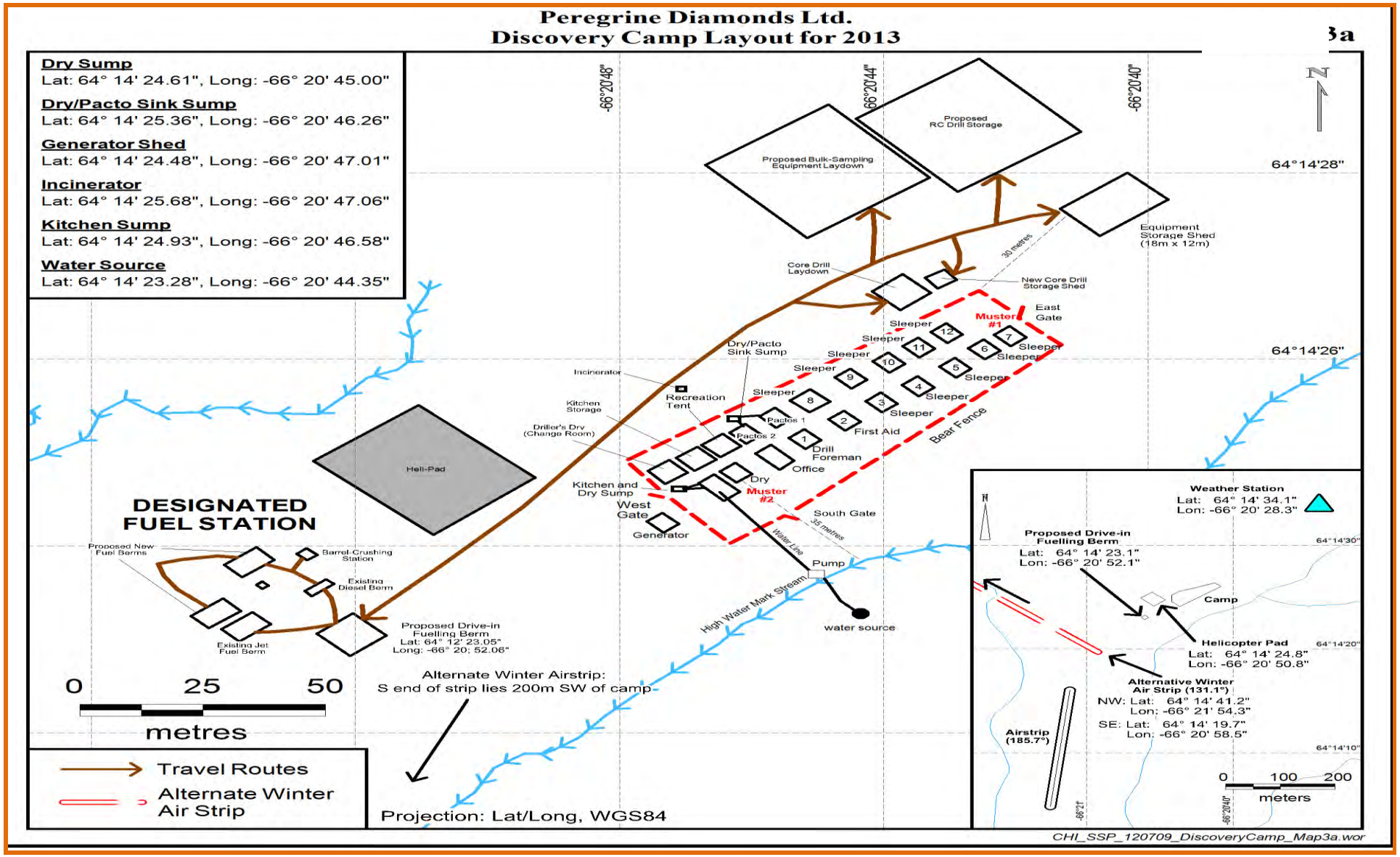
Chidliak Project with proposed Bulk Sample Focus Area and CH-6 Camp, at centre of Hall Peninsula, South Baffin.

MAP 2



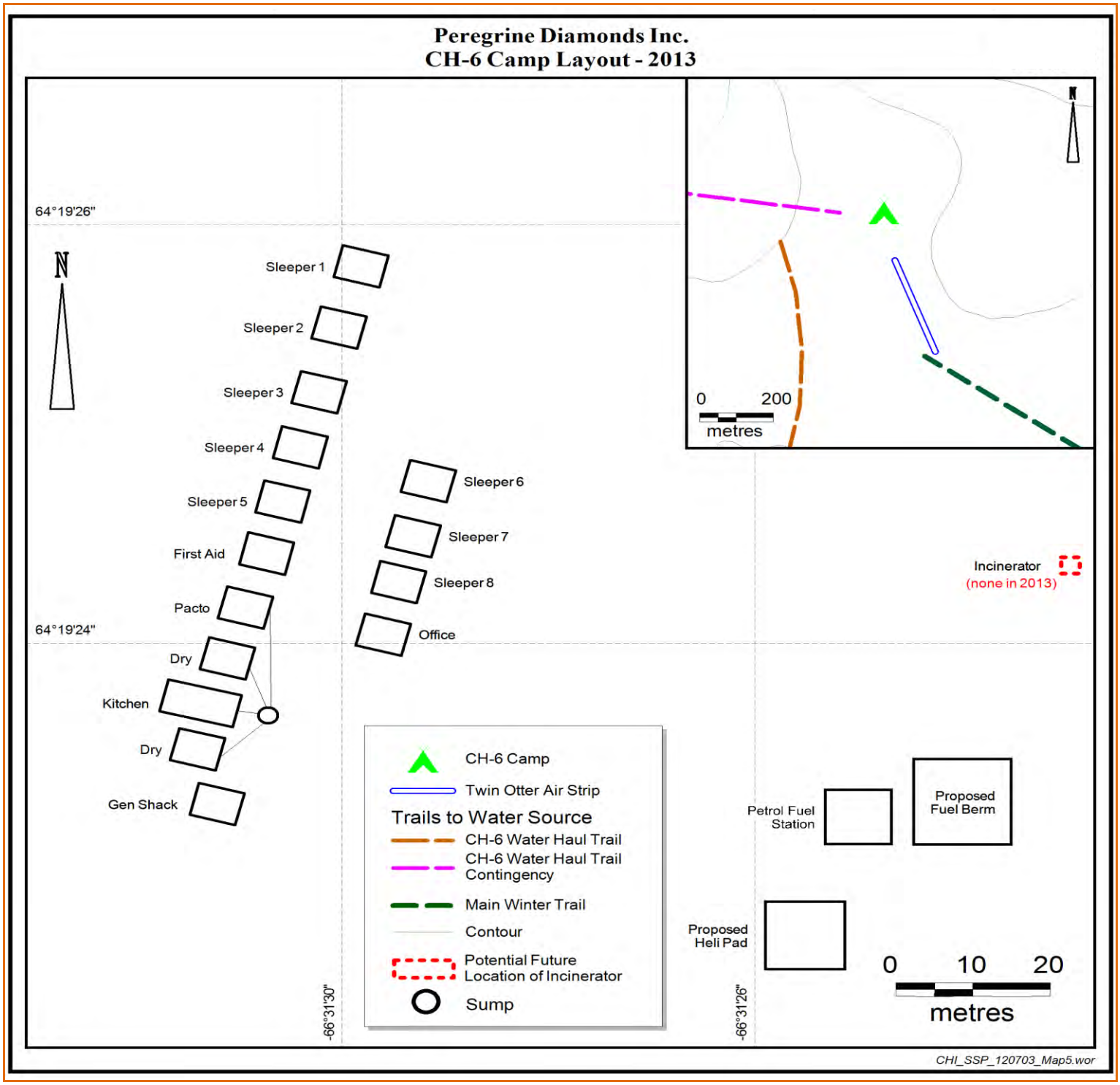
A proposed adjustment for the renewal application is addition of a second contingency lake (already surveyed) along the approved routing to the "Deep Hole" main water source for CH-6.

MAP 3



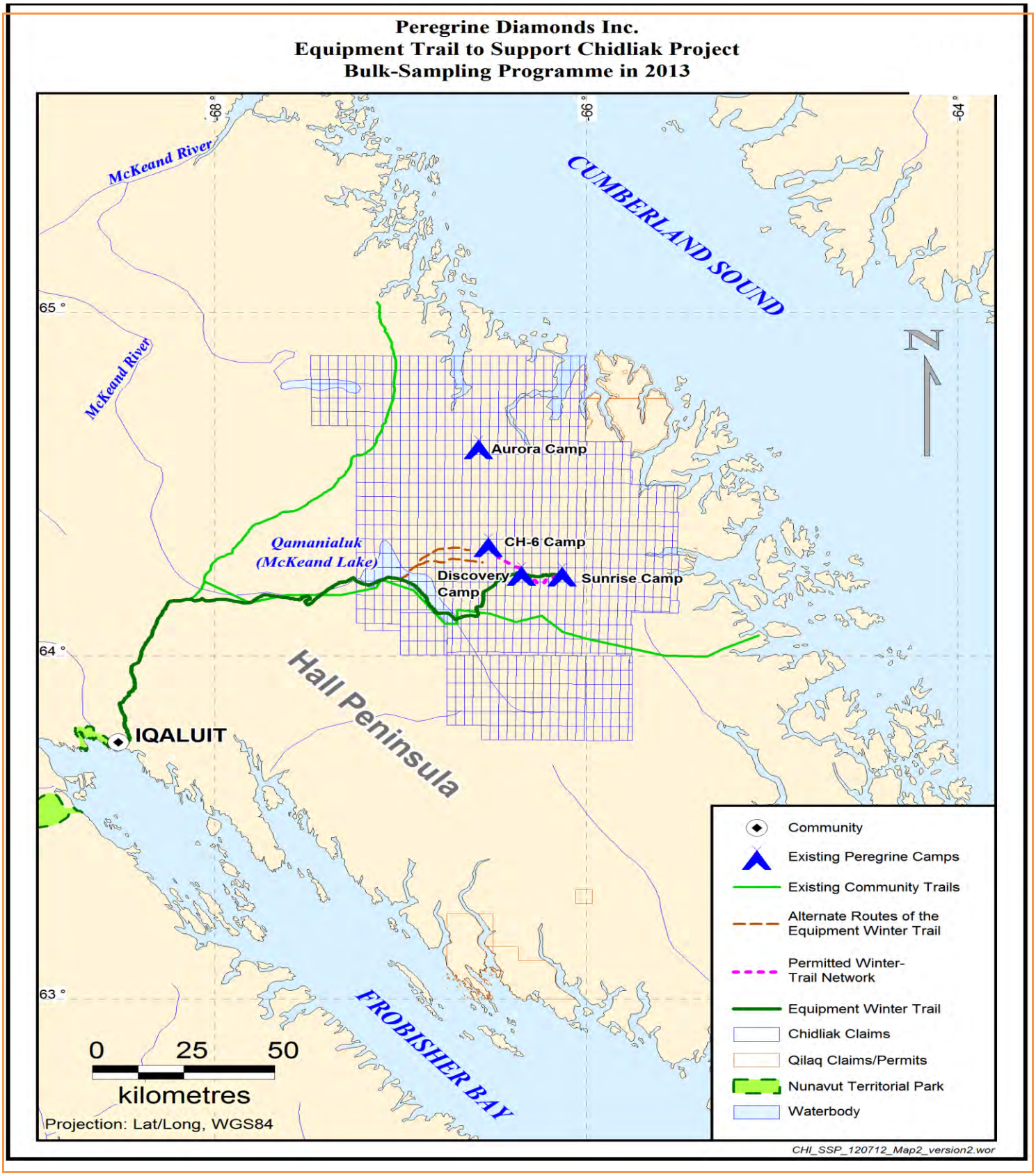
Key feature of Discovery Camp expansion: consolidation of fuelling in a Fuel Station. A proposed adjustment for the renewal application is use of a contingency winter airstrip, if needed.

MAP 4



CH-6 Camp will be used to support multi-phase bulk-sampling of CH-6 kimberlite, approx. 600m SW. Garbage will be transferred daily to Discovery Camp during 2013 programme for incineration.

MAP 5



Existing local trail, with routes to reach site by the safest and most efficient means, was approved as an equipment trail in 2012 to serve the bulk-sampling programme.