

ABANDONED MINERAL EXPLORATION SITES IN NUNAVIK REHABILITATION PROJECT

2005-2012 Summary Report
and
Update of the General Reponse Plan





Cover photos:

Partial view of site PJ-1 before (back cover; in 2001) and after (front cover; in 2011) clean-up work.

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ABANDONED MINERAL EXPLORATION SITES IN NUNAVIK REHABILITATION PROJECT

2005-2012 Summary Report
and
Update of the General Reponse Plan

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The idea for the abandoned mineral exploration site rehabilitation project began with the persistent request from Amaamak Jaaka that sites near his community of Kangiqsujuaq be cleaned. Following the 2008 documentary featuring Johnny Peters of the Makivik Corporation that was produced by Francis Labbé and broadcast on Radio Canada, public and corporate interest in the project increased and the idea continued to develop. Finally, André Gaumond of Virginia Mines put forward the idea of a collaborative project between northern organizations and mining companies that grew into the successful project we know today.

Since the very beginning, many people, organizations and municipalities have been involved in this project. The Kativik Regional Government (KRG) would like to take this opportunity to thank everyone for their part in making it such a success.

In particular, the KRG would like to formally acknowledge the community of Aupaluk for its enormous participation in clean-up work at the site PJ-1. Special thanks go to Maggie Grey (the municipal secretary-treasurer) and Charlie Akpahatak (a former field technician) for their continued dedication to the project. The community of Tasiujaq should also be thanked for its involvement in clean-up work at this site and others.

The KRG would like to acknowledge the communities of Kangiqsujuaq and Salluit for their multi-year participation in clean-up work at the site SW-34. The environmental division of Xstrata Nickel should also be thanked for its many contributions during the site's continued rehabilitation.

The Naskapi Nation of Kawawachickamach and the Innu Nation of Matimekush-Lac John should be acknowledged for their continuing contribution to clean-up work at the site KAW-35. NORPAQ Adventures, a local outfitter, has also been an important contributor to this work.

In 2011, the Northern Village of Kangiqsualujuaq participated in clean-up work at the sites PJ-1 and SW-34, providing several workers to assist the field technician, Charlie Munick.

The Northern Village of Kangirsuk should be thanked for its involvement in the rehabilitation of the site TW. Similarly, the Northern Village of Kuujuaq should be thanked for the assistance that it provided for clean-up work at nearby sites.

The KRG moreover acknowledges the outstanding contribution of Cruise North Expeditions to the clean-up work at the sites PJ-17, PJ-17A and PJ-18 and for the many volunteers who were given an opportunity to make a difference.

Mining companies currently active in Nunavik, such as Canadian Royalties, Goldbrook Ventures, Xstrata Nickel and, most recently, Oceanic Iron Ore Corporation, should furthermore be recognized for their clean-up initiatives on numerous abandoned mineral exploration sites located on or near their claims.

The KRG would also like to thank Nunavut Eastern Arctic Shipping for its patience and understanding regarding the transportation of several hundred tonnes of metal debris and heavy equipment removed from the site PJ-1 and stored at Aupaluk over the years, as well as for its long-standing support for the project.

Finally, the KRG would like to thank Nunavik Rotors for its continued professionalism and expertise regarding the transportation of residual materials and employees throughout the entire project.

EXECUTIVE SUMMARY

Beginning in the 1950s, mining companies had a growing interest in the Nunavik region. At this time, very few regulations existed to monitor and guide the social and environmental impacts of the activities of these companies. With the signing of the *James Bay and Northern Québec Agreement* in 1975, mining companies became subject to more strict rules that oblige the companies to declare their activities to the *ministère des Ressources naturelles et de la Faune* (natural resources and wildlife, MRNF) and to rehabilitate closed mineral exploration sites. Unfortunately, past mining-company activities have had an impact on vegetation, wildlife habitat and water quality, as well as a visual impact on the landscape of the region.

The present clean-up project stemmed from community initiatives in the 1990s, followed by a joint project undertaken in 1999 by the Kativik Regional Government (KRG), the Makivik Corporation and the *Groupe d'études inuit et circumpolaires (Université Laval)* to identify and locate abandoned mineral exploration sites in Nunavik. In 2000, the Naskapi Nation of Kawawachikamach joined the project. A review of existing oral and written information on all mining-related sites identified some 595 potential abandoned mineral exploration sites in Nunavik.

In 2001–2002, an inventory of a sample of 193 potential sites was conducted to validate the information previously gathered. As a result, 90 sites were confirmed as abandoned mineral exploration sites and, of these, 18 sites were classified as requiring major clean-up work, 27 as requiring intermediate clean-up work, and 45 as requiring minor clean-up work. Classification of the sites was based on a list of criteria adapted from the National Classification System for Contaminated Sites, including an assessment of the quantity of material and equipment present at the sites, as well as soil and surface water contamination.

Considering Inuit concerns and the threat that these sites posed to the environment, the KRG and Makivik joined forces to identify the funding needed to undertake their clean-up.

In December 2004, the KRG signed a four-year contribution agreement (2004–2008) with Environment Canada under the Northern Ecosystem Initiative. As a first phase, the KRG undertook pilot rehabilitation projects in 2005 and 2006 on two of the sites requiring major clean-up work (KAW-35 near Kawawachikamach and PJ-1 near Tasiujaq).

In October 2007, a formal contribution agreement was signed by the KRG, Makivik, the MRNF and a consortium of mining exploration companies known as *Fonds Restor-Action Nunavik*. The agreement focused on providing the KRG with the funding and technical support needed to undertake clean-up work on all of the 18 sites requiring major clean-up. Since the signing of these agreements, the KRG has completed work at 13 sites and initiated work at two other sites in cooperation with Inuit communities, the Naskapi Nation of Kawawachikamach and a few mining companies. This work involves numerous partners and continuous collaboration between governments, regional and municipal entities, as well as mining companies and several northern organizations.

In 2011, inspections were carried out at sites classified as requiring intermediate clean-up work. The waste at these 27 sites is similar to the waste found at the sites requiring major clean-up, but the extent of the work to be performed is smaller. From 2006 to 2011, nine sites requiring intermediate work were cleaned up by various mining companies. An amendment to the 2007 contribution agreement was moreover signed to provide funding for work at the sites requiring intermediate clean-up as well as to complete work at the five remaining sites requiring major clean-up.

This report presents the work carried out between 2005 and 2011 at the sites requiring major clean-up and some sites requiring intermediate clean-up. To date, more than 50 pieces of heavy equipment (including large machinery), 4,300 barrels, 250 propane tanks, 14 large reservoirs, 23,100 L of residue hydrocarbons (diesel or other), 2,000 L of motor oil, 70 batteries and a large amount of debris have been removed from the sites. As well, hydrocarbons and hazardous material, such as paint, grease, batteries, fire extinguishers and transformers, have been shipped to specialized facilities in the south for proper recycling or proper disposal.

RÉSUMÉ

À partir des années 1950, les sociétés minières ont eu un intérêt grandissant pour la région du Nunavik. Il n'y avait à cette époque que très peu de réglementation visant à encadrer et orienter les activités des sociétés en lien avec les impacts causés sur l'environnement et le milieu social. Depuis la signature de la Convention de la Baie-James et du Nord québécois en 1975, les sociétés minières sont assujetties à des règles plus strictes qui les obligent à déclarer leurs activités au ministère des Ressources naturelles et de la Faune (MRNF) et à restaurer les sites d'exploration minière qu'ils abandonnent. Malheureusement, les activités réalisées par les sociétés minières dans le passé ont eu un impact sur la végétation, les habitats fauniques et la qualité de l'eau, ainsi qu'un impact visuel sur le paysage de la région.

Le présent projet de nettoyage découle d'initiatives lancées par les communautés dans les années 1990, suivies d'un projet conjoint entrepris en 1999 par l'Administration régionale Kativik (ARK), la Société Makivik et le Groupe d'études inuit et circumpolaires (GÉTIC) de l'Université Laval visant à dénombrer et à localiser les sites d'exploration minière abandonnés au Nunavik. En 2000, la Nation Naskapi de Kawawachikamach s'est jointe au projet. Une revue globale de l'information orale et écrite existante sur le sujet a permis de dénombrer 595 sites potentiels d'exploration minière abandonnés au Nunavik.

En 2001-2002, un inventaire d'un échantillon de 193 sites potentiels d'exploration minière abandonnés a été réalisé afin de valider l'information qui avait été précédemment recueillie. Selon les résultats de cet inventaire, 90 sites ont été confirmés comme étant des sites d'exploration minière abandonnés. Dix-huit de ces sites ont été classés comme nécessitant des travaux de nettoyage de grande envergure, 27 des travaux de moyenne envergure et 45 des travaux de faible envergure. La classification des sites a été faite en fonction d'une liste de critères adaptée provenant du Système national de classification des lieux contaminés et inclut l'évaluation de la quantité de matières résiduelles présentes sur les sites ainsi que la contamination des sols et de l'eau de surface.

En raison des préoccupations soulevées par les Inuits et de la menace que représentent ces sites pour l'environnement, l'ARK et la Société Makivik ont conjugué leurs efforts afin de trouver le financement nécessaire pour entreprendre le nettoyage de ces sites.

En décembre 2004, l'ARK a conclu une entente de contribution de quatre ans (2004-2008) avec Environnement Canada, par l'entremise de l'Initiative des écosystèmes du Nord (IEN). Lors d'une première phase, l'ARK a entrepris des projets pilotes de réhabilitation en 2005 et en 2006 à deux des sites nécessitant des travaux de nettoyage de grande envergure, à savoir le site KAW-35 dans les environs de Kawawachikamach et le site PJ-1 dans les environs de Tasiujaq.

En octobre 2007, une entente de contribution officielle a été signée par l'ARK, la Société Makivik, le MRNF et un consortium de sociétés minières connu sous le nom de Fonds Restor-Action Nunavik (FRAN). L'entente avait pour but de fournir à l'ARK le financement et le soutien technique nécessaires pour réaliser les travaux de nettoyage aux 18 sites nécessitant des travaux de nettoyage de grande envergure. Depuis la signature de ces deux ententes, les travaux de nettoyage réalisés par l'ARK ont été achevés à 13 des 18 sites et entrepris à deux autres sites en collaboration avec les communautés inuites, la Nation Naskapi de Kawawachikamach et quelques sociétés minières. Ces travaux impliquent un grand nombre de partenaires et une collaboration continue de la part des gouvernements, des autorités régionales et municipales ainsi que des sociétés minières et de plusieurs organismes nordiques.

En 2011, les sites nécessitant des travaux de nettoyage de moyenne envergure ont été inspectés. Ces 27 sites contiennent les mêmes matières résiduelles que les sites nécessitant des travaux de grande

envergure, mais en moins grandes quantités. De 2006 à 2011, neuf sites nécessitant des travaux de moyenne envergure ont été nettoyés par diverses sociétés minières. De plus, une modification a été apportée à l'entente de contribution signée en 2007, afin que les travaux de nettoyage puissent être entrepris aux sites nécessitant des travaux de moyenne envergure et achevés aux cinq derniers sites nécessitant des travaux de grande envergure.

Le présent rapport décrit les travaux qui ont été réalisés de 2005 à 2011 aux sites nécessitant des travaux de grande envergure et à quelques-uns des sites nécessitant des travaux de moyenne envergure. À ce jour, plus de 50 équipements lourds (incluant de la grosse machinerie), 4 300 barils, 250 bonbonnes de propane, 14 grands réservoirs, 23 100 L de résidus d'hydrocarbures (diesel ou autre), 2 000 L d'huile à moteur, 70 batteries et de grandes quantités de matières résiduelles ont été retirés des sites. Les hydrocarbures et les matières dangereuses, telles que la peinture, la graisse, les batteries, les extincteurs et les transformateurs, ont été expédiés à des installations spécialisées du sud en vue de leur recyclage et de leur élimination adéquate.

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1 INTRODUCTION

In 2001 and 2002, verification of 193 potential abandoned mineral exploration sites was performed in Nunavik, the territory of Québec north of the 55th parallel. The results of that verification are described in the *Assessment and Prioritization of Abandoned Mining Exploration Sites in Nunavik: Final Report on a Two-Year Project (2001–2002)* produced by the Kativik Regional Government (KRG) and the Makivik Corporation in March 2003. The final report indicates that, of the 193 possible sites, 90 were confirmed to be abandoned mineral exploration camps. Eighteen of these were classified as requiring major clean-up work, 27 intermediate clean-up work and 45 minor clean-up work. This classification takes into account the quantity of material and equipment present at each site, as well as the nature and scope of soil and surface water contamination.

Further to the recommendations contained in the report on the 2001-2002 inventory work and with funding from Environment Canada under the Northern Ecosystem Initiative and from the *ministère des Ressources naturelles et de la Faune* (natural resources and wildlife, MRNF), in 2005 and 2006 the KRG implemented two rehabilitation pilot projects of at abandoned mineral exploration sites classified as requiring major work, KAW-35 (2005–2006) and PJ-1 (2006). At the same time, Cruise North Expeditions voluntarily undertook work at a third abandoned mineral exploration site (PJ-17) requiring major clean-up. These initiatives represent the initial stage of a proposed Nunavik-wide clean-up project. In August 2003, the KRG and Makivik proposed a funding mechanism and recommendations for the assessment and rehabilitation of abandoned mineral exploration sites (Barrett and Lanari, 2003). The proposal focused in particular on the 18 sites classified as requiring major clean-up work and promoted a partnership between Northern Québec communities, the mining industry and the different levels of government. In March 2007, the mining industry took up the challenge and created the *Fonds Restor-Action Nunavik* to rehabilitate abandoned mineral exploration sites in Nunavik dating as far back as several decades. Finally in October 2007, a contribution agreement was signed by the KRG, Makivik, the MRNF and the FRAN. The agreement made it possible to proceed with work at all 18 sites requiring major clean-up using the expertise developed during the above-mentioned pilot projects.

This report is a summary of all the work carried out at the 18 sites requiring major clean-up, as well as the work carried out at other sites, to date. First, the report provides an historical overview of the project and the financial agreements and partnerships that provided for its success. Secondly, the report describes the clean-up work carried out during the 2011–2012 season, provides an overview on the progress of work since 2005, and updates the 2007–2012 General Response Plan. Finally, the report describes the sites classified as requiring intermediate clean-up and presents the 2012–2017 General Response Plan, which outlines future clean-up work based on previous completed activities and the necessary budget.

2 OVERVIEW

This section provides an overview of the clean-up of abandoned mineral exploration sites in Nunavik. It presents facts and observations related to mineral exploration activities since the 1940s, and describes the site inventory and characterization projects, rehabilitation pilot projects, as well as work at sites classified as requiring major clean-up that has been carried out.

2.1 Mining Exploration and Waste

Between the 1940s and 1980s, extensive mineral exploration programs were carried out in Northern Québec above the 55th parallel, especially in the Labrador and Ungava troughs. Exploration was initiated in the Labrador Trough, from Schefferville near Labrador to Kangirsuk, a village located on the western coast of Ungava Bay. In the 1950s, mineral exploration activities were extended to the Ungava Trough, oriented east–west from Kangiqsujaq on the Hudson Strait to Hudson Bay. This prospecting led to the opening of the Asbestos Hill and Raglan mines. A third smaller region, located along the Hudson Bay coast between Umiujaq and Kuujuarapik–Whapmagoostui was also explored for its mineral potential, but for a more limited period of time.

Before 1976, some companies cleaned up the sites when they left, while others abandoned them as is, leaving buildings, motors, core trays, drilling and heavy equipment (generators, compressors, bulldozers, etc.), petroleum tanks and barrels (some of which still contained residue), batteries, transformers, chemical products, salts and acids. Today, it is clear that these sites are polluted and may have adverse impacts on wildlife, water and the diet of Nunavimmiut.

2.2 Environmental Regulations

The signing of the *James Bay and Northern Québec Agreement* (JBNQA) on November 11, 1975, and the signing of the *Northeastern Québec Agreement* on January 31, 1978, created environmental regulations for development projects, including mining activities. Consequently, after 1976, mining companies were subject to more strict rules that obliged them to declare their activities to the MRNF and to rehabilitate closed mineral exploration sites.

On March 9, 1995, the *Mining Act* was adopted by the Québec government to govern mineral exploration and mining activities. Provisions concerning activity-site remedial measures include sections 232.1 through 232.11. Section 232.11 moreover stipulates that the Minister may decide to go beyond the norms stipulated and “enjoin” mining companies to clean up sites retroactively, with no time limit. However, as companies did not report their activities to the MRNF prior to 1976, it is impossible to identify the companies responsible for most of the exploration activities carried out in Nunavik before that date (Duhaime and Comtois 2002).

2.3 Environmental Concerns

In the early 1990s, Inuit communities began to notice possible environmental contamination. In 1997, more than 100 L of highly toxic concentrated acid, generally used for chemical exploration, were discovered improperly stored in an area accessible to the local population, 10 km south of the Katinniq mine. In 2000, abandoned dynamite was found close to Tasiujaq (Duhaime and Comtois, 2002).

In 1997, some Inuit municipalities undertook to clean up some old mineral exploration sites. Priority was given to those sites that were considered dangerous and easily accessible. Consequently, only a very small fraction of the sites known to Inuit were cleaned (Duhaime and Comtois, 2002). The clean-up of these sites remains an important concern for Inuit communities. In 1998, the KRG attempted to obtain funding from the Québec government to pursue this work. But, both the number of sites and the threat they posed to the environment were unknown (Duhaime and Comtois, 2002). It therefore became necessary and urgent to carry out a more systematic evaluation.

2.4 Inventory and Assessment of the Sites

1999-2000 Inventory

In order to survey and assess the abandoned mineral exploration sites, a four-phase program was designed. The first phase consisted of a pilot project to test various methods to best inventory the sites. The second phase was an inventory of abandoned mineral exploration sites in the region north of the 55th parallel. The third phase was an evaluation of these sites to determine their size and the hazards that each posed to the ecosystems and to land users. The fourth and final stage, which is the purpose of this proposal, is to carry out the remedial measures at the identified sites and to complete the evaluation undertaken in the third phase.

Subsequently, in 1999 a pilot project, primarily funded by the EJLB Foundation and conducted jointly by the KRG, Makivik and the *Groupe d'études inuit et circumpolaires* (GÉTIC, Université Laval), was undertaken in a 50 km X 50 km area located 70 km west of Kangiqsujuaq to test three methods to inventory abandoned mineral exploration sites. The three methods tested involved: 1) interviews with local key informants and archival data; 2) aerial surveys; and 3) satellite imagery. The project concluded that aerial surveys and interviews were the most reliable ways to map the sites and that archival data helped to complete the inventory. The project specified, however, that the characterization of sites would require field surveys by helicopter. In the area surveyed, 47 abandoned mineral exploration sites were identified using topographic maps (Duhaime and Comtois, 2000).

In 2000, consultations in the 14 Inuit communities and the Naskapi community, and a review of documentation from the Québec Ministry of Natural Resources (MRNQ, now known as MRNF), revealed the possible existence of 595 abandoned mineral exploration sites in Nunavik, most of them located in the Labrador and Ungava troughs.

2001-2002 inventory and Assessment

In 2001-2002, a two-year project was initiated to survey and assess the abandoned mineral exploration sites in Nunavik. The KRG and Makivik were the project promoters and contributed to the project in kind and financially. Environment Canada's Environmental Protection Branch also contributed to the project in kind and financially. Additional funding was provided by Environment Canada under the Northern Ecosystem Initiative (NEI), the MRNQ (now known as the MRNF), Indian and Northern Affairs Canada and the Naskapi Nation of Kawawachikamach. The GÉTIC provided data and technical support at the beginning of the study. Some Inuit, Naskapi and Cree informants participated in the field surveys. The sites were classified according to their contents, contamination and the risk they posed to the environment. Classification was based on a list of criteria adapted from the National Classification System for Contaminated Sites, including an assessment of the quantity of material and equipment present at the sites, as well as soil and surface water contamination.

The results of the verification carried out in 2001-2002 of 193 potential abandoned mineral exploration sites are described in the *Assessment and Prioritization of Abandoned Mining Exploration Sites in Nunavik: Final Report on a Two-Year Project (2001–2002)* produced by the KRG and Makivik in March 2003. The final report indicates that, of the 193 possible sites, 90 were confirmed to be abandoned mineral exploration camps. Eighteen of these were classified as requiring major clean-up work, 27 intermediate clean-up work and 45 minor clean-up work. Based on the fact that since 90 of the 193 inspected sites contained residual materials from mineral exploration activities, it was projected that there could be a total of 277 potential abandoned mining exploration sites in Nunavik: 25 requiring major clean-up work, 95 requiring intermediate clean-up work, and 157 requiring minor clean-up work.

In 2001, another one-year project was initiated under the NEI. Its goal was to test the use of IKONOS satellite imagery to inventory abandoned mineral exploration sites in a portion of the 1999 pilot project area (Duhaime and Comtois, 2000). The project promoters were the KRG and Makivik. The project was funded by the NEI, the KRG, Makivik, and the geo-matic sciences department of *Université Laval*. Hydro-Québec provided the IKONOS images (Pouliot et al., 2002). The GÉTIC provided some data to *Université Laval* geo-matic sciences department, which conducted the research. No further study using IKONOS imagery was carried out after this project.

2.5 2004–2008 Contribution Agreement with Environment Canada

In December 2004, the KRG signed a four-year contribution agreement (2004–2008) for \$152,000 with Environment Canada under the NEI. The two parties agreed to reach the following objectives by March 2008:

- increase awareness on the impacts of contamination to northern ecosystems and promote the capacity of northern communities to play an active role in related research and remediation activities;
- participate in field assessments and complete the inventory and characterization of the abandoned mining exploration sites located north of the 55th parallel to provide an overview of the current situation;
- evaluate the direct and cumulative impacts of the abandoned mining exploration sites, make recommendations and develop remedial measures to minimize those impacts to environment and public health.
- respond to the requests made by Inuit, Naskapi and Innu communities to assess the environmental impacts of abandoned mining exploration sites in Northern Québec.

An amount of \$50,000 was paid in the 2006–2007 year to complete validation work at sites requiring major and intermediate clean-up and to continue work at certain pilot-project sites requiring major clean-up. The agreement was terminated in October 2007. In order to continue this important work, a new contribution agreement was signed in October 2007 by several parties (refer to section 4 of this report).

2.6 2005 and 2006 Pilot Projects

Further to the recommendations contained in the report on the 2001-2002 inventory and site characterization work, in 2005 and 2006 the KRG implemented two pilot projects at abandoned mineral exploration sites requiring major clean-up, KAW-35 (2005-2006) and PJ-1 (2006). Contributions were provided by Environment Canada (under the above-mentioned agreement) and by the MRNF.

The work carried out at these sites under the pilot projects are described in detail in the reports produced by the KRG (KRG, 2006, 2007a and 2007b). The work carried out at these sites, under the current report and covered by the contribution agreement referred to in the preceding section (2.5), are described in section 4.1 of this report.

2.7 2005, 2006, 2007 and 2009 Clean-Up Work by Cruise North Expeditions

Parallel to the above-mentioned pilot projects and in cooperation with Makivik and the KRG, Cruise North Expeditions participated on a volunteer basis in the Aupaluk sector in the first year of work (phase 1) at the site PJ-17 which is classified as requiring major clean-up, as well as at the site PJ-17A which is classified as

requiring intermediate clean-up and at the site PJ-18 which was not verified during the initial 2001-2002 inventory work. The work performed at these sites under the pilot projects are described in detail in the reports produced by the KRG (KRG, 2006, 2007a and 2007b).

In 2006 (phase 2), in 2007 (phase 3) and in 2009 (phase 4), Cruise North Expeditions continued to participate in clean-up work at the site PJ-17 in cooperation with Makivik, the KRG and the community of Aupaluk. The work performed at the site PJ-17 is described in section 4.1 of this report.

2.8 Funding for the Rehabilitation of Sites Requiring Major Clean-Up Work

The pilot projects represented the initial stage of a Nunavik-wide clean-up project that was implemented between 2007 and 2011 after the KRG and its partners were able to secure the necessary funding.

KRG and Makivik Proposal

In order to implement this ambitious clean-up project, the KRG and Makivik proposed in August 2003 a funding mechanism and recommendations for the assessment and rehabilitation of abandoned mineral exploration sites (Barrett and Lanari, 2003). The proposal focused in particular on the 18 sites classified as requiring major clean-up work and promoted a partnership between Northern Québec communities, the mining industry and the different levels of government.

Fonds Restor-Action Nunavik

In March 2007, the mining industry responded to the challenge and created the *Fonds Restor-Action Nunavik* (FRAN). FRAN is a consortium of Québec mining exploration companies which share a goal to clean up and rehabilitate abandoned mining sites. Through the FRAN, these mining companies aim to participate in the rehabilitation of priority mineral exploration and mining sites, in cooperation with the provincial government and Inuit communities. Cognizant that the rehabilitation practices of past generations of mining companies did not comply with modern, responsible practices, participating companies wish to demonstrate that, in addition to strict environmental management and social responsibility practices, they are capable of concrete actions to rehabilitate selected priority sites and ensure compliance with environmental standards for current and future activities.

2.9 2008–2012 Contribution Agreement: the KRG, Makivik, the MRNF and the FRAN

In October 2007, a contribution agreement was signed by the KRG, Makivik, the MRNF and the FRAN. The agreement made it possible to proceed with work at all 18 sites requiring major clean-up using the expertise developed during the above-mentioned pilot projects.

In this manner, between 2007 and 2011, work was undertaken at sites requiring major clean-up.

3 CLEAN-UP WORK CARRIED OUT IN 2011–2012

This section provides an updated description of the sites at which clean-up work was carried out in 2011–2012. Appendix 1 contains maps showing the locations of the abandoned mineral exploration sites in Nunavik. Section 4 contains a summary of clean-up work carried out under the 2008–2012 contribution agreement (refer to section 2.9 of this report). Appendices 3 and 4 contain photographs that illustrate the evolution of clean-up work at each site.

It should be noted that in 2011 a field technician, Charlie Munick from Kangiqsualujjuaq, was hired to supervise the work at each of the sites and in some communities when necessary. The KRG would like to thank Charlie Akpahatak, the former field technician, for his hard work during his time with the project (2006–2011). Nancy Dea, the project coordinator since 2009, continued to exercise this role in 2011.

3.1 Description of Work

Tasiujaq Sector

PJ-1

During three work sessions in August, September and October 2011, the field technician and a work team from Kangiqsualujjuaq undertook the final stages of work at the site, the largest of all the sites requiring major clean-up. The smaller pieces of debris that were left at the site at the end of the 2010 winter work were collected in all sectors and transported to Aupaluk by helicopter. One trailer, which will remain on site at the request of the community of Aupaluk, was cleaned and restored and can now be used as a temporary shelter. Approximately 4,000 lbs of debris was removed from the site in 2011.

Although the clean-up of this site is now considered complete, a large volume of material removed over the years is currently being stored at Aupaluk, the closest community to PJ-1. In August 2011, the project coordinator met with Nunavut Eastern Arctic Shipping (NEAS) to discuss the transportation of this equipment and debris. Further to this meeting, approximately 36 pieces of equipment and machinery, totalling 117 tonnes, were transported by ship in October 2011 to a metal recovery facility in the south. The ship will return next season to remove the remainder of the equipment, most of which is scrap metal. Meanwhile, preparation work will be required to guarantee that all remaining debris is removed (refer to section 6.7 of this report).

Again this year, the Northern Village of Aupaluk contributed a great deal to clean-up work at the site PJ-1 by providing workers and coordinating supply and rental logistics in the community. Nunavik Rotors also assisted with the transportation of debris from the site PJ-1 to the temporary storage site at Aupaluk.

Aupaluk Sector

PJ-10

In 2011, Oceanic Iron Ore Corporation assisted in the final clean-up at the site, removing several piles of aluminium and tin. The mining company undertook rehabilitation activities at a total of seven sites near Aupaluk. Clean-up work at this site is now considered complete.

Salluit Sector

SW-34

With the assistance of Xstrata Nickel and Canadian Royalties, a team of workers from Salluit and Kangiqsujuaq undertook three work sessions at the site SW-34 in July, August and September 2011. As poor weather conditions hampered clean-up activities, multiple attempts were made to complete the work.

Approximately 300 barrels were crushed and then removed from the site by helicopter. The crusher was purchased by the KRG in 2010 and transported by ship to Deception Bay by Xstrata Nickel. In 2011, the

crusher was transported by helicopter and assembled at the SW-34 site. The crushed barrels were stored in a shipping container located near the site and made available by Xstrata Nickel. Several barrels of oil and fuel residue were also removed from the site. This material will be transported to Deception Bay by Xstrata Nickel for shipment south. Approximately 61,000 lbs of waste was removed from the site in 2011.

Four dumpsites containing rusty cans and metal debris remain on site and therefore work will continue in 2012. This is discussed in greater detail in section 6.7 of this report.

The Northern villages of Kangiqsujuaq and Salluit contributed to clean-up work at the site SW-34 in 2011 by providing workers.

SW-42

This site was cleaned by Canadian Royalties in 2011. Twenty-five barrels were removed five of which contained diesel and 12 small cans. Approximately 3m³ of empty cans were also removed from the site. Clean-up work at the site is considered complete.

Inspections

In September 2011, the project coordinator and field technician carried out inspections at the 18 sites classified as requiring major clean-up. This allowed the KRG to properly assess whether any remaining actions are needed and provided an opportunity to take photographs for comparison purposes. The two were joined by Josée Brunelle, who took part in the original 2001-2002 inventory and is a co-author of this report, as well as a technician from the *ministère du Développement durable, de l'Environnement et des Parcs* (sustainable development, environment and parks, MDDEP).

The team also visited 26 of the 27 sites classified under the 2001-2002 inventory as requiring intermediate work. These visits allowed the KRG to compare the data collected during the original inventory and to determine the actions needed to ensure the clean-up of these sites.

A summary description of the 27 sites requiring intermediate clean-up work is provided in section 5 of this report.

3.2 Presentation to the KRG Council

In November 2011, the project coordinator presented to the KRG Council a summary of the rehabilitation activities carried out at the 18 abandoned mineral exploration sites classified as requiring major clean-up. The KRG is led by a 17-member Council composed of elected municipal representatives appointed by each of the Northern villages and the Naskapi Nation of Kawawachikamach. The members of the KRG Executive Committee also sit on the KRG Council.

This presentation provided an opportunity to highlight the results of seven years (2005–2011) of hard work and dedication of not just the KRG but also of the Northern villages and regional organizations that allowed for rehabilitation work on 13 of the 18 sites requiring major clean-up to be completed.

The presentation in its entirety was translated into Inuktitut and broadcast on regional radio.

3.3 Clean-Up Work Carried Out by Mining Companies

In 2011–2012, several mining companies currently active in Nunavik carried out restoration work at various sites classified as requiring major, intermediate and minor clean-up, as well as at some sites not included in the 2001-2002 inventory.

Over the last eight years, Canadian Royalties has voluntarily cleaned up more than 50 abandoned mineral exploration sites in parallel with its mineral exploration activities and the development of the Nunavik Nickel project. In 2011, Canadian Royalties undertook clean-up work at 11 sites in the Kuujuaq sector, near Lac Prinzèles. These sites were not part of the 2001-2002 inventory. Generally, the work involved the collection of empty fuel barrels, scrap metal and various waste (acid, paint, grease, oil, etc.).

In the Kangiqsujuaq sector, work at three sites by Canadian Royalties was completed: the site SW-42 which is classified as requiring major clean-up and the sites KAN-1 and I-32 which are classified as requiring intermediate clean-up. A total of 87 barrels were collected along with 3.5 m³ of other debris. This waste was transported to Canadian Royalties' Expo Camp (K-61) where they were processed according to the company's hazardous waste management procedure.

Oceanic Iron Ore Corporation, which was quite active in the Aupaluk area in 2011, also carried out clean-up activities at numerous, mostly minor sites. A list of these sites can be found in Appendix 2 of this report.

3.4 Expenditures

Table 1 indicates fieldwork and project administration expenditures from June to December 2011. Some expenditures were over- or under-estimated in previous cost assessments due to weather constraints and extra sessions of fieldwork.

Table 1 Expenditures for Work Carried Out in 2011

Expenditures*	2011
Travel and Accommodations	\$231,773
Purchase of materials	\$9,935
General contracts	\$334,021
Administrative charges	\$100,000
Administrative costs	\$23,377
TOTAL:	\$699,106

*Source: KRG Financial Statement, 2011

4 SUMMARY OF THE 2005-2007 AND 2008-2012 WORK AT THE 18 SITES REQUIRING MAJOR CLEAN-UP

Section 4 provides descriptions of the 18 abandoned mineral exploration sites classified as requiring major clean-up and of the work carried out at these sites.

4.1 Description of the 2004–2008 and 2008–2012 work

The following paragraphs describe the contents of the 18 sites requiring major clean-up according to the 2001-2002 inventory (KRG, 2003), the 2007 follow-up inventory (KRG, 2007b) and clean-up activity reports (KRG, 2006, 2007a). For each site, the description of the contents is followed by a summary of the clean-up work carried out between 2005 and 2007 (four sites) under the 2004–2008 contribution agreement (refer to section 2.5 of this report) and between 2007 and 2011 (18 sites) under the 2008–2012 contribution agreement (refer to section 2.9 of this report).

Appendix 1 contains maps showing the locations of inventoried sites as well as a map (Map 8) showing the locations of the sites that have been rehabilitated. Appendix 3 contains the site inventory sheets completed during the 2001-2002 inventory and Appendix 4 contains photographs of each site before and after clean-up work.

It should be recalled that clean-up work was carried out at the sites KAW-35, PJ-1 and PJ-17 between 2005 and 2007 under the 2004–2008 contribution agreement (refer to sections 2.5 to 2.7 of this report). As well, clean-up work was carried out at the site SW-34 by mining companies in 2007 (KRG, 2007b).

Tables 2 and 3 show the work carried out between 2004 and 2008 and between 2008 and 2012, respectively, at the 18 sites requiring major clean-up according to the 2001-2002 inventory. The work planned for the winter of 2011–2012 and the summer of 2012 at the sites still requiring more clean-up are described in sections 6.7 and 6.8 of this report.

Table 2 Clean-up work between 2005 and 2007 at Abandoned Mineral Exploration Sites Requiring Major Clean-Up (2004–2008 Contribution Agreement)

<i>Sector/ Site</i>	<i>Summer or fall 2005</i>	<i>Winter 2005–2006</i>	<i>Summer or fall 2006</i>	<i>Winter 2006–2007</i>	<i>Summer or fall 2007</i>
<i>Kawawachikamach</i>					
KAW-35	CW		CW		CW
<i>Tasiujaq</i>					
PJ-1			CW		CW
<i>Aupaluk</i>					
PJ-17	CW (CNE)		CW (CNE)		CW (CNE)
PJ-17A*	CW (CNE) + C				
PJ-18**	CW (CNE)				
PJ-19*		CW ***			
<i>Kangiqsujuaq</i>					
K-28			CW (CR)		
K-61			CW (CR) + C		
<i>Salluit</i>					
SW-34					CW

Legend: CW: Clean-up work; (CR): Canadian Royalties; (CNE): Cruise North Expeditions; C: Clean-up considered complete (PJ-1: waste remains to be transported from Aupaluk); WT: Winter transportation; * Site requiring intermediate clean-up; ** Site not verified during the 2001-2002 inventory work / *** The site PJ-19 was cleaned up in April 2010

Table 3 Clean-up work between 2008 and 2011 and Work Still Planned in 2011 and 2012 at the 18 Abandoned Mineral Exploration Sites Requiring Major Clean-Up (Contribution Agreement 2008–2012)

<i>Sector/ Site</i>	<i>Summer or fall 2008</i>	<i>Winter 2008- 2009</i>	<i>Summer or fall 2009</i>	<i>Winter 2009- 2010</i>	<i>Summer or fall 2010</i>	<i>Winter 2010- 2011</i>	<i>Summer or fall 2011</i>	<i>Winter 2011- 2012</i>	<i>Summer or fall 2012</i>
<i>Kawawachikamach</i>									
KAW-35	CW		CW		CW			See 6.7	See 6.7
KAW-45	CW + C								
<i>Tasiujaq</i>									
PJ-1	WT + CW		CW	WT	CW	WT	CW + C		See 6.7
TQ-1					CW + C				
TQ-4					CW + C				
<i>Aupaluk</i>									
PJ-10					CW	WT	CW + C		
PJ-17			CW (CNE) + C						
<i>Kangirsuk</i>									
TW	CW	WT	CW + C						
<i>Kangiqsujuaq</i>									
K-28			CW (CR) + C						
K-61			CW (CR) + C						
WB-3	CW		CW + C						
<i>Salluit</i>									
KV-1									See 6.8
SAL-1			CW + C						
SW-27									See 6.8
SW-34	CW		CW		CW		CW		See 6.7
SW-42							CW (CR) + C		
WB-9									See 6.8
<i>Umiujaq</i>									
WHA-1					CW + C				

Legend: CW: Clean-up work; (CR): Canadian Royalties; (CNE): Cruise North Expeditions; C: Clean-up complete (PJ-1: waste remains to be transported from Aupaluk); WT: Winter transportation

Kawawachikamach Sector

KAW-35

Description

The abandoned mineral exploration site KAW-35 (55°13.94' N, 66°07.27' W) is located near Lake Retty, 60 km east-northeast of Kawawachikamach and Schefferville (Map 3). The site covers 0.15 km² and comprises three sectors; locally, it is known as Blue Lake. The 2001-2002 inventory ranks this site eighth in importance. The 2007 follow-up inventory (KRG, 2007b) indicates that the site remained as described in the 2001-2002 inventory and that the site should have been ranked among the top three sites requiring the most work.

The contents of the site KAW-35 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
19	1 muskeg 1 insulated tank (in a shed) Furnaces, water heaters, motors (generators) 1 trailer 1 large sled	Diesel barrels >1000 total >6 full (>1200 L) >200 with residue 6 X 4400-L diesel reservoirs: empty Plastic bottles: hydrofluoric acid 4% -3 empty -10 full: 5 L -3 with residue: 10 mL Pails: 5 X 20-L: full or residue of biodegradable solvent Dry extinguishers	3 batteries	500+ (including buildings)	100+	103

The inventory sheet for the site KAW-35 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

The KRG began clean-up work at site KAW-35 under the 2005–2006 pilot project (KRG, 2006, 2007). It continued this work in 2007 under the 2004–2008 contribution agreement (KRG, 2007) and again in 2008, 2009 and 2010 under the 2008–2012 contribution agreement (refer to section 2.9 of this report). Detailed accounts of this work are provided in the reports prepared by the KRG (KRG, 2008, 2009, 2011).

During the clean-up work carried out in 2005 and 2006 (pilot project) as well as in 2007, 814 barrels (roughly 87% of all the barrels), and all hazardous material were removed from the site, except for three barrels containing residue diesel and oil and two other 20-L containers of grease. No treatment of contaminated soil (103 m³) could be performed. In 2007, the buildings were still standing. The work was carried out by Naskapi workers from Kawawachikamach and Innu workers from Matimekush-Lac John (KRG, 2007b).

The clean-up work carried out in July 2008 involved the burning of combustible waste (100m³) and the eight buildings (only the truck trailers were conserved) as well as the transportation of waste to recycling and treatment facilities. All non-combustible material was removed from the trailers before they were burned. Metal sheeting was folded and prepared for transportation. Residue hydrocarbons were transferred into undamaged barrels and the empty barrels were cut up using a grinder. All the barrels were transported

from the site by floatplane to Schefferville. Subsequently, all the waste was transported by train to Sept-Îles and the hydrocarbons and other hazardous material were transported to Baie-Comeau (KRG, 2008).

From October 5 to 14, 2009, the clean-up work involved reducing the number of piles of metal debris at the site, cutting up the metal frames of the eight trailers burned in 2008, cutting up the metal sheeting into sizes that could be handled and transported, and inspecting and emptying the two trailers located roughly one kilometre north of the main site. Part of the metal debris from the trailers (a total of roughly 9000 lbs) was transported by helicopter to Kawawachikamach (no floatplane was available), loaded onto a truck trailer, and transported to Schefferville. The metal debris was then transported to a recycling facility at Sept-Îles. A small pumping station north of the site was emptied and burned.

From July 12 to 16, 2010, the clean-up work involved reconstructing the floating dock to make floatplane access easier and safer, and then removing a portion of the remaining metal debris from the site by floatplane. The metal framing and sheeting from the eight trailers were transported by floatplane to a sorting facility at Schefferville. This debris and two other small piles of metal debris were then transported by train to a recycling facility at Sept-Îles.

Sector 2 of this site contains a large quantity of ore tailings. A water sample taken from the mine, which is now flooded, revealed an acid pH of 3.27 (21.7°C). This acid pH indicates acid mine drainage. The slope of the terrain drains towards the lake. Due to the presence of an outfitting camp near the site KAW-35, the sector is visited frequently. Action is recommended to minimize the impact of acid mine drainage (KRG, 2011).

The inspection carried out by the KRG in September 2011 served to update the description of the site KAW-35 following the clean-up work carried out between 2005 and the summer of 2010 and to estimate the work that remains to be done. Refer to section 6.7 of this report. Photographs of the site before and after clean-up work appear in Appendix 4.

KAW-45

Description

The abandoned mineral exploration site KAW-45 (55°33.68' N, 67°21.20' W) is located on the shore of Lake Musset, 30 km west-northwest of Kawawachikamach and Schefferville (Map 3). The site comprises two sectors located close to one another. The 2001-2002 inventory ranks this site 16th in importance. The 2007 follow-up inventory (KRG, 2007b) indicates that the site remained as described in the 2001-2002 inventory.

The contents of the site KAW-45 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
5	-	Diesel barrels: 2 empty 3 with residue 7 unknown content 4 X 4 L Naptha: empty	-	15+	5+	2

The inventory sheet for the site KAW-45 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

In July 2008, all the combustible material at the site KAW-45 was burned. The empty barrels were cut up using a grinder. Waste was transported by floatplane (Otter) to the temporary storage site at Schefferville, then by train to appropriate recycling and treatment facilities. The metal was transported to Sept-Îles and the residue hydrocarbons and other hazardous material to Baie-Comeau. The clean-up work at the site KAW-45 is complete and no further action is necessary.

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site KAW-45 is complete. Only wood debris remains (including core trays). Photographs of the site before and after clean-up work appear in Appendix 4.

Tasiujaq Sector

PJ-1

Description

The abandoned mineral exploration site PJ-1 (58°57.71' N, 69°35.85' W) is located midway between the communities of Aupaluk and Tasiujaq (Map 4). The site covers more than 3 km² and comprises nine sectors. The 2001-2002 inventory ranks this site first in importance.

The contents of the site PJ-1 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transfor- mers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Conta- mina- ted soil (m²)
7	2 bulldozers 2 muskegs 1 truck 2 crushers 2 conveyors 1 crane 8 machines 2 alternators 1 radiator 3 trailers 6 generators 10 X 40,000-L reservoirs 2+ motors	Diesel barrels: ~357 empty 3 full: 2500 L 43 with residue: 2595 L Propane tanks: 80 empty ~50 tubes of grease 1 X 2 kg grease 1 X 4 L motor oil 1 X 50 L motor oil 3 X 4L paint	20 batteries 2 transfor- mers	150+	100+	115

The inventory sheet for the site PJ-1 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

The April 2011 report indicates that the ore tailings at the site PJ-1 contain higher than acceptable levels of heavy metals, according to analysis carried out by the MDDEP (KRG, 2011).

Work Performed

In 2006 (pilot project) and in 2007, major clean-up work carried out at the site PJ-1, both in the summer and in the winter, permitted the removal of 15 batteries, 34 oil filters and five 4-L containers of paint. The barrels that had been cut up and stacked in different locations at the site were prepared for winter transportation by snowmobile to Aupaluk in the winter of 2008. Taking into account all the sectors of the site PJ-1, there were roughly 146 barrels each containing one or two more barrels, roughly 24 barrels containing residue hydrocarbons, and more than 90 barrels containing rocks, metal debris and other waste. All the barrels containing residue hydrocarbons were labelled with a 'D' for diesel or an 'O' for oil. Hazardous material and some other products were left at the site or were stored temporarily inside the wooden shed in sector 5 (KRG, 2007b). During the work carried out in 2006, biological soil treatment was performed in sectors 4 and 6. Analysis results showed a reduction in hydrocarbon soil contamination in the sectors 4 and 6 by 52% and 23%, respectively, compared with the initial values measured in 2002 (KRG, 2007).

In April 2008, waste was transported from the site PJ-1 to Aupaluk with snowmobiles and sleds. In total, 117 barrels that were either empty or filled with metal debris and 33 propane tanks were removed from the site. The waste was stored in a shipping container at a temporary storage site near the Aupaluk disposal site (KRG, 2008).

In July 2009, work in the sectors 1, 2, 3, 4, 5, 8 and 9 generally involved sorting and stacking the remaining waste by type (barrels, metal debris, tires and flexible hose; and from trailers: boards, insulation, electrical wiring and toilets) in preparation for its transportation by helicopter the following clean-up season. All combustible material remaining on site, including one of the two trailers located in Sector 5, was burned.

In 2009, in sector 4 which contains a large quantity of ore tailings, a water sample taken near the tailings revealed a neutral pH of 6.79 (15.9°C), suggesting the absence acid mine drainage. Also, in 2009, waste was transported from sectors 6 and 7 by helicopter to Aupaluk and then transported by ship to specialized treatment facilities in the south. The work in these two sectors was completed.

On October 15 and 16, 2009, roughly 20,000 lbs of waste and a small quantity of hazardous material (sectors 6, 5 and 4) were removed from the site PJ-1. This waste and hazardous material was transported by helicopter to Aupaluk and stored in shipping containers. In November 2009, these containers were transported by ship to the south; the hazardous material was specifically transported to specialized treatment facilities (KRG, 2009).

In November and December 2009, over a three-week period, all the heavy equipment except for one piece (15 pieces total) was removed from the site PJ-1 (crane, tractor, truck, crusher, conveyer, generators, motor, tracks, etc.). This equipment was transported to Aupaluk using an excavator and tractor along a 45-km temporary winter road across the tundra. This work was carried out by specialists (mechanics, welders and equipment operators), assisted by local workers. The heavy equipment was stored temporarily in Aupaluk in preparation for its transportation to the south in the summer of 2010 (KRG, 2009, 2011). Several 10,000-L reservoirs from the site were cut in half and used to transport waste. Some of these were left at the site for removal in the winter of 2010 with other metal debris such as pole segments and rolls of metal grating (KRG 2009).

From July 21 to 26, 2010, the clean-up work generally involved collecting and sorting the remaining waste from sectors 1, 2, 3, 8 and 9 and transporting it by helicopter to sector 5. All the combustible waste in these sectors was burned. At the end of the clean-up work in July 2009, sector 5 contained only a single trailer and all the waste had been prepared for transportation to Aupaluk during the winter (KRG, 2011).

In October 2010, eight containers filled with propane tanks, metal debris and compacted barrels, i.e. 43.5 tonnes of metal and 972 lbs of aluminium, were transported by ship from Aupaluk to a recycling facility in the south. However, due to its considerable size and weight, the dock master decided that the heavy equipment could not be transported safely. An alternative strategy to remove the heavy equipment from Aupaluk therefore had to be found (KRG, 2011).

In the fall of 2010, the workers repaired and prepared the heavy equipment for the work to be carried out in the winter of 2011.

In January 2011, due to extremely cold temperatures and unusually thin snow cover, the work team adopted a new strategy to transport the huge pieces of metal and inoperable heavy equipment from the site to Aupaluk. Metal reservoirs were transformed into trailers and skids were welded onto metal frames to create sleds. The trailers were then towed one behind the other by a bulldozer (KRG, 2011). In this manner, ten loads of metal pieces and waste were transported from the site PJ-1 to Aupaluk. Three weeks of hard labour on the part of the work team in cooperation with the Northern Village of Aupaluk were necessary to transport everything. The community asked that the remaining trailer in sector 5 be left behind to serve as an emergency shelter (KRG, 2011).

The Northern Village of Aupaluk made major contributions to the clean-up work at the site PJ-1 by supplying labourers and handling material logistics and equipment rental in the community.

The work carried out at this site in 2011 is described in section 3.1 of this report.

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site PJ-1 is complete. Further to a request made by the community, a trailer has been left behind in sector 5. Photographs of the site before and after clean-up work appear in Appendix 4. Heavy equipment is still stored at Aupaluk; refer to section 6.7 of this report.

TQ-1

Description

The abandoned mineral exploration site TQ-1 (57°57.68' N, 69°40.16' W) is located on the shore of Lake Gerido, 75 km west of Kuujuaq (Map 4). The site comprises one sector. The 2001-2002 inventory ranks this site sixth in importance. The 2001-2002 inventory notes that the outfitter Safari Nordik appeared to be using the site under the name Gerido Camp.

The contents of the site TQ-1 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Conta- mina- ted soil (m²)
8	1 snowmobile	Diesel barrels: -30 empty -1 with ~100 L at <2 m from the lake Propane tanks: 6 empty	1 battery	20+	10+	2

In 2001-2002 it was noted that the barrels of diesel connected to the building stoves have leaked, causing soil contamination. One barrel containing roughly 100 L of diesel is situated less than 2 m from the lake. There is also some recent waste: batteries, fuel tanks, freezers, stove, small watercraft and trailer. The site seems to be used, but is not well maintained.

The inventory sheet for the site TQ-1 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

The 2007 follow-up inventory indicates that the site was still in use by the outfitter Safari Nordik and that the site remained as described in the 2001-2002 inventory. The camp was, however, better maintained and renovations had been carried out. The soil contamination identified under old barrels next to the buildings was still present (KRG, 2007b).

The 2007 follow-up inventory indicates that roughly 50 barrels containing diesel were counted next to the landing strip located about one kilometre from the camp, inland from Lake Gerido. These barrels, which

were initially located on the shore of Lake Gerido one kilometre from the camp (location known as P-24F13-5, requiring intermediate clean-up as determined in 2005 – KRG, 2006), were moved to the landing strip by the community of Tasiujaq after 2002. According to the 2007 follow-up inventory, close to 50 more barrels remain on the shore of Lake Gerido, several of which contain diesel, metal debris and rock samples.

Work Performed

The site TQ-1 is an abandoned mineral exploration site that now serves as a camp belonging to the outfitter Safari Nordik. The maintenance and clean-up of this site are under the responsibility of Safari Nordik. The KRG therefore did not perform any work at this site. It did, however, undertake clean-up work at the site P-24F13-5 mentioned above.

In September 2010, the empty barrels and metal debris from the site P-24F13-5 were collected together, transported to Kuujuaq by helicopter, and stored in a shipping container in preparation for transportation to specialized facilities in the south in 2012. Overall, 15 loads of metal debris were removed from the site P-24F13-5. As well, close to 50 barrels of diesel were removed from the site by Twin Otter and transported to Kuujuaq. The clean-up of this site is considered complete (KRG, 2011).

The Northern villages of Tasiujaq and Kuujuaq contributed to the clean-up of the site by supplying labourers to do the work (KRG, 2011).

The inspection carried out by the KRG in September 2011 at the sites TQ-1 and P-24F13-5 confirmed that the clean-up of the site P-24F13-5 is complete, but that the site TQ-1 requires more work. A few barrels are still located on the lake shore and there is a pile of cans and other debris. There are also a number of barrels and some debris piled next to the landing strip; these will be removed by Canadian Royalties as part of its clean-up activities in this sector. Photographs of the site appear in Appendix 4.

TQ-4

Description

The abandoned mineral exploration site TQ-4 (58°15.23' N, 70°07.20' W) is located 40 m from Lake Garigue, south of Tasiujaq (Map 4). The site comprises three sectors. The 2001-2002 inventory ranks this site 15th in importance. The 2007 follow-up inventory indicates that, overall, the site closely matches the description prepared during the 2001-2002 inventory.

The contents of the site TQ-4 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contami- nated soil (m²)
2 + 1 cabin	1 ice drill	Diesel barrels: 153 empty; some with residue: 150 L Propane tanks: 8 empty 3 X 20 L gasoline: full	0	10+	10+	0

The inventory sheet for the site TQ-4 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Inspections carried out in 2007 and 2010 revealed that the site closely matches the description prepared during the 2001-2002 inventory, with a still useable building, a collapsed building, a wooden platform, some waste (35 barrels, eight propane tanks, aluminium insulation, etc.) near the two buildings in sector 1, as well as 115 barrels located around two depressions in sector 2.

Work Performed

In September 2010, 120 empty barrels, several propane tanks, 3,500 lbs of steel rod and six loads of metal debris were removed from the site and transported by helicopter to Tasiujaq to be stored in a shipping container to be transported to specialized facilities in the south. All the combustible material, including a collapsed building and wooden platform, were burned on site. A building was cleaned up and left to serve as a shelter (KRG, 2011).

The Northern villages of Tasiujaq and Kuujuaq contributed to the clean-up of the site by supplying labourers to do the work. The clean-up of this site is considered complete (KRG, 2011).

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site TQ-4 is complete. Photographs of the site before and after clean-up work appear in Appendix 4.

Aupaluk Sector

PJ-10

Description

The abandoned mineral exploration site PJ-10 (59°15.07' N, 70°06.52' W) is located 50 m from Lake Ford, 30 km west-southwest of Aupaluk (Map 5). The site comprises two sectors. The 2001-2002 inventory ranks this site ninth in importance. Highly hydrocarbon-contaminated soil was noted under two piles of barrels. The 2007 follow-up inventory indicates that the site matched the description prepared during the 2001-2002 inventory.

The contents of the site PJ-10 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contami- nated soil (m²)
1 base	1 reservoir	Diesel barrels: 39 empty 34 with residue: ~1400 L Propane tanks: 10 empty 5 with residue 2 X 20 L grease 7 X 40 L motor oil	1 battery	50+	25+	20

The inventory sheet for the site PJ-10 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site and the results of contaminated soil analysis.

Work Performed

From August 16 to 22, 2010, close to twenty loads of metal debris were transported from the site by helicopter to Aupaluk and stored at the local disposal site. The debris consisted of empty barrels, 11 x 12'-long steel rods, empty aluminium core trays, metal sheeting, used oil barrels, extinguishers, grease pails and barrels filled with small metal debris. This waste was stored in a shipping container in preparation for transportation by ship to specialized facilities in the south (KRG, 2011).

The soil contaminated by seven leaky barrels was placed in appropriate bags and transported by helicopter to Aupaluk. These bags were stored with other hazardous waste in a shipping container. The contents of the barrels were transferred into undamaged barrels and transported to Aupaluk. Several barrels containing small pieces of metal debris and sheeting (with sharp edges that made them unsafe to transport by helicopter) were left at the site at the end of the summer work for transportation in the winter by snowmobile (KRG, 2011).

Because the remaining debris could not be transported in the winter as planned, Oceanic Iron Ore Corporation returned to the site in the summer of 2011 to collect it. Refer to section 3.1 of this report. The clean-up of this site is considered complete.

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site PJ-10 is complete. Only wood debris remains. Photographs of the site before and after clean-up work appear in Appendix 4.

PJ-17

Description

The abandoned mineral exploration site PJ-17 (59°20.29' N, 69°45.93' W) is located roughly 10 km northwest of Aupaluk at Merganser Point, Hopes Advance Bay (Map 5). The site comprises three sectors. The 2001-2002 inventory ranks this site third in importance.

The contents of the site PJ-17 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
2	1 truck 1 metal sled 1 runway roller 8 motors	Diesel barrels: 270 empty 15 with residue: 500 L Propane tanks: 27 empty 13 with residue 1 pail full of grease	5 batteries 1 transformer	15+	30+	125

The inventory sheet for the site PJ-17 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site and the results of contaminated soil analysis.

Work Performed

Clean-up work was carried out at the site PJ-17 by Cruise North Expeditions in September 2005, 2006 and 2007 with KRG and Makivik support. The project was made possible through the volunteer contributions of Cruise North Expeditions staff, *R/V Ushuaia* (in 2005) and *M/V Lyubov Orlova* (in 2006 and 2007) crew, and the participation of corporate sponsors and passengers on these volunteer cruises.

This work involved the dismantling of antennas and a pole with a transformer, the gathering of cables and a large quantity of metal debris, and the burning of combustible material. The work also involved the removal from the site of 94% of the barrels (290 of 308), 33% of the propane tanks (13 of 40), 76% of the metal and other debris (19 of 25 m²), 50% of the metal rods and pipes (50 of 100) and a significant quantity of small- and medium-sized waste. The waste was transported by ship (Cruise North Expeditions) to St-John's, Newfoundland and Labrador, for appropriate processing. The clean-up work is described in detail in the March 2006 and March 2007 reports prepared by the KRG (KRG, 2006, 2007).

In September 2009, Cruise North Expeditions carried out a fourth clean-up campaign at the site PJ-17 with KRG and Makivik support. Hazardous material, metal debris and other waste collected at the site were transported by Zodiac or by helicopter to the ship or by helicopter to the temporary storage site at Aupaluk. Twenty-eight propane tanks were stored at Aupaluk in a shipping container and then transported by sealift in November 2009 to the south of Québec. Hazardous material and other waste transported aboard the *M/V Lyubov Orlova* (Cruise North Expeditions) were dropped off in the port at St-John's, Newfoundland and

Labrador. The firm FPCollins subsequently took responsibility for recycling the metal debris and the proper disposal of the other waste (KRG, 2009).

During the clean-up work carried out in 2005, 2006, 2007 and 2009, roughly 325 barrels, 60 propane tanks, thousands of pounds of metal and other waste, including metal rods and pipes as well as a significant quantity of small- and medium-sized waste, were removed from the site. During the four clean-up campaigns, no biological treatment was performed on the 125 m² of soil contaminated with hydrocarbons (near the garage). In 2009, the clean-up of this site was considered complete (KRG, 2009).

The December 2009 report (KRG, 2009) indicates that large items could not be transported by helicopter during the September fieldwork. It was recommended that the large items be transported to Aupaluk by heavy equipment, once the construction of an access road that will pass by the site PJ-17 has been completed. Subsequently, the items will be transported to the south. At the request of the community of Aupaluk, the garage at the site PJ-17 was left on site. The following items remain to be removed from the site:

- one piece of heavy equipment (in the garage);
- large motor parts (in the garage);
- four large pieces of metal sheeting (behind the garage);
- two steel rollers (6-ft. X 30 in.) (on the road between the main site and the bay and next to the landing strip).

The inspection carried out by the KRG in September 2011 confirmed the presence of all the items listed above. They will be removed from the site once the construction of the road between the site PJ-17 and Aupaluk is complete. The clean-up of this site is considered complete. Photographs of the site before and after clean-up work appear in Appendix 4.

Kangirsuk Sector

TW

Description

The abandoned mineral exploration site TW (60°05.45' N, 69°55.48' W) is located on the shore of Lake Twin near Kangirsuk (Map 5). The site comprises one sector. The 2007 follow-up inventory indicates that the site matched the description prepared during the 2001-2002 inventory (KRG, 2007b). The 2001-2002 inventory ranks this site fourth in importance.

The contents of the site TW are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transfor- mers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Conta- mina- ted soil (m²)
2 bases	1 pipe threader	Diesel barrels: 70 empty 13 with residue: 1230 L Propane tanks: 7 empty 4 with residue 1 X 100 L of grease 2 X 4 L of grease 1 X 2 kg of grease 20-L dry extinguisher powder	0	30+	20+	2

The inventory sheet for the site TW in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site and the results of contaminated soil analysis.

Work Performed

Clean-up work was carried out at the site TW in June 2008 and in the spring of 2009. The work in 2008 involved taking rock and water samples for analysis to verify potential acid mine drainage, the collection and compacting of empty barrels, the burning of combustible material (20 m³), and the transportation of waste to a temporary storage site at Kangirsuk in preparation for its transportation to the south by ship in the summer of 2010. A small quantity of metal debris remaining at the site was piled together in preparation for transportation by snowmobile and sled in the winter (KRG, 2008, 2009).

The work in the spring of 2009 involved transporting waste by snowmobile to Kangirsuk. As certain items were stuck in the snow, a work team returned to the site by ATV in the summer to remove the last three barrels and some rusted metal boxes. The site now only contains core samples on stands and a wooden platform. The work at this site is considered complete (KRG, 2009).

The Northern villages of Kangirsuk contributed to the clean-up of the site by supplying labourers to do the work (KRG, 2008, 2009).

Photographs of the site TW before and after clean-up work appear in Appendix 4.

Kangijsujuaq Sector

K-28

Description

The abandoned mineral exploration site K-28 (61°34.65' N, 73°14.75' W) is located 67 km west of Kangijsujuaq, far from any body of water (Map 6). The site comprises three sectors. The 2001-2002 inventory ranks this site 11th in importance.

The contents of the site K-28 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
1 tent	1 motor	Diesel barrels: 60 empty 10 with residue: 2000 L Propane tanks: 9 empty 6 with residue Bags with CaCl ₂ (de-icing salt)	0	30+	25+	15

The inventory sheet for the site K-28 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

This site was partially cleaned in 2006 by Canadian Royalties (KRG, 2007b). The 2007 follow-up inventory indicates that wood was burned, that scattered barrels were stacked together, and that barrels containing diesel and bags containing calcium chlorite were removed from the site. Canadian Royalties also gathered roughly 100 barrels from Sectors 1 and 2 along the road that leads to its Berbegamo Camp. Although the tripod was still in place, except for a pile of metal debris at the foot of the tripod, all the drilling material that was observed in 2001 had been removed from the site. The 2007 October report by the KRG states that Canadian Royalties would continue to implement its clean-up plan and was expected to remove all the barrels by 2009 (KRG, 2007b). The soil contamination in sector 1 was still present. Up until July 2007, no biological treatment had been performed on the 5 m² of hydrocarbon contaminated soil (KRG, 2007b).

In 2009, Canadian Royalties continued clean-up work and removed from the site the remaining barrels and other waste. Hydrocarbon contaminated soil (5 m²) was also removed from sector 1. The clean-up of this site is complete (KRG, 2009).

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site K-28 is complete. Photographs of the site before and after clean-up work appear in Appendix 4.

K-61

Description

The abandoned mineral exploration site K-61 (61°33.25' N, 73°27.25' W) is located 80 km west of Kangiqsujuaq, more than 500 m from any body of water (Map 6). The site comprises three sectors. The 2001-2002 inventory ranks this site seventh in importance.

The contents of the site K-61 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
12	2 muskegs 1 X 40,000-L reservoir 1 bath 3 water heaters 6 motors	Diesel barrels: 25 empty 10 full: 2000 L >5 with residue Propane tanks: 18 total; 16 full 44 X 20 L of grease 20 X 1 L of grease 2 L of motor oil 1 container with acid 1 X 4 L of paint	5 batteries	150+	75+	75

The inventory sheet for the site K-61 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

The 2001-2002 inventory indicates that the site K-61 seemed to be in use by Canadian Royalties, under the name Expo Camp. As of the visit in July 2007, the original buildings had been demolished or renovated. Sector 1 remained unchanged. It included reservoirs, barrels and debris located near the original buildings as well as the same types of material removed from sites requiring intermediate and minor clean-up on the Canadian Royalties property. This material was to be removed from the site.

Work Performed

The 2007 October report by the KRG states that Canadian Royalties was continuing to implement its clean-up plan and was expected to remove all the barrels by 2009 (KRG, 2007b). Up until July 2007, no biological treatment had been performed on 75 m² of hydrocarbon contaminated soil (KRG, 2007b).

According to the 2009 KRG report, Canadian Royalties started clean-up at the site K-61 in 2006, removing from the site a certain number of barrels, metal debris and non-hazardous waste, as well as a muskeg. In 2009, Canadian Royalties continued its clean-up work, removing from the site the remaining barrels and waste, as well as 75 m² of hydrocarbon contaminated soil (KRG, 2009).

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site K-61 is complete.

WB-3

Description

The abandoned mineral exploration site WB-3 (61°29.41' N, 72°18'09' W) is located on the shore of Lake Qulusuttalik, roughly 22 km southwest of Kangiqsujuaq (Map 6). The site comprises one sector. The 2001-2002 inventory ranks this site tenth in importance.

The 2007 follow-up inventory indicates that, overall, the site matched the description prepared during the 2001-2002 inventory.

The contents of the site WB-3 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
0	1 round wooden base covered with aluminium	Diesel barrels: 76 empty 9 with residue: 675 L Propane tanks: 1 empty	0	20+	5+	2,5

The inventory sheet for the site WB-3 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

The clean-up of this site was carried out during the 2008 and 2009 summer seasons. In July 2008, the work involved collecting and cutting up all the empty barrels (some had to be emptied), burning all the combustible material (20 m³) and transporting waste by helicopter to a temporary storage site at Kangiqsujuaq. At the site, only some metal sheeting and a few metal rods remained to be transported by snowmobile (KRG, 2008).

The Northern village of Kangiqsujuaq was responsible for supplying labourers. Xstrata Nickel provided an in-kind contribution through the use of the helicopter (KRG, 2008).

During the clean-up work carried out in 2008 at the site WB-3, the Radio-Canada journalist Francis Labbé filmed the activity for a news report he was preparing. This was Mr. Labbé's third visit to abandoned mineral exploration sites in three consecutive years. The report was broadcast in December of 2008 on Radio-Canada television (KRG, 2008).

In September 2009, the remaining waste (barrels filled with metal debris, sheeting and rods) was transported by helicopter to a temporary storage site at Kangiqsujaq to be loaded into a shipping container with all the material removed from the site during clean-up work in 2008. It was planned that the container would be transported to the south in 2010. In 2009, the site contained only core samples on stands as well as a round wooden platform. The clean-up of this site is considered complete (KRG, 2009).

The Northern Village of Kangiqsujaq contributed to the clean-up of the site by supplying labourers to do the work. (KRG, 2009).

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site WB-3 is complete. Only a round wooden platform, wood debris and a few metal rods remain. Photographs of the site before and after clean-up work appear in Appendix 4.

Salluit Sector

KV-1

Description

The abandoned mineral exploration site KV-1 (61°25.64' N, 76°45.46' W) is located on the shore of a lake, roughly 100 km southwest of Salluit (Map 6). The site comprises two sectors. The 2001-2002 inventory ranks this site 14th in importance.

The 2007 follow-up inventory indicates that the site matched the description prepared during the 2001-2002 inventory. Roughly 23 barrels were scattered around the site and on the opposite shore of the lake and 15 crushed barrels and two dumpsites were still present.

The contents of the site KV-1 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transfor- mers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Conta- mina- ted soil (m²)
0	1 water heater	Diesel barrels: 28 empty 1 with residue: 50 L	0	10+	5+	2

The inventory sheet for the site KV-1 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

Clean-up of the site KV-1 has not yet been started. The work to be carried out is described in section 6.8 of this report.

It was not possible to visit the site in September 2011 due to poor weather conditions.

SAL-1

Description

The abandoned mineral exploration site SAL-1 (61°31.14' N, 74°53.01' W) is located next to Lake Nuvilik, roughly 90 km south-southeast of Salluit (Map 6). The site comprises one sector. The 2001-2002 inventory ranks this site 18th in importance.

The 2007 follow-up inventory indicates that the site matched the description prepared during the 2001-2002 inventory.

The contents of the site SAL-1 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
6	0	Diesel barrels: 336 empty Propane tanks: 15 empty 6 X 40-L of aviation oil 3 X 1-L of aviation oil	2 batteries	50+	10+	0

The inventory sheet for the site SAL-1 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs.

Work Performed

Clean-up work was carried out at the site SAL-1 in August 2008 and September 2009. In 2008, the work involved burning combustible material and six wooden buildings, gathering about 300 barrels and, as required, transferring their contents, as well as collecting hazardous material into a single location (KRG, 2009).

From September 7 to 9, 2009, all the waste was removed from the site by helicopter and transported to a temporary storage site at the Goldbrook Ventures' Bélanger Camp. Empty barrels were crushed and stacked. Subsequently, the waste was transported to a temporary storage site at Salluit and loaded into three shipping containers in preparation for their transportation to the south by ship in 2010 (KRG, 2009).

The Northern villages of Kangiqsujaq and Salluit contributed to the clean-up of the site by supplying labourers to do the work. Goldbrook Ventures, and in particular the team at the Bélanger Camp, contributed to the clean-up work by providing accommodations and meals for the workers and by permitting the use of two helicopters to transport the waste to the camp and a Twin Otter aircraft to transfer the waste to Salluit. Clean-up work at this site is now complete (KRG, 2009).

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site SAL-1 is complete. Only a few sheets of plywood and wood debris remain. Photographs of the site before and after clean-up work appear in Appendix 4.

SW-27

Description

The abandoned mineral exploration site SW-27 (61°28.76' N, 76°22.93' W) is located roughly 90 km south-southwest of Salluit, far from any body of water (Map 6). The site covers 0.2 km² and comprises four sectors. The 2001-2002 inventory ranks this site 12th in importance.

The 2007 follow-up inventory indicates that the site matched the description prepared during the 2001-2002 inventory. Of all the abandoned mineral exploration sites still requiring clean-up, the site SW-27 contains the greatest quantity of hydrocarbon residue and residual material.

The contents of the site SW-27 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transfor- mers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Conta- mina- ted soil (m²)
1 base	1 muskeg 1 tractor 1 trailer	Diesel barrels: 77 empty 6 full: 1200 L 8 with residue: 450 L Propane tanks: 1 with residue 9 pails of grease: 260 L ~40 L of motor oil 6 L of aviation oil	1 battery	20+	15+	2,5

The inventory sheet for the site SW-27 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

Clean-up of the site SW-27 has not yet been started. The work to be carried out is described in section 6.8 of this report.

It was not possible to visit the site in September 2011 due to poor weather conditions.

SW-34

Description

The abandoned mineral exploration site SW-34 (61°34.90' N, 74°28.12' W) is located next to Lake Esker, 90 km southeast of Salluit. The site comprises one sector. The 2001-2002 inventory ranks this site second in importance.

The 2007 follow-up inventory notes that the north and east shores of Lake Esker (Xstrata Nickel property) seemed to have been omitted from the 2001-2002 inventory, which focused on the main site located on Goldbrook Ventures property. In 2007, 175 x 205-L barrels, five 20-L barrels, three propane tanks and not less than ten rusting barrels were noted around the lake and on its islands (KRG, 2007b).

The contents of the site SW-34 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
1 base	0	Diesel barrels: large: 1220 empty medium: 14 empty small: 260 empty small: with residue (40 L) Propane tanks: 42 empty 16 grease pails: empty 1 bottle: ~250 mL acid 1 bottle with powder	14 batteries	25+	30+	90

The inventory sheet for the site SW-34 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

In August 2007, the KRG undertook the first phase of clean-up work at the site SW-34, which partially overlaps the Xstrata Nickel and Goldbrook Ventures properties. At this time, 180 barrels and three propane tanks from around the lake and its islands (Xstrata Nickel property) were gathered in a single location (61°35.046' N, 74°27.494' W) by helicopter and ATV in preparation for their eventual removal. Residue diesel, aviation gasoline and naphtha were transferred into 19 undamaged barrels in preparation for their transportation to the Raglan mine for treatment. Xstrata Nickel Exploration based at the Raglan mine provided an in-kind contribution to this first phase of clean-up work. Clean-up work was mostly concentrated on the Xstrata Nickel property, although some work was carried out on the Goldbrook Ventures property (KRG, 2007b).

On the Goldbrook Ventures property (i.e. the site SW-34 as indicated in the 2001-2002 inventory), roughly 200 barrels (the majority of which were empty) were gathered with another group of roughly 500 barrels. The hydrocarbon residue in the 800 barrels was estimated to be equivalent to between 60 and 100 barrels. Finally, 20 batteries and 20 oil filters were removed from the site by helicopter and delivered to the environmental services for the Raglan mine (KRG, 2007b).

In August 2008, close to 3000 L of hydrocarbon residue was transferred into undamaged barrels. Of the 700 barrels at the site SW-34, 520 were crushed and stacked with propane tanks along the edge of the lake. Metal debris (70 m³) was gathered into 25 piles. Combustible material was gathered together and burned. The waste from the former dumpsite was placed in not less than 50 gunny sacks in preparation for transportation (KRG, 2008).

On September 8, 2009, the site was inspected. It contained roughly 400 crushed barrels, 20 empty propane tanks, 300 uncrushed barrels and 20 full barrels gathered together near the lake, plus more than ten piles of metal debris at different locations. Other barrels, including close to 100 very rusted barrels and 19 full barrels in good condition were collected together along the edge of the lake, roughly one kilometre east of the main site. On September 9, 160 crushed barrels were transported by helicopter to the Xstrata Nickel road, near the mining site close to East Lake. They were subsequently loaded into shipping containers. The work carried out in September 2009 was interrupted due to helicopter technical problems (KRG, 2009).

During the 2008–2009 winter, Xstrata Nickel delivered two empty shipping containers to its camp at East Lake, roughly 10 mi. from the site SW-34. In August 2010, the clean-up work involved transporting the remaining roughly 300 crushed barrels, as well as 70 propane, oxygen and acetylene tanks to the shipping containers. Roughly 20,000 lbs of metal was removed from the site. Xstrata Nickel planned to remove the shipping containers from the area during the winter of 2010–2011. Roughly 500 uncrushed and several piles of metal debris were still at the site (KRG, 2011).

The Northern villages of Kangiqsujuaq and Salluit contributed to the clean-up of the site by supplying labourers to do the work. In August 2008, Xstrata Nickel provided transportation and accommodations for workers, as well as a barrel crusher and other on-site help. In September 2009, Goldbrook Ventures, and in particular the team at the Bélanger Camp, contributed to the clean-up work by providing accommodations and meals for the workers and the helicopter pilot.

The work carried out at this site in the summer of 2011 is described in section 3.1 of this report. The work that remains to be carried out is described in section 6.7.

It was not possible to inspect the site in September 2011 due to heavy fog.

SW-42

Description

The abandoned mineral exploration site SW-42 (61°23.92' N, 74°34.40' W) is located next to Lake Beuparlant, roughly 100 km south-southeast of Salluit (Map 6). The site comprises one sector. The 2001-2002 inventory ranks this site 13th in importance.

The 2007 follow-up inventory indicates that the site matches the description prepared during the 2001-2002 inventory, except with regards to a pile of 1- to 20-L metal containers located only a few metres from the lake.

The contents of the site SW-42 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transformers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Contaminated soil (m²)
1	0	Diesel barrels: 74 empty 7 with residue: 700 L 3 X 4-L of grease 200 mL insect repellent	0	10+	10+	12

The inventory sheet for the site SW-42 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

In 2011, this site was cleaned up by Canadian Royalties. Refer to section 3.1 in this report.

The inspection carried out by the KRG in September 2011 confirmed that the clean-up of the site SW-42 is complete. Only a few remnants of the old building on the ground and some barrels remain. Photographs of the site before and after clean-up work appear in Appendix 4.

WB-9

Description

The abandoned mineral exploration site WB-9 (61°27.35' N, 74°33.22" W) is located next to Lake Kenty, roughly 100 km south-southeast of Salluit (Map 6). The site comprises one sector. The 2001-2002 inventory ranks this site fifth in importance.

The 2001-2002 inventory (KRG, 2003) does not present the complete inventory of the site since it seemed to be still used by Falconbridge Exploration at the time of the 2001 visit. According to the 2007 follow-up

inventory (KRG, 2007b), Falconbridge removed barrels from the site in 1998 and the camp was sold to Jean-Marie Arseneault around 2002. The KRG tried to confirm this information with Jean-Marie Arseneault who stated that he was not the owner of the camp. At the time of the 2007 follow-up inventory, another camp had been set up on the opposite shore of Lake Kenty.

The inventory of the site prepared in 2007 appears in Appendix 3. The site possesses 10 buildings and three small wooden cabins. The condition of the facilities has deteriorated since the 2001-2002 inventory. The site contains a large quantity of non-hazardous waste, such as bed frames, rotten mattresses, a stove-oven, a recent washing machine, rock samples, etc. In total, there are 20 barrels stacked close to the buildings. The barrels were not inspected systematically, but they may contain hydrocarbon residue. The soil contamination observed in 2001 underneath two barrels is still present. Refer to the 2001 inventory sheet in Appendix 3 of this report. As well, within a one-kilometre radius of the camp, 60 barrels stacked in three groups were observed, although their contents were not verified. The list of hazardous material and other items observed at the site WB-9 in July 2007 is presented in the following table (KRG, 2007b):

Product	Identification UN	Quantity
battery	2794	1
paint	1263	2 x 4 L + 1 x 20 L
motor oil	1202	8 x 4 L
propane	1978	9
grease	-	2 x 20 L
jet-B fuel	1203	2 x 205 L
gasoline	1203	20 L
fire extinguishers	-	3
anti-freeze	-	4 L
calcium chlorite	-	a few bags
oil filter	-	15

The inventory sheet for the site WB-9 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis. The 2007 follow-up inventory that lists the detailed contents of the site also appears in Appendix 3.

Work Performed

In order to proceed with clean-up work, the owner of the mining title or the camp will need to be identified. The work to be carried out at this site is described in section 6.8 of this report.

Umiujaq Sector

WHA-1

Description

The abandoned mineral exploration site WHA-1 (56°24.06' N, 75°59.40' W) is located on the shore of a lake, roughly 40 km southwest of Umiujaq (Map 7). The site comprises a 120 m x 25 m sector. The 2001-2002 inventory ranks this site 17th in importance.

This site was not visited in 2007 for logistical reasons and due to its remoteness.

The contents of the site WHA-1 are described as follows in the 2001-2002 inventory:

Buildings (no.)	Heavy equipment (no.)	Hydrocarbons and other products (qty)	Batteries and transform- ers (no.)	Pipes/ core trays/ wood (m³)	Debris (m³)	Conta- mina- ted soil (m²)
9	0	Diesel barrels: 4 empty 1 full: 200 L 3 with residue: ~30 L 16 small (40 L) empty 4 small with residue: ~50 L 10 cans of deodorant cleaner (empty?)	0	50+	5+	6

The inventory sheet for the site WHA-1 in the 2001-2002 inventory (KRG, 2003), which appears in Appendix 3 of this report, provides a detailed description of the site, including photographs and the results of contaminated soil analysis.

Work Performed

In September 2010, waste and barrels were removed from the site by helicopter and stored temporarily in a shipping container at Umiujaq in preparation for transportation to specialized facilities in the south. Combustible material was burned on site (KRG, 2011).

The Northern Village of Umiujaq contributed to the clean-up of the site by supplying labourers to do the work. Clean-up work at this site is now considered complete (KRG, 2011).

It was not possible to visit the site in September 2011 due to its remoteness. Photographs of the site before clean-up work and during 2010 clean-up work appear in Appendix 4.

4.2 Overview of clean-up work from 2005 to 2011

The quantities of waste removed from the abandoned mineral exploration sites as part of the work carried out between 2005 and 2011 are described in Table 4. Specifically, more than 250 propane tanks, 14 x 4,400-L reservoirs, 7,700 barrels, 23,100 L of hydrocarbons, 2,400 L of motor oil, 1,100 L of grease, three transformers, 70 batteries, 1,900 m³ of various kinds of debris were removed from the sites and transported to waste disposal sites or specialized recovery and recycling facilities.

Table 4 Quantities of Waste Removed from the 18 Abandoned Mineral Exploration Sites Classified as Requiring Major Clean-Up Work between 2005 and 2011

Site Sector/	Buildings burned or demolished (no.)	Equipment (no.)	Propane tanks (no.)	Reservoirs (no.)	Barrels (no.)	Diesel or other fuel (L)	Motor oil (L)	Grease	Other hazardous material	Transformers (T) or batteries (B) (no.)	Pipes, core trays, wood (m ³)	Debris (m ³)
Kawawachikamach												
KAW-35*	19	1 muskeg + various	0	0	1000	4000	0	0	Acid, solvents, paint, oil filters, extinguishers	15 B	500+	100+
KAW-45	5	0	0	0	12	30	0	0	Naptha	0	15+	5+
Tasiujaq												
PJ-1	3 + 5 platforms	30	80	10	403	5100	54	5 kg	Paint, antifreeze, extinguishers	2 T 20 B	150+	200+
TQ-1	0	1 snowmobile	6	0	30	500	0	0	0	1 B	20+	40+
TQ-4	2	1 drill	8	0	156	200	0	0	0	0	10+	10+
Aupaluk												
PJ-10	1 platform	0	15	1	74	1400	280	40 L	0	1 B	50+	25+
PJ-17	11	11	40	0	285	500	2000	1 pail	0	1 T; 6 B	75+	100+
Kangirsuk												
TW	2 platforms	1 pipe threader	11	0	83	1230	0	110 L 2 kg	0	0	30+	20+
Kangiqsujuq												
K-28	1 tent	1 motor	15	2	70	2000	0	0	CaCl ₂	0	30+	25+
K-61	12	11	18	1	3600	5000	2	900 L	Acid, paint	5 B	150+	75+
WB-3	0	0	1	0	85	675	0	0	0	0	20+	5+
Salluit												
KV-1**	-	-	-	-	-	-	-	-	-	-	-	-
SAL-1	6	0	15	0	336	1000	27	0	0	4 B	50+	10+
SW-27**												
SW-34*	1 platform	0	42	0	1500	1000	0	0	Acid, powder, oil filters	20 B	50+	70+
SW-42	1	0	0	0	45	1000	12	0	0	0	10+	10+
WB-9**	-	-	-	-	-	-	-	-	-	-	-	-
Umiujaq												
WHA-1	9	0	0	0	28	280	0	0	Cleaners	0	50+	5+
TOTAL	-	-	251	14	7 707	23 915	2 375	>1 075 L	-	3 T; 72 B	1 210+	700+

* Clean-up work still to be completed; ** No clean-up work has yet been carried out.

4.3 Expenses from 2007 to 2011

Table 5 shows the expenses incurred for site clean-up work from 2007 to 2011.

Table 5 Expenses for the Clean-Up of Abandoned Mineral Exploration Sites Classified as requiring Major Clean-Up Work between 2007 and 2011

KRG EXPENSES	2007	2008	2009	2010	2011	Total
Travel and accommodation	\$100,307	\$53,096	\$205,229	\$266,327	\$231,733	\$856,732
General contracts	\$77,721	\$28,815	\$306,752	\$235,844	\$334,021	\$983,153
Salaries and fringe benefits	\$38,153	\$2,018	\$3,698	\$0	\$0	\$43,869
Purchase of materials	\$36,209	\$28,555	\$23,731	\$35,495	\$9,935	\$133,925
Administrative costs	\$0	\$0	\$24,769	\$1,040	\$23,377	\$49,186
Administrative charges	\$13,000	\$120,000	\$180,000	\$89,000	\$100,000	\$502,000
TOTAL	\$265,390	\$232,484	\$744,179	\$627,706	\$699,106	\$2,568,865

Source: KRG financial statements

5 SITES REQUIRING INTERMEDIATE CLEAN-UP

The 2001-2002 inventory (KRG, 2003) classified 27 sites as requiring intermediate clean-up according to the material and equipment present. These sites are divided equally between the Labrador Trough (14 sites) and the Ungava Trough (13 sites).

In September 2011, visits to sites requiring intermediate clean-up were conducted in every sector (Kawawachikamach, Tasiujaq, Aupaluk, Kangirsuk, Kangiqsujuaq and Salluit), except for the Umiujaq sector (site GW-8). The goal was to update the results of the 2001-2002 inventory and assess the extent of work to be carried out in the coming years. This section provides descriptions of these sites. As priority has to date been given to work at abandoned mineral exploration sites requiring major clean-up (refer to section 4 of this report for details), work has not yet been organized systematically at the sites requiring intermediate clean-up. Nonetheless, some intermediate sites were cleaned by mining companies when these sites were located on or close to current activities (mining titles).

5.1 Site descriptions

This section describes the state of each of the 27 sites requiring intermediate clean-up included in the 2001-2002 inventory (26 of which were visited between September 15 and 19, 2011), plus four new sites identified in September 2011 and another site not included in the 2001-2002 inventory that was cleaned up in the Aupaluk sector (site PJ-18). The site descriptions integrate the results of the 2001-2002 inventory and the September 2011 visits. The maps in Appendix 1 show the locations of the abandoned mineral exploration sites and Appendix 5 contains photographs.

Kawawachikamach Sector

There are three sites requiring intermediate clean-up in the Kawawachikamach sector: KAW-36, KAW-59 and KAW-119 (Map 3). The results of the observations made at these sites are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
KAW-36	23/O8	55°15.02'	66°09.46'	32 barrels, 1 wooden platform, plastic core trays (10 m ³), drilling pipes, wood and metal debris, dumpsite with cans (2 m ³), old toilet.
KAW-59	24B/5	56°17.80'	67°49.00'	4 wooden platforms, 3 barrels, piping, metal debris, 1 stove, 1 tarpaulin, 1 recent canoe. REQUIRED ACTION: Cut down trees and bushes to allow a helicopter to land at the site.
KAW-119	23O/10	57°37.48'	66°45.77'	17 barrels, 2 wooden platforms, 1 stove, 1 isolated barrel on the other side.

Kuujuaq Sector

There is only one site requiring intermediate clean-up in the Kuujuaq sector: P-24F (Map 3). The results of the observations made at this site are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
P-24F (located on an island)	24F/2	57°01.54'	68°53.20'	3 wooden platforms (6 m ³), 44 empty barrels, 1 barrel with ~10 L of diesel, 2 small barrels with ~20 L of diesel (the barrels are in 3 groups), 6 x 1 L aviation-oil containers (empty), 2 empty pails, empty Raid aerosol cans, 2 small propane tanks, 2 stoves, stove piping, cans, shingles (~1 m ³), bottles, beer cans, 1 double toilet, plastic, wood debris (1–2 m ³), aluminium core tray (1–2 m ³). REQUIRED ACTION: Cut down trees and bushes to allow a helicopter to land at the site.

Tasiujaq Sector

There are six sites requiring intermediate clean-up in the Tasiujaq sector (Map 4). The results of the observations made at these sites are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
TA-1	24K/5	58°16.80'	69°50.19'	8 barrels, wood debris, 1 propane tank, 1 wooden bench in the water, 1 blue tarpaulin, 1 small dumpsite.
TA-2 (see TQ-6)	24K/5	58°17.48'	69°56.34'	Core trays, 9 barrels (1 in the water), piping, 2 wood beams, beds, 1 furnace, 2 open barrels, pails, wood debris. Near site TQ-6.
TQ-6 (TA-2 et TQ-6 are the same site)	24K/5	58°17.92'	69°57.37'	Aluminium core trays, open barrels, metal and wood debris, cables, ~45 x 45 gal. barrels, 2 x 10 gal. barrels, metal drilling pipes, aluminium piping, wood beams, propane tanks, furnace, stove piping, tar paper, beds, cans. No contaminated soil observed.
TQ-10	24L/1	58°06.36'	70°09.10'	3 large pliable bladders <10 m from the shore, 1 wooden box containing a pliable bladder, hose, motor with pump, 1 motor, 1 wooden box with debris (piping), 1 barrel with residue (1 eighth full of diesel). NOTE: Shrubs hide debris.
TQ-14	24L/8	58°19.36'	70°14.30'	11 scattered barrels, 4 propane tanks, wood debris of an old cabin. Near the shore.
VP-11	24F/13E	57°48.59'	69°31.75'	Debris of 3 collapsed wooden cabins, 3–4 groups of 5–6 barrels (all empty) a few of which are 5 m from the shore.

Aupaluk Sector

There are three sites requiring intermediate clean-up in the Aupaluk sector (Map 5). The results of the observations made at these sites are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
G-24N04-3	24N/4	59°11.57'	69°49.86'	<i>Sector 1:</i> mineral exploration camp, including: 9 recent yellow barrels (eight x full, 1 x a third full); 1 burned building; 20 burned aluminium pipes (1.5 m long) aluminium piping (3 x 3 m ³); metal debris; 4 beds, 8 barrels (three recent containing diesel; four empty, one very old); 9 empty barrels on the beach; 1 old building (clean). No contamination. Towards sector 2: 2 empty barrels. (This site is close to G-24/N04-3). Dumpsite.

				<p><i>Sector 2:</i> located ~500 m from the stream. 1 empty propane tank; 6 barrels (one full); 1 open barrel containing recent debris (Pepsi cans, paper, etc.); 1 empty Coleman stove tank; scattered metal debris (<0.1 m³). 2 barrels near the shore.</p> <p>50 m towards east: 52 barrels, 9 barrels (one is full, 2 have residue (1 x a quarter full, 1 x a third full); 3 empty barrels; one wood canoe rack; 3 empty barrels; 3 empty propane tanks; 1 Coleman stove; 8 empty barrels 5 m from the water.</p>
PJ-17A	24N/5	59°20.54'	69°43.81'	<p>BEFORE CLEAN-UP: 64 empty barrels on a rocky point 10 m from Hopes Advance Bay (some with residue), propane tanks, batteries, various debris. No contaminated soil. Not far from the site PJ-17.</p> <p>AFTER CLEAN-UP: 1 recent building. This site was cleaned by Cruise North Expeditions in September 2005.</p>
PJ-18				<p>BEFORE CLEAN-UP: Old buildings, scattered debris (3 m³) (metal piping, containers of motor oil, aerosol cans, kerosene stove, various hazardous material), 8 barrels with 3 containing diesel residue, 9 metal antennas.</p> <p>AFTER CLEAN-UP: Site not visited in 2011. This site was cleaned by Cruise North Expeditions in September 2005.</p>
PJ-19	24N/5	59°18.91'	69°46.06'	<p>BEFORE CLEAN-UP: ~60 empty barrels. No soil contamination (2 samples were analyzed).</p> <p>AFTER CLEAN-UP: Only one barrel remains (snowmobile-trail marker) and barrel covers. This site was cleaned in April 2010 by a team of workers from Aupaluk.</p>

Kangirsuk Sector

The site QC-3 requiring intermediate clean-up is in the Kangirsuk sector (Map 5). The results of the observations made at this site are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
QC-3 <i>Inuit camp</i>	25D/8E	60°21.55'	70°09.33'	1 locked cabin, 19 empty barrels, metal piping, 2 empty camping-fuel cans, 2 containers of motor oil. No contaminated soil. 2 dumpsites, 1 blue tarpaulin, 2 gas containers. 7 barrels scattered nearby were observed from the air.

Kangiqsujaq Sector

There are ten sites requiring intermediate clean-up in the Kangiqsujaq sector (Map 6). Among these sites, seven were cleaned by Canadian Royalties (I-32, K-27, K-37, K-49, KAN-1, KAN-2 and KAN-4). The results of the observations made at the sites are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
I-32	35H/10W	61°43.12'	72°54.94'	BEFORE CLEAN-UP: 7 scattered barrels along the shore; 36 standing up; 1 propane tank; 1 dumpsite. Close to Lake Qanartaliup Tasinga, next to the cliff edge. AFTER CLEAN-UP by Canadian Royalties: No debris observed.
K-27	35H/11W	61°36.24'	73°19.89'	BEFORE CLEAN-UP: Near Lake Bombardier: 20 barrels. No contaminated soil observed. AFTER CLEAN-UP by Canadian Royalties: No barrels observed.
K-37	35H/12E	61°31.07'	73°37.44'	BEFORE CLEAN-UP: Wood beams, water heater, 14 barrels, wood debris, wire, metal piping. AFTER CLEAN-UP by Canadian Royalties: No debris observed.
K-49	35H/5	61°28.70'	73°49.70'	BEFORE CLEAN-UP: One plane, ~45 barrels, 14 propane tanks, 1 stove, metal piping, wood debris, cans, metal debris. Debris have been piled up by the community. AFTER CLEAN-UP by Canadian Royalties: No debris observed.

KAN-1	35H/10W	61°32.19'	72°57.90'	<p>BEFORE CLEAN-UP: 1 old helicopter, 12 barrels, 1 old battery. Close to a lake (5 m). Close to the site I-26.</p> <p>AFTER CLEAN-UP by Canadian Royalties: No debris observed.</p>
KAN-2	35H/12E	61°32.51'	73°31.11'	<p>BEFORE CLEAN-UP: 2 tripods, 1 non-hydraulic drill, debris (motor, hoses, winch), ~50 pipes, barrels, drilling sites, dump of calcium salts.</p> <p>AFTER CLEAN-UP by Canadian Royalties: 1 barrel and metal piping. Wood boards.</p>
KAN-4	35H/12	61°30.92'	73°40.18'	<p>BEFORE CLEAN-UP: A pile of ~75 barrels; 2 are set apart and contain diesel.</p> <p>AFTER CLEAN-UP by Canadian Royalties: No barrels observed.</p>
KAN-6 (Confirmed Inuit camp)	35H/5	61°28.94'	73°49.50'	<p>2 buildings. About 1.5 m² of contaminated soil near buildings. Near Lake Vaillant.</p>
KAN-7	35H/12E	61°28.48'	73°49.93'	<p>BEFORE CLEAN-UP: A pile of ~75 barrels, 1 muskeg, 18 propane tanks, 2 oxygen tanks. Other debris (metal rods, piping, wood, etc.). Barrels and debris have been piled up by the community.</p> <p>AFTER CLEAN-UP by Canadian Royalties: Only one muskeg remains on the site.</p>
KAN-10	35H/10	61°31.58'	72°49.30'	<p>BEFORE CLEAN-UP: Collapsed building, 25 barrels, 1 propane tank, metal and wood debris, core trays, barrels in a wetland. ~100m from the lake.</p> <p>10 crushed barrels at 61°31.27' N; 72°48.96' W.</p> <p>OBSERVATIONS: Building collapsed, 25 stacked barrels, debris gathered in a pile near the barrels.</p>

Salluit Sector

There are two sites requiring intermediate clean-up in the Salluit sector (Map 6). The results of the observations made at the sites are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
Lake Parent	35G/11W	61°33.43'	75°10.36'	6 recent barrels (Jet-B): 4 empty; 1 full; 1 half full. 5 perches
SW-24 Barrels observed at:	35G/6E	61°18.75'	75°44.00'	Along the Little Puvirnituk River, about 100 km long. ~233 barrels, 12 propane tanks (125 barrels and 6 propane tanks were seen on the south shore; 108 and 6 propane tanks on the north shore). The geographical coordinates provided are for information purposes only; most barrels are located along the downstream portion of the river, on the south shore.
		61°24.15'	75°06.53'	
		61°23.09'	75°12.19'	
		61°22.94'	75°12.95'	

Umiujaq Sector

There is only one site requiring intermediate clean-up in the Umiujaq sector: GW-8 (Map 7). The results of the observations made at this site are summarized in the following table.

Site no.	Map no.	North latitude	West longitude	Description
GW-8	33M/1	55°05.09'	78°15.51'	25 barrels, 1 snowmobile.

Other sites

During the visits to sites requiring intermediate clean-up in September 2011, four new sites were identified. The results of the observations made at these sites are summarized in the following table (the coordinates are indicated here in a different format (degrees, minutes, seconds with decimals) than previously indicated in this report.

Site no.	North latitude	West longitude	Description
Unknown-1	57°21'13.70"	68°45'31.40"	On the shore of Lake Hérodier, 50 mi. southwest of Kuujjuaq. 5 buildings (one collapsing, one recent). 3 new boats, 5 propane tanks, 8 barrels (stacked). Active site.
Unknown-2	57°48'20.50"	69°29'45.07"	Wood debris, 10 stacked barrels. A second group of roughly 15 barrels. Large piles of hose.
Unknown-3	61°34'23.40"	73°11'59.00"	7 barrels.
Unknown-4	61°34'06.44"	72°45'22.09"	Along the Wakeham River, on the cliff edge. 4 propane tanks, 1 barrel, a long metal rod, wood debris.

5.2 Overview of work at sites requiring intermediate clean-up

The quantities of waste removed from abandoned mineral exploration sites requiring intermediate clean-up are indicated in Table 6.

Table 6 Quantities of Waste Removed by Canadian Royalties from the Abandoned Mineral Exploration Sites Classified as Requiring Intermediate Clean-Up Work

Sector/ Site	Equipment (no.)	Propane tanks (no.)	Barrels (no.)	Diesel or other fuel (L)	Other hazardous material	Batteries (no.)	Debris
I-32	-	1	30	820	-	-	1 dumpsite
K-27	-	-	20	-	-	-	Wood, wiring, piping
K-37	1 water heater	-	14	-	-	-	
K-49	1 plane	14	45	-	-	-	1 stove, piping, wood, wood and metal debris
KAN-1	1 helicopter	-	12	820	-	1	Helicopter debris (metal)
KAN-2	2 tripods, 1 drill, 1 motor, 1 winch	-	-	-	CaCl ₂	-	50 pipes
KAN-4	-	-	75	-	-	-	-
KAN-7*	-	18	75	-	-	-	2 oxygen tanks, metal, wood
KAN-10	-	1	25	-	-	-	Metal and wood, core trays
TOTAL		34	296	1640	-	1	-

* A muskeg remains.

** First phase of clean-up complete (waste collected together). The material will be removed during a second phase.

Note: The quantities of material removed by Ocean Iron Ore Corporation (Appendix 2) have not been inventoried.

6 2012-2017 GENERAL RESPONSE PLAN

6.1 Introduction

The *Agreement Concerning the Clean-up in Nunavik of Abandoned Mineral Exploration Sites Classified as "Major"* was amended to allow for the continuation of rehabilitation work in Nunavik. This funding will be used to complete work at the five remaining sites requiring major clean-up and to carry out work at the sites classified as requiring intermediate clean-up. The 2012–2017 General Response Plan, which is presented below, takes these developments into account. It contains a revised project budget, based on the expertise acquired during the past several years of clean-up work.

The 2012–2017 General Response Plan contains: a description of the clean-up work to be carried out before March 2017; a proposed work schedule; a proposed budget; a description of the needed human resources; a description of work to be carried out by mining companies; and a few details concerning the communication of results.

6.2 Work to Be Carried Out

The work to be completed at the remaining sites (five sites requiring major clean-up and 18 sites requiring intermediate clean-up) can be broken down into the following categories: 1) fieldwork logistics; 2) transportation and disposal of hazardous material; 3) management of combustible non-toxic material; and 4) management of non-combustible non-toxic material. For each of these categories, the work is described below.

Fieldwork Logistics

Summer is the busiest and most productive clean-up season. Workers have easier access to the waste on the sites and a greater number of daylight hours for working. Summer fieldwork involves cutting up and crushing barrels, transferring residue hydrocarbons to undamaged barrels, gathering of hazardous material and other waste, gathering and burning combustible material, and preparing if necessary hazardous material and waste for removal from the site in winter. Table 7 provides a general description of fieldwork logistics for each of the sites including the proposed number of workdays and workers, based on the site description and the scope of the work to be carried out.

Sites may be accessible by land depending on the distance between each site and the nearest villages, as well as the topography. However, generally speaking, workers will access most sites by helicopter or floatplane. Winter work can involve the transportation of waste if the site is close enough to a village and accessible by snowmobile.

Table 7 Fieldwork Logistics, 2012–2017

Site	Workdays	Workers ¹	Worker Community	Transportation	Accommodations
SW-34*	7	5	Salluit/Kangiqsujuq	Helicopter	Exploration camp
SW-27*	7	5	Salluit/Kangiqsujuq	Helicopter	Exploration camp
WB-9*	14	7	Salluit/Kangiqsujuq	Helicopter	Exploration camp
KV-1*	7	5	Salluit/Kangiqsujuq	Helicopter	Exploration camp
KAW-35*	14	7	Kawawachikamach	Helicopter/floatplane	Temporary camp
KAW-36	2	4	Kawawachikamach	Helicopter/floatplane	Village
KAW-59	2	4	Kawawachikamach	Helicopter	Village
KAW-119	2	4	Kawawachikamach	Helicopter	Village
P-24F	5	5	Kuujjuq	Helicopter	Village
TA-1	2	4	Tasiujaq	Helicopter	Village
TA-2/6	2	4	Tasiujaq	Helicopter	Village
TQ-10	5	5	Tasiujaq	Helicopter	Village
TQ-14	2	4	Tasiujaq	Helicopter	Village
VP-11	2	4	Kuujjuq	Helicopter/snowmobile	Temporary camp
G-24N04-3	7	5	Aupaluk	Helicopter	Village
PJ-19	1	2	Aupaluk	Boat	Village
QC-3	2	4	Kangirsuk/Quaqtaq	Twin Otter	Cabin
KAN-10	2	4	Salluit/Kangiqsujuq	Helicopter	Exploration camp
KAN-2	1	4	Salluit/Kangiqsujuq	Helicopter	Exploration camp
KAN-7	1	4	Salluit/Kangiqsujuq	Helicopter	Exploration camp
Parent Lake	1	4	Salluit/Kangiqsujuq	Helicopter	Exploration camp
SW-24	2	4	Salluit/Kangiqsujuq	Helicopter	Exploration camp
GW-8	2	4	Kuujjuarapik	Helicopter/boat	Village

* Site classified as requiring major clean-up work.

¹ Including the field/environmental technician.

Transportation and Disposal of Hazardous Material

Table 8 shows the types of hazardous material found at each site as well as the means of transportation proposed for their removal. All hazardous material will be sent to a recovery facility in the south. The transfer of hazardous materials to undamaged containers, labelling and preparing the material for transportation will be carried out during summer fieldwork.

Table 8 Transportation and Disposal of Hazardous Material, 2012–2017

Site	Means of Transportation		Quantity of hazardous material							
	From site to nearest village	From village to a recovery facility	Diesel (L)	Antifreeze (L)	Oil (L)	Naptha (L)	Grease (L)	Propane (tanks)	Batteries (no.)	Paint (L)
SW-34*	Helicopter/ container	Cargo (Xstrata Nickel)	200							
SW-27*	Helicopter	Cargo (Canadian Royalties)	1,650		20	6	260	1	1	
WB-9*	Helicopter	Cargo	To be determined.							
KV-1*	Helicopter	Cargo (Canadian Royalties)	50							
KAW-35*	Floatplane	Train	Only metal debris remaining							
KAW-36										
KAW-59										
KAW-119										
P-24F	Helicopter	Cargo	30					2		
TA-1	Helicopter	Cargo						1		
TA-2/6	Helicopter	Cargo	1					4		
TQ-10										
TQ-14	Helicopter	Cargo						4		
VP-11	Snowmobile	Cargo								
G-24N04-3	Helicopter	Cargo	3,000					4		
PJ-19										
QC-3										
KAN-10										
KAN-2										
KAN-7										
Parent Lake	Helicopter	Cargo				400				
SW-24	Helicopter	Cargo						30-50		
GW-8										

* Site classified as requiring major clean-up work.

Management of Combustible Non-Toxic Material

Combustible non-toxic material will be burned or left at each site. This material includes wood as well as buildings constructed from wood, aluminium and mineral wool. Pursuant to section 22 of the *Regulation respecting the Quality of the Atmosphere*, a certificate of authorization is required to burn wood, shacks and buildings. Prior to burning any building, all hazardous material must be removed including emergency lights (lead and Ni-Cd battery cells), smoke detectors, fluorescent ballast and fire system accumulators (Ni-Cd battery cells). Non-combustible material must also be removed including asphalt shingles, heating stoves, refrigerators, stove-ovens, bed frames, etc. Material unable to be burned (tin, glass wool, iron and wire) is managed with the other waste at the site. It is possible that hydrocarbons at the sites are used to ignite

combustible material. In this case, a certificate of authorization is required pursuant to section 23 of the *Regulation respecting the Quality of the Atmosphere* for the open-air burning of hydrocarbons. The KRG obtained such a certificate in 2008.

Table 9 Management of Combustible Non-Toxic Material, 2012–2017

Site	Wood debris for burning	Number of buildings	
		To be burned	Keep standing
SW-34*	Debris		
SW-27*	Base		
WB-9*	9 buildings and debris	9	
KV-1*	Debris and base		
KAW-35*	Building and debris	1	
KAW-36	Platform and debris		
KAW-59	4 platforms and canoe		
KAW-119	2 platforms		
P-24F	3 platforms and debris		
TA-1	Debris		
TA-2/6	Beams and debris		
TQ-10	Debris		
TQ-14	Debris		
VP-11	Debris of 3 collapsed buildings		
G-24N04-3	Burned debris, 1 old campsite, canoe rack		If safe.
PJ-19	0		
QC-3	0		
KAN-10	0		
KAN-2	0		
KAN-7	0		
Parent Lake	0		
SW-24	0		
GW-8	0		

* Site classified as requiring major clean-up work.

Management of Non-Combustible Non-Toxic Material

At most of the sites, non-combustible non-toxic material represents the greatest quantity of debris (empty barrels, equipment parts, domestic appliances, wire meshing, etc.) and is the least likely to be harmful to the environment or to jeopardize the health of animals and humans. Notwithstanding, such material adversely affects the appearance of the landscape. For this reason, wherever possible all waste will be removed from the sites. Batteries and oil will be removed from equipment and transported from the sites as hazardous material.

An inventory of this type of material is found in sections 4 and 5, which provide descriptions for each site.

6.3 Work Schedule

Table 10 outlines the proposed work schedule for work at the remaining sites requiring major clean-up and at the sites requiring intermediate clean-up between April 1, 2012, and March 31, 2017. In order to facilitate the work, clean-up work will be carried out, when possible, on sites located in the same sector. The first priority is to complete the rehabilitation work on the five remaining sites requiring major clean-up.

6.4 Budget

Table 11 presents the estimated budget for the clean-up work to be carried out in 2012–2013.

Table 12 presents the overall estimated 2012–2017 budget for rehabilitation work at the remaining sites requiring major clean-up and the sites requiring intermediate clean-up as identified in the 2001-2002 inventory.

Table 10 Work Schedule, 2012-2017

Site	Summer 2012	Winter 2012-2013	Summer 2013	Winter 2013-2014	Summer 2014	Winter 2014-2015	Summer 2015	Winter 2015-2016	Summer 2016	Winter 2016-2017
SW-34*									INSPECTIONS	COMMUNITY TOUR
SW-27*	CR									
WB-9*										
KV-1*	CR									
KAW-35*										
PJ-1 (Aupaluk)										
KAW-36										
KAW-59										
KAW-119										
P-24F										
TA-1										
TA-2										
TQ-6/10										
TQ-14										
VP-11										
G-24N04-3										
PJ-19										
QC-3										
KAN-10	CR									
KAN-2	CR									
KAN-7	CR									
Parent Lake	GV									
SW-24										
GW-8										

*Site nécessitant des travaux de nettoyage de grande envergure

Legend:



Clean-up work by KRG

Clean-up work by KRG, if necessary

CR: Canadian Royalties; GV: Goldbrook Ventures



Clean-up work by mining companies

Winter transportation

Table 11 Budget, 2012-2013

INCOME	
KRG surplus 2011-2012	\$8,791
MRNF income	\$403,402
FRAN income	\$403,402
TOTAL	\$815,594

IN-KIND CONTRIBUTION							
Site	KAW-35	SW-34	PJ-1 (Aupaluk)	KV-1	SW-27	VP-11	Total
Xstrata Nickel		Transportation					\$25,000
Canadian Royalties					To clean		\$80,000
Makivik (NEAS)			Transportation				\$100,000
Jien Nunavik Mining & Exploration Ltd.				To clean	To clean		\$50,000
Goldbrook Ventures							\$80,000
TOTAL	\$0	\$25,000	\$100,000	\$50,000	\$50,000	\$0	\$335,000

EXPENSES							
Site	KAW-35	SW-34	PJ-1 (Aupaluk)	KV-1*	SW-27*	VP-11	Total
Coordinator salary (General Contract)	\$10,000	\$7,000	\$12,000	\$5,000	\$5,000	\$5,000	\$44,000
Technician salary and benefits	\$8,000	\$7,000	\$10,000	\$3,000	\$3,000	\$5,000	\$36,000
Workers salaries	\$40,000	\$30,000	\$50,000	\$0	\$0	\$15,000	\$135,000
Professional/Technical salaries (General Contract)	\$10,000	\$0	\$10,000	\$0	\$0	\$0	\$20,000
Transportation of waste (to south)	\$10,000	\$0	\$100,000	\$0	\$0	\$0	\$110,000
Transportation of material/workers	\$50,000	\$50,000	\$0	\$0	\$0	\$15,000	\$115,000
Disposal of waste (General Contract)	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000
Travel Airfare	\$20,000	\$15,000	\$10,000	\$0	\$0	\$0	\$45,000
Travel Expenses	\$25,000	\$15,000	\$10,000	\$0	\$0	\$0	\$50,000
Material/Equipment	\$15,000	\$15,000	\$15,000	\$0	\$0	\$10,000	\$55,000
Communication and translation	\$200	\$200	\$200	\$200	\$200	\$200	\$1,200
KRG training costs (Human Resources)	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$6,000
Sub-total	\$214,200	\$140,200	\$218,200	\$9,200	\$9,200	\$51,200	\$642,200
Administration (12%)	\$25,704	\$16,824	\$26,184	\$1,104	\$1,104	\$6,144	\$77,064
Poor weather conditions reserve (15%)	\$32,130	\$21,030	\$32,730	\$1,380	\$1,380	\$7,680	\$96,330
TOTAL	\$272,034	\$178,054	\$277,114	\$11,684	\$11,684	\$65,024	\$815,594

Table 12 Overall Estimated Budget, 2012-2017

	YEAR	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	TOTAL
EXPENSES							
Coordinator salary (General Contract)		\$44,000	\$35,000	\$30,000	\$10,000	\$11,000	\$130,000
Technician salary and benefits		\$36,000	\$35,000	\$30,000	\$8,000	\$5,000	\$114,000
Workers salaries		\$135,000	\$125,000	\$95,000	\$30,000	\$0	\$385,000
Professional/Technical salaries (General Contract)		\$20,000	\$0	\$0	\$0	\$0	\$20,000
Transportation of waste (to south)		\$110,000	\$15,000	\$0	\$0	\$0	\$125,000
Transportation of material/workers		\$115,000	\$140,000	\$140,000	\$60,000	\$0	\$455,000
Disposal of waste (General Contract)		\$25,000	\$50,000	\$60,000	\$10,000	\$0	\$145,000
Travel Airfare		\$45,000	\$65,000	\$70,000	\$10,000	\$70,000	\$260,000
Travel Expenses		\$50,000	\$115,000	\$130,000	\$20,000	\$70,000	\$385,000
Material/Equipment		\$55,000	\$65,000	\$65,000	\$10,000	\$10,000	\$205,000
Communication and translation		\$1,200	\$1,200	\$1,200	\$400	\$2,000	\$6,000
KRG training costs (Human Resources)		\$6,000	\$6,000	\$6,000	\$2,000	\$2,000	\$22,000
Sub-total		\$642,200	\$652,200	\$627,200	\$160,400	\$170,000	\$2,252,000
Administration (12%)		\$77,064	\$78,264	\$75,264	\$19,248	\$20,400	\$270,240
Poor weather conditions reserve (15%)		\$96,330	\$97,830	\$94,080	\$24,060	\$25,500	\$337,800
TOTAL		\$815,594	\$828,294	\$796,544	\$203,708	\$215,900	\$2,860,040

6.5 Human Resources

Human resources for the project fall into two categories: 1) KRG employees, which is to say the project coordinator and the environmental and/or field technicians, and 2) local workers.

The project coordinator works full-time on the project from approximately June to December, while the environmental and field technicians work part-time during the summer season and, if necessary, winter season. Experience acquired during previous work suggests that it is absolutely necessary to have one and in some cases two technicians on site to complete clean-up work on schedule and to allow for more coherent logistical planning by the coordinator.

Local workers are hired to work on the project from the communities located closest to each site. This not only creates jobs, but it also contributes to increasing local know-how regarding contaminated site restoration and environmental project management. The Northern villages play a key role in the project by supplying local workers and paying their wages. The wages paid to the workers are subsequently invoiced to the KRG which reimburses all related costs. This cooperation is extremely effective and permits the hiring of individuals who are recognized in their communities. This kind of experience is also highly sought-after by mineral exploration companies for the clean-up of their sites and could therefore lead to future work.

Summer clean-up work requires an environmental or field technician and between four and seven workers at each site. Winter fieldwork, including the transportation of waste by snowmobile and Twin Otter loading and unloading, generally requires four workers and a supervisor.

Field technicians are hired for the clean-up work at each site to ensure professionalism as well as to provide leadership and crucial knowledge regarding the local area and transportation logistics. They also provide a vital link between the coordinator and local workers, as well as reporting on the activities at each site.

Worker safety is also an important issue for those involved in the clean-up of the abandoned mineral exploration sites. All of the sites to be rehabilitated are in isolated locations that cannot easily be reached from nearby villages. In summer, workers are most often transported by helicopter or floatplane. Since the transporter does not remain at the site, emergency planning is important. It is essential that each work team have an emergency plan and adequate communication systems to contact help, if necessary. The combined use of satellite phones and SPOT technology is highly recommended. As well, the use of HF radios is recommended as it permits better communication between pilot and work team and ensures greater safety when transporting equipment and during landings and take-offs.

6.6 Communications

A yearly activity report will be sent to each of the partners involved in the clean-up work. A final report will also be prepared in 2017 to summarize the overall results of the 2012–2017 efforts.

At the end of the project in 2017, a tour of the communities involved in the clean-up project could be organized to present the results of the rehabilitation work. Also, as was the case in 2011, a presentation could be made to the KRG Council.

6.7 Clean-Up Work to Complete

KAW-35

Further to the inspection in September 2011, it was determined that rehabilitation work was not complete at this site. There remain two large and two small piles of scrap metal, a small dumpsite, five metal reservoirs (empty), two transport trailers, and some debris in the water and around the newly constructed dock. There is also a wooden structure located near the water that contains a reservoir, engine parts and pump. The larger wooden structure located at the site will be left as a shelter but will be cleaned. Finally, there is a pipeline (partially covered by a wooden frame) that runs from the lake to an area located near the piles of mine tailings. The pipes will be dismantled and cut into pieces while the wooden frame will be burned on site. Photographs of the material remaining at the site are found in Appendix 6.

With data gathered during the 2011 inspection, the KRG plans to organize work at this site in the summer of 2012. In collaboration with the Naskapi Nation of Kawawachikamach and the Innu Nation of Matimekush-Lac John, a work team will need 7–10 days on site to complete the work. A floatplane or helicopter will transport the waste from the site to Schefferville for transportation by train to Sept-Îles and a recovery facility.

It may be possible to travel to the site during the winter of 2012 to remove the reservoirs by snowmobile since they are on skis. During this time, any remaining debris will be removed using sleds.

SW-34

Work will continue at this site in 2012 as there remain four dumpsites containing rusty cans and metal debris. As in previous years, collaboration with Xstrata Nickel will facilitate the rehabilitation of the site. Normally, the mining company handles the storage and transportation of the debris to a recovery facility in the south and allows the work team to use their camp facilities, located closer to the site than the nearest village.

The KRG will assemble a team of workers from the communities of Salluit and Kangiqsujuaq to undertake several days of work. With the assistance of a helicopter, the work team will move the debris from the site to the shipping containers located nearby. Photographs of the dumpsites and the material remaining at the site are found in Appendix 6.

PJ-1 (Aupaluk)

Although clean-up work at the site PJ-1 is complete, a large quantity of debris and scrap metal is still being stored at Aupaluk. Approximately 400 to 500 drums need to be crushed and placed in a shipping container for transportation by ship. The crusher that was used at the site SW-34 was transported to Aupaluk by ship for this purpose in 2011.

Five large reservoirs that were cut in half and used as sleds to transport waste during the winters of 2009 and 2010 are also being stored at Aupaluk. All but one of the half reservoirs are filled with metal debris. There are approximately 150 steel rods, several metal sheets, approximately 10 large rolls of heavy fencing, pieces of dismantled equipment and random metal debris stored next to the municipal garage. There are also four large white bags containing smaller pieces of metal at the same location. As well, six more large white bags are located at the local disposal site and contain contaminated soil removed from the site PJ-10. Photographs of some of the material stored at Aupaluk are found in Appendix 6.

This material will need to be prepared for transportation by binding similar items together using a metal strapper. Larger items, such as engines and equipment parts, will need to be grouped together and properly labelled for transportation. The hazardous material will need to be separated and stored in a designated container.

The KRG will organize a team at Aupaluk to carry out this work in the summer of 2012 so that the waste can be transported by ship in the fall.

6.8 Collaborative Clean-up Work

The following section describes work to be carried out in collaboration with mining companies that are active in the region.

KV-1

Roughly 23 barrels are scattered around the site and on the opposite shore of the lake. As well, 15 compacted barrels and two dumpsites are still present.

As this site is located near the site SW-27, the two sites should be cleaned-up at the same time to make effective use of the work team and helicopter. Work will consist of gathering barrels and other debris for removal from the site, burning combustible materials on site, and inspecting the dumpsites. Photographs of this site are found in Appendix 6.

SW-27

Of all the abandoned mineral exploration sites still requiring clean-up, site SW-27 contains the greatest quantities of residual material and hydrocarbons residue: roughly 1650 L of diesel, 260 L of grease and 26 L of oil. Although covering only 2.5 m², hydrocarbon soil contamination is still very evident. Open or damaged barrels of grease observed during 2001-2002 inventory work are still present. Photographs of this site are found in Appendix 6.

This site is located near a Canadian Royalties property. Collaboration with this company would help clean-up efforts at sites SW-27 and KV-1.

WB-9

This site is both an abandoned mineral exploration site and an outfitter camp. In 2007, a property owned by Golden Valley Mines Inc. was identified on the opposite shore of Lake Kenty. A Goldbrook Ventures property also borders the site WB-9.

The nine wooden structures will be emptied, stripped of metal and non-hazardous waste, and burned on site. The barrels and other debris will be transported by helicopter to a temporary storage location. Hazardous material, if any, will be transported to a recycling facility in the south. Photographs of the debris and buildings present at the site are found in Appendix 6.

6.9 Conclusion

The 2012–2017 General Response Plan identifies the rehabilitation work to be carried out at the remaining sites (five requiring major clean-up and 18 requiring intermediate clean-up). In 2012–2013, priority will be given to completing the work on the five sites requiring major clean-up, specifically KAW-35, WB-9, KV-1, SW-27 and SW-34, as well as preparing waste at Aupaluk for transportation by ship. It is anticipated that the clean-up work will be done in collaboration with mining companies that are active in the concerned areas. In 2013 and 2014, work will focus on completing rehabilitation work at blocks of closely located sites requiring intermediate clean-up. In 2015, work will consist of completing work at any remaining sites that were not rehabilitated in the preceding years. Finally, 2016 has been set aside for final inspections of all the sites where work was carried out and for the development of a presentation to be made to communities involved in the project. The General Response Plan will be revised on the completion of work each year.

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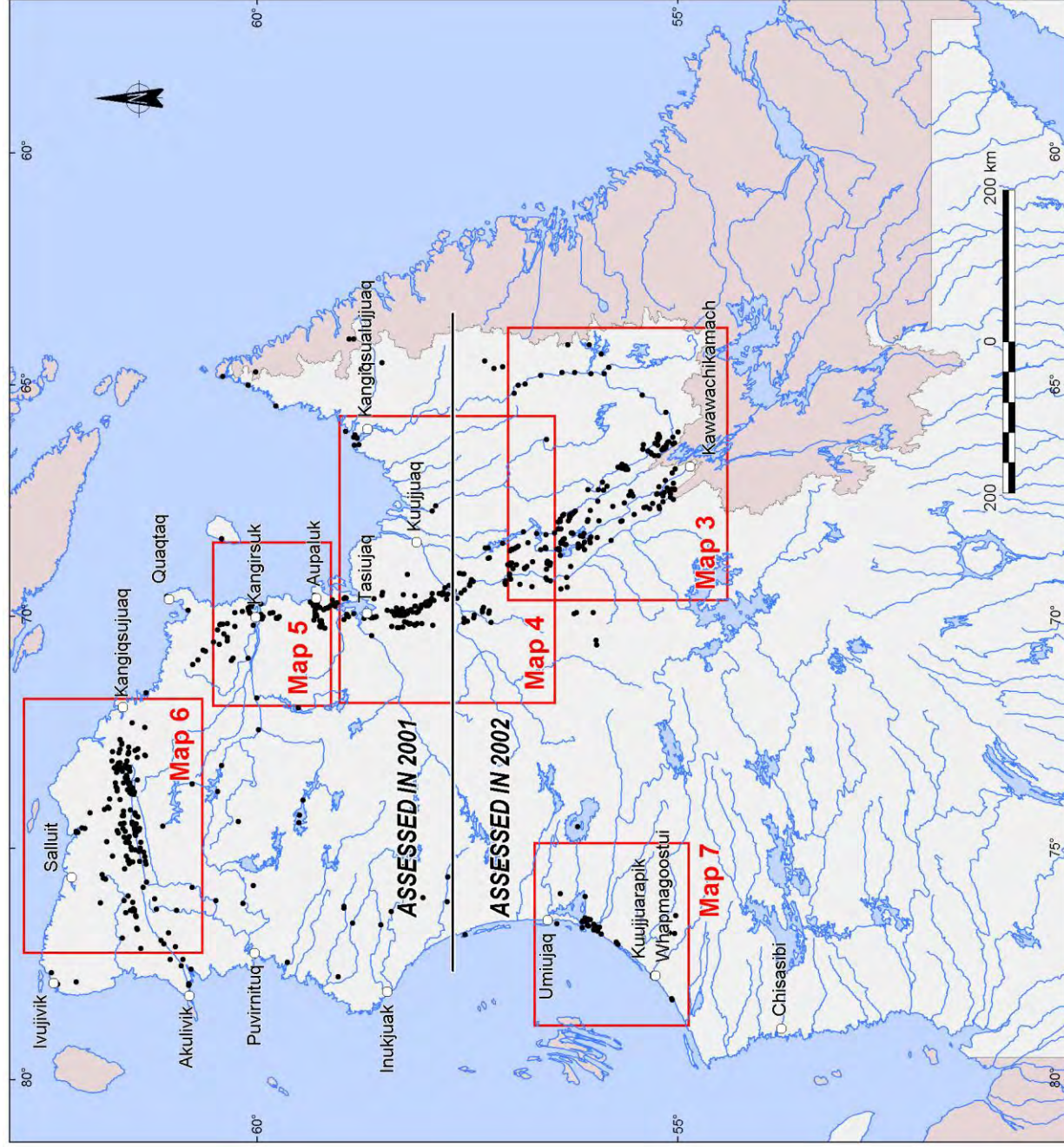
APPENDICES

APPENDIX 1

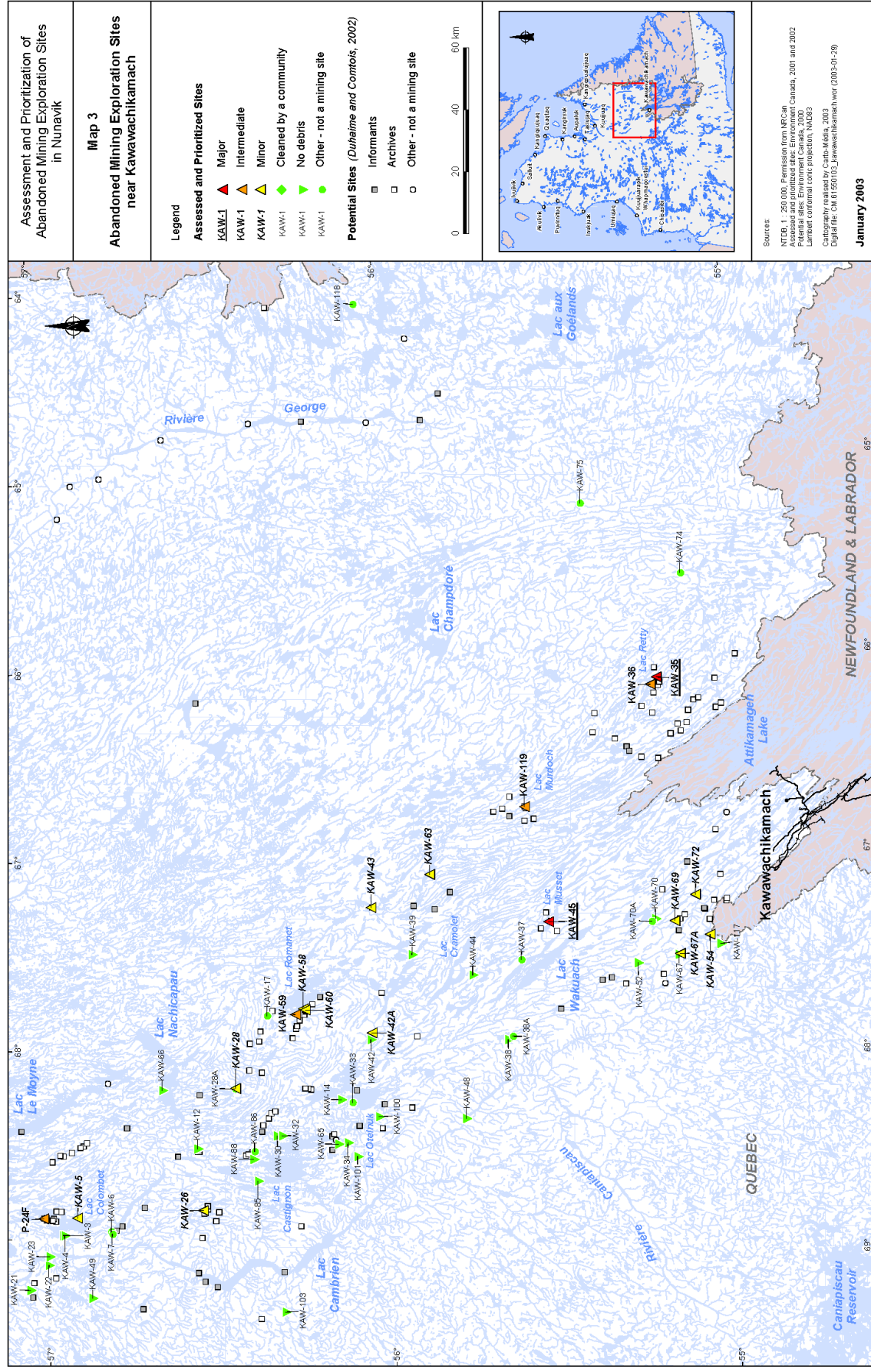
Maps Showing the Locations
of Abandoned Mineral Exploration Sites in Nunavik

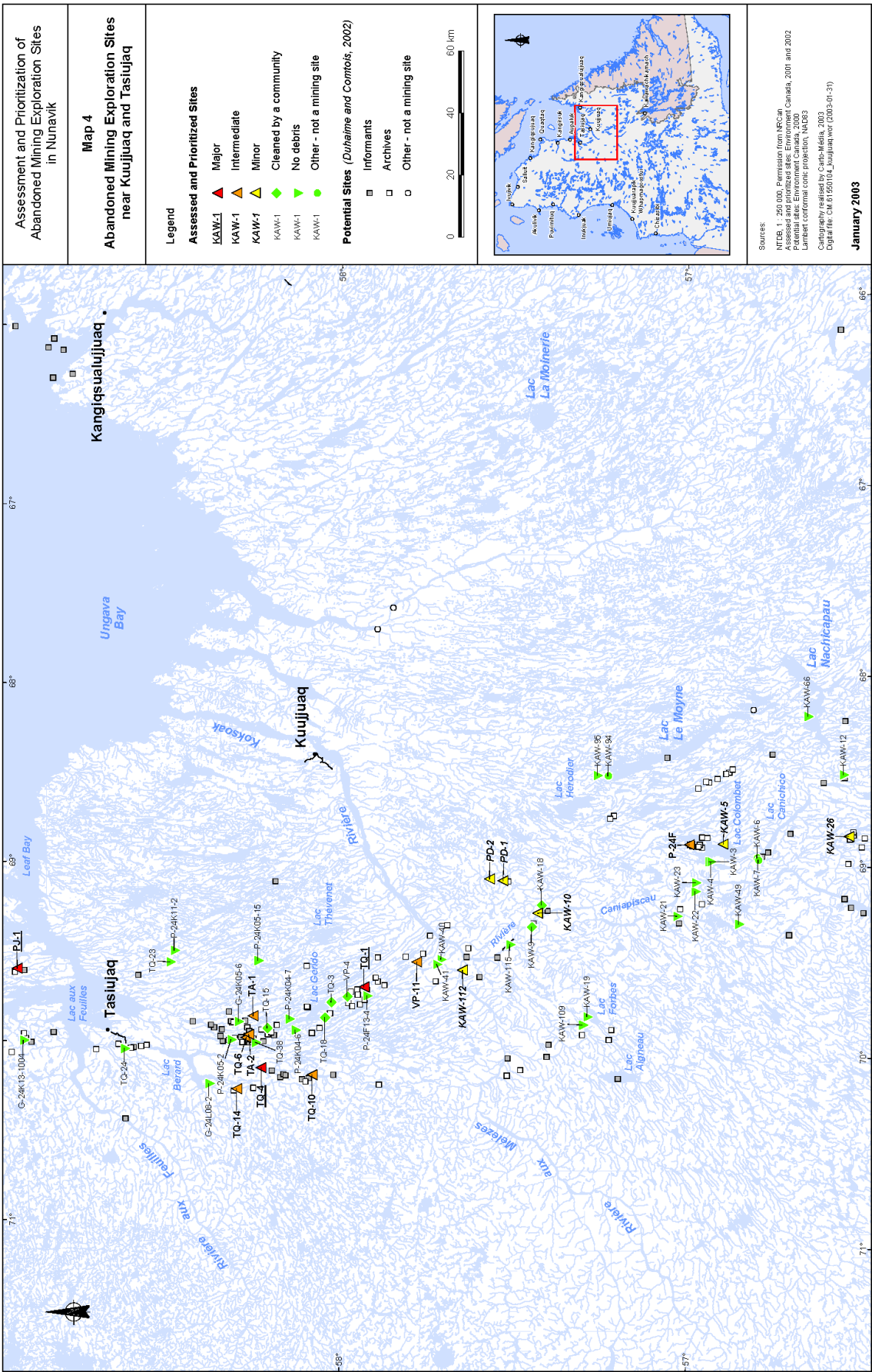
LIST OF MAPS

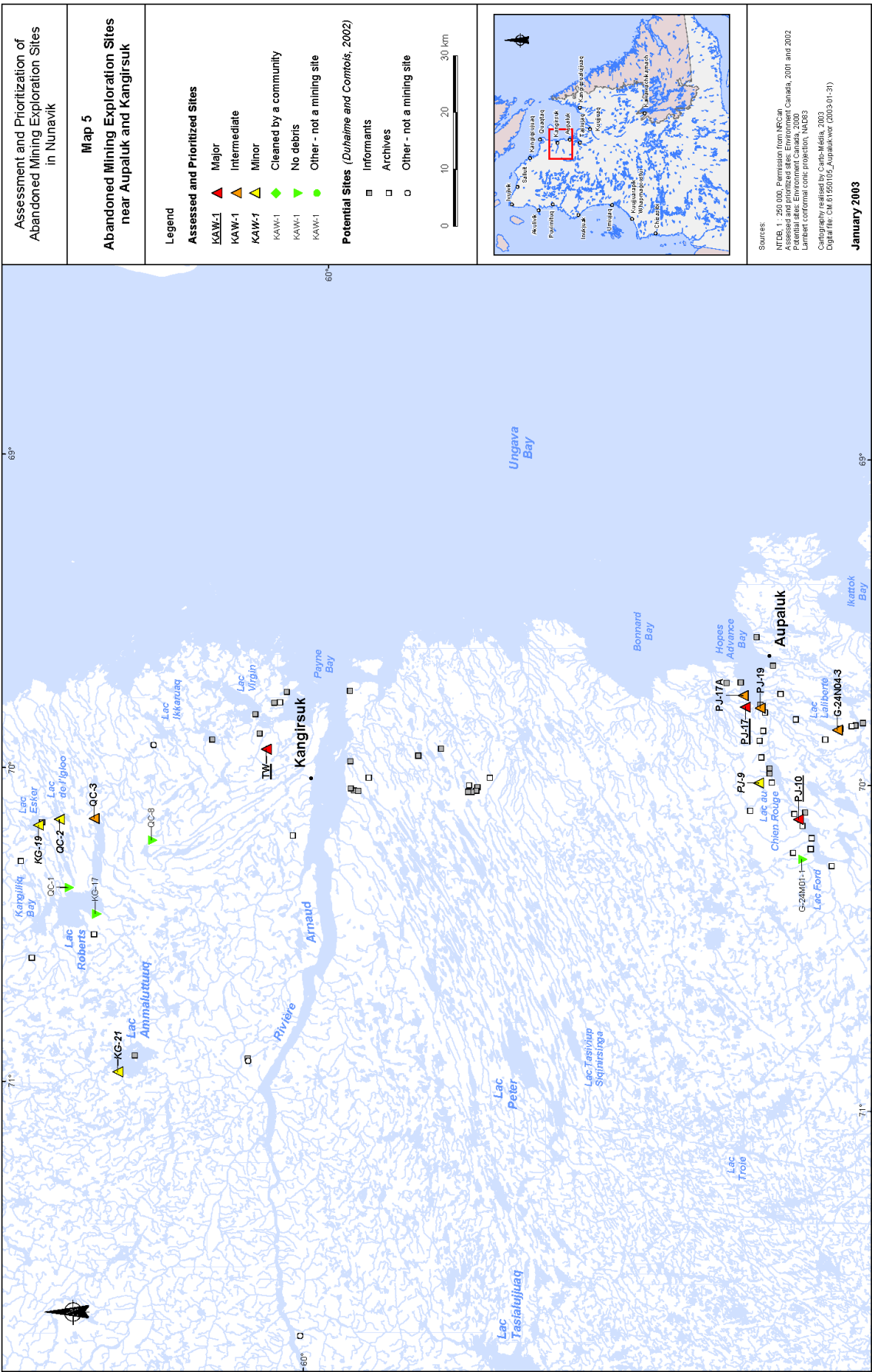
Map 2	Map Index.....	3
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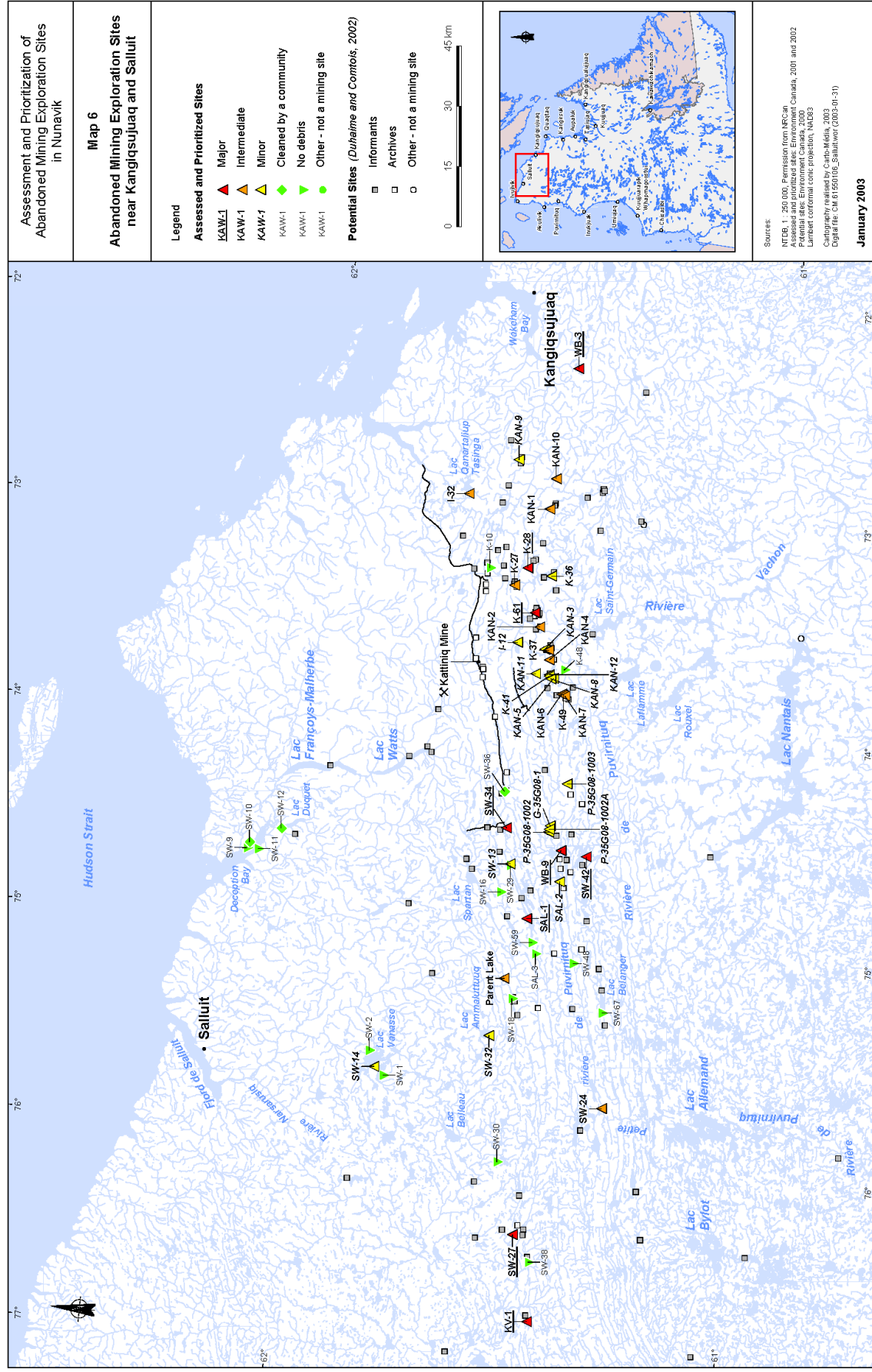


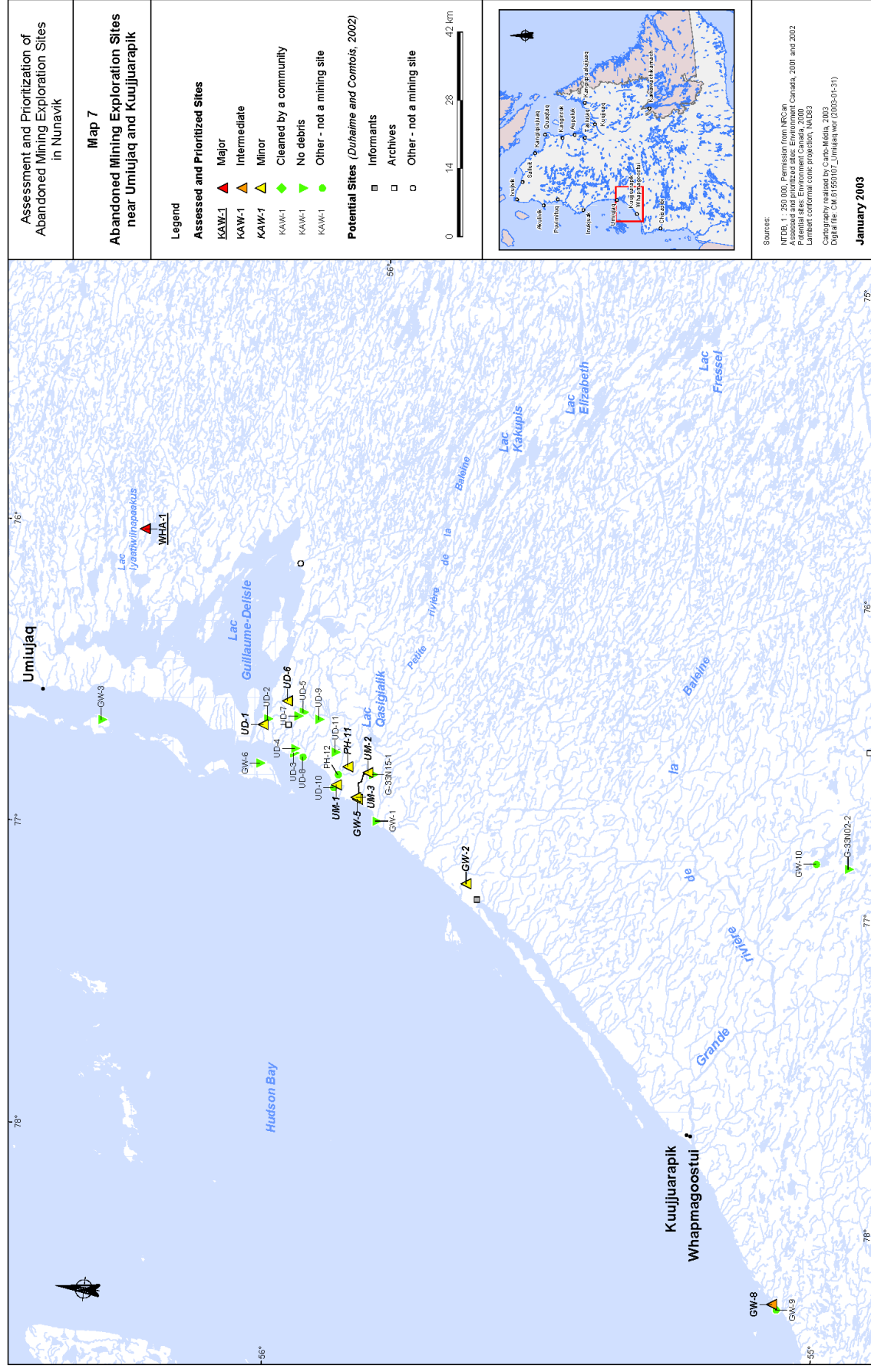
Map 2 Map Index

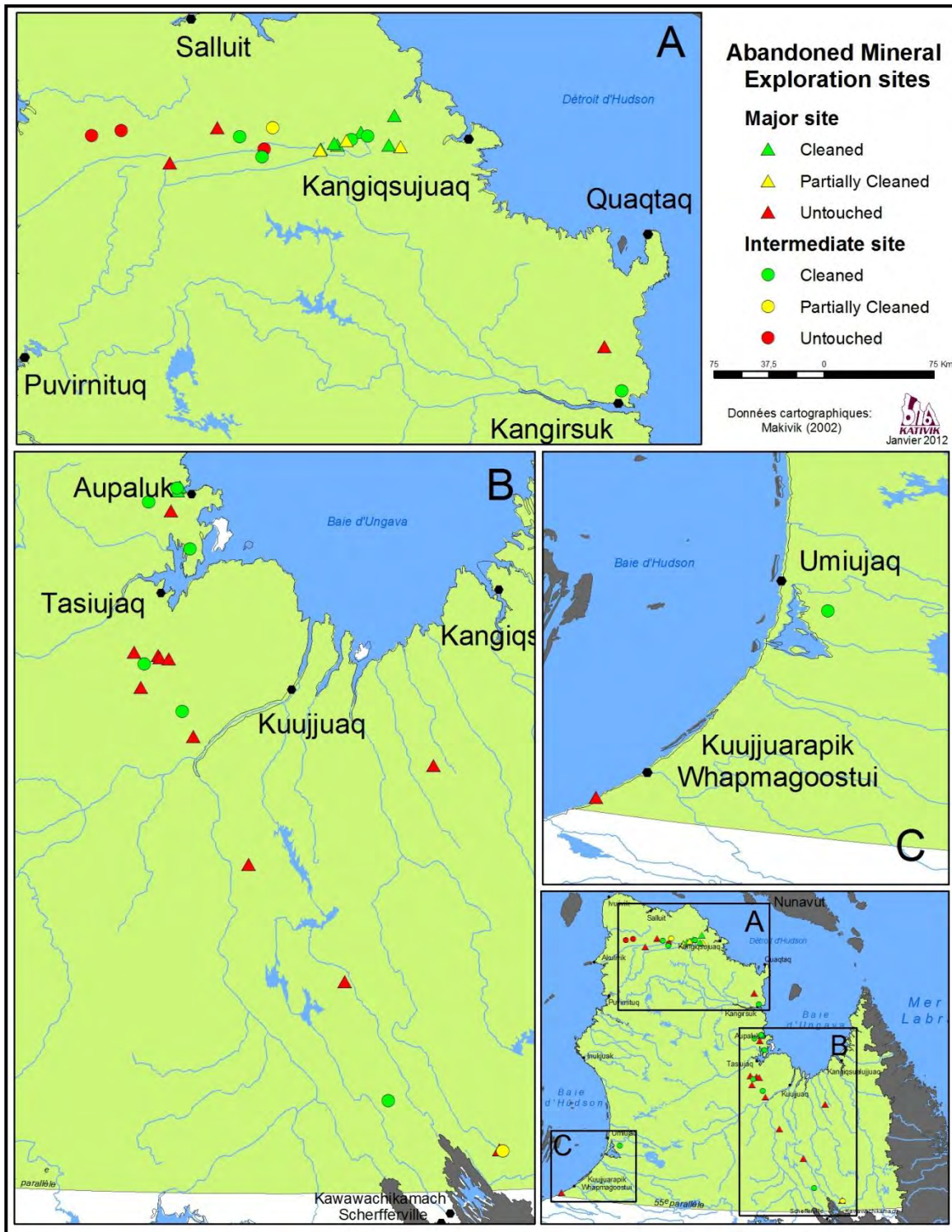












Map 8 Location of the Abandoned Mining Exploration Sites Which Have Been Cleaned or Partially Cleaned Under the Rehabilitation Project From 2005 to 2011

APPENDIX 2

Sites on Which Ocean Iron Ore Corporation Carried Out Clean-up Work in 2011

SITE (Oceanic Code)	UTM-E	UTM-N	Z
HA-11-034	438501.19	6577664.84	167.72
HA-11-035	438434.15	6577300.71	166.87
HA-11-074	438643.90	6570205.05	96.35
HA-11-044	445228.89	6575564.30	167.56
MC-11-060	431925.95	6569103.70	171.55
Red Dog	445084	6573600	90.35
Ford Lake Zone	436613	6568680	96.35

APPENDIX 3

Inventory Sheets (2001-2002) of the 18 Sites Requiring Major Clean-up Work

Kawawachikamach Sector

KAW-35

KAW-45

Tasiujaq Sector

PJ-1

TQ-1

TQ-4

Aupaluk Sector

PJ-10

PJ-17

Kangirsuk Sector

TW

Kangiqsujaq Sector

K-28

K-61

WB-3

Salluit Sector

KV-1

SAL-1

SW-27

SW-34

SW-42

WB-9

Umiujaq Sector

WHA-1

**SECTOR OF
KAWAWACHIKAMACH**

KAW-35

KAW-45

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE

INVENTORY FORM/FICHE D'INVENTAIRE - 2002

Site N° <u>KAW-35</u>	Map/Carte N°: <u>23 O/1 East</u>	Latitude <u>55 ° 13.94'</u> N	Longitude <u>66 ° 07.27'</u> W
Region/Région: <u>Kawawachikamach</u>	Informant/Informateur <u>Tommy Einish; Pete Guanish on board</u>		
Date: <u>10 Sept. 2002</u>	By/Par: <u>JB, LO, PG, LE</u>	Priority/Prioritaire <input checked="" type="checkbox"/>	Hasard <input type="checkbox"/> Other: _____

Nb sectors/secteurs: 3 **Sector/Secteur N°:** 1 **Size/Dimension:** 500 m X 300 m
Distance from surface water/Distance de l'eau de surface: < 1 m **Soil/Sol:** Roc; roc **Drainage:** Bad to good

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 8 Dwellings: 8 State/Condition: Some stable, some unstable
Description (material/matériaux + volume): Wood: ~300m³/Bois: ~300m³; lot of various equipment (volume below)

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 1000 empty/vides: ? full/pleins: > 6 residue/residus: >200 piled/empilés: _____ scattered/épars: ☒

Quantity/Quantité ☒ diesel: >1200 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: < 1 m Type of area/de milieu: Lake Retty/Lac Retty

Nb tanks/réservoirs:

TOTAL: 5 empty/vides: 5 full/pleins: 0 residue/residus: 0 [Same as for the Mid-Canada Line: 4400 L]

Quantity/Quantité ☒ diesel: _____ L ☐ Jet-B: _____ L ☐ : _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: > 200 m Type of area/de milieu: Lake Retty/Lac Retty

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 13 empty/vides: 3 full/pleins: 10 residue/residus: 3 state/état: Good (plastic)/Bon (plastique)

Content + quantity/Contenu + quantité: Hydrofluoric acid 4%/acide fluorhydrique : 5 L Solvant dégraissant biodégradable : 5x20 L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 3 Condition: Good **Nb transformers/transformateurs:** 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: 0 Tractor/tracteur: 0 Truck/Camion: 0 Muskeg: 1 : _____

Conveyor/Convoyeur: 0 Crusher/Concasseur: 0 Generator/Génératrice: 3+ (motors?) : _____

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: ? ; 100 m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): _____ ; 5 m³ Cables/Câbles: _____ ; 3 m³

Wood/Bois: 10-20 m³ Metal/Métal: 50-100 m³

Other/Autre: _____

Hard hats found on the site indicated/des casques durs indiquent : "D'ORVAL Mines Ltd, Opening Sept., 1987".

Letterhead indicates/Des en-têtes de lettres indiquent: "Compagnie de Gestion Minière Louvicourt Ltée,

Case Postale 1270, Val d'Or (Québec) J9P 4P8" Caribou pellets/Crottin de caribou.

Sector 2: 55° 13.70' N; 66° 07.42' W: Tailings and one garage/Résidus miniers et un garage. Photo 11. See/Voir verso

Sector 3: 55° 13.65' N; 66° 08.76' W: Tailer and one tank/Roulotte et un réservoir. Photo 10. See/Voir verso

We saw pipes near the Outfitter camp that is close by/On a vu des tuyaux près de la pourvoirie située près du site.

Photo 34

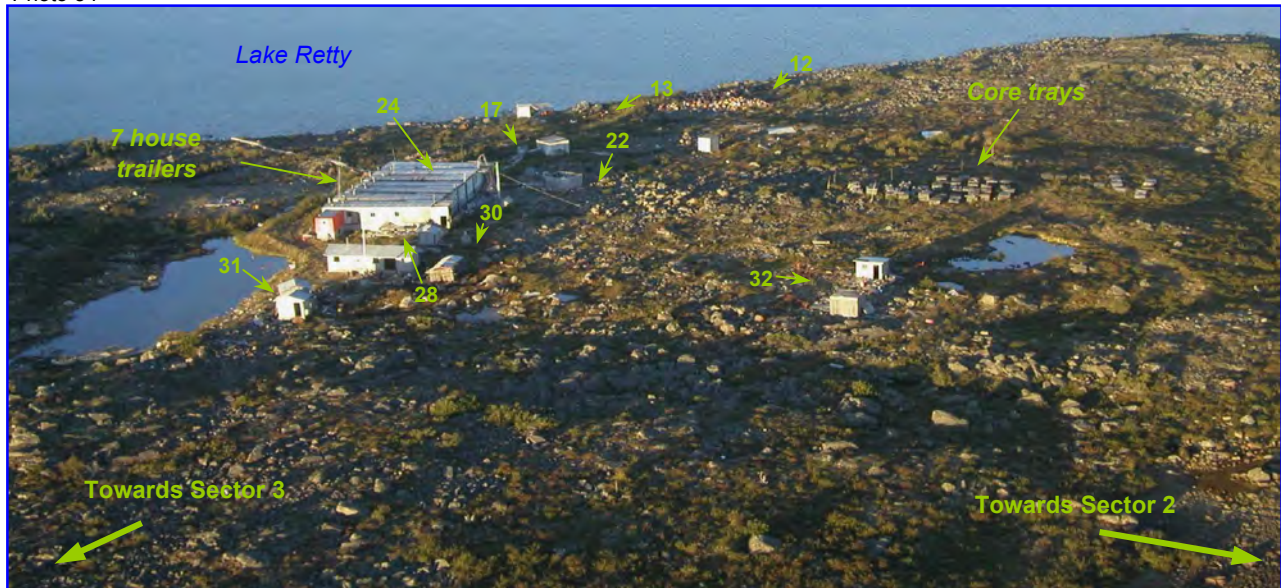


Photo 12



800 barrels at 1m of the lake

Photo 13



>100 barrels at 1m of the lake
[5 full of diesel (1000 L)],
1 shed, various debris:
metal, styrofoam, wood,
pipes, sleeping bag.
1 wharf, wires in the lake, Al rods.

Photo 17



1 shed containing a large
insulated tank.
Stryfoam, fiberglass,
sidewalk, stairs, wood (3m³)

Photo 22



1 Shed without roof.
Metal debris (5m³),
wood debris (3m³),
2 furnaces, 1 shelf, 1 trash can,
1 stove pipe, 1 large container,
canvas, styrofoam.

Photo 24



Partial view of the inside of a
house trailer. It usually contains:
1 water heater, 1 motors (generator?),
1 freezer, 1 fire extinguisher,
1 counter, bed, furnaces, toilets,
fiberglass, debris, paper, canvas

Photo 28



View beside a house trailer.
Wood debris (10m³).
Nearby: 3 barrels with residue

Photo 31

**Generator houses.**

1 motor, 1 tractor with tracks,
flexible hoses, 3 oil filters,
1 full barrel, 1 barrel with residue,
3 empty barrels,
1 furnace

Photo 30



Core trays (20m³), metal pipes,
wires, wood debris, scrap
Nearby: metal rack, pipes,
wood debris, 3 barrels

Photo 32



2 small sheds; one contains
3 bottles with
hydrofluoric acid 4% (1.5 L),
empty bottles, test tubes.

Canvas, scrap, flexible hoses,
1 battery, 1 fire extinguisher,
oil filters, metal debris

About 200 barrels scattered on the site and many debris

Also: 5 empty 4400-Litre tanks (with inscription "Knob Lake"),
1 big sled, dumpsite,
pails containing biodegradable degreaser without phosphate,
2 batteries (one is close to a small cabin), wires, poles, plastic, 1 trailer

Photo 11

**Sector 2**

Tailings and a garage

Photo 36

**Sector 3**

House trailers and a tank

Caribou tracks on the site

KAW 35

Coord.: 55° 13.94' N 66° 07.27' W.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
KAW 35-1	Soil under a battery	0-3	Hg Pb	0.10 140	-
KAW 35-3	Soil under a lot of barrels	0-3	C ₁₀ -C ₅₀	3700	30
KAW 35-4	Soil under a battery	0-3	Hg Pb	0.34 120	-
KAW 35-5	Soil under 2 barrels	0-3	C ₁₀ -C ₅₀	120 000	25
KAW 35-6	Soil under the generator shed	0-3	C ₁₀ -C ₅₀	24 000	48
KAW 35-7	Soil under a 4400 L. tank	0-3	C ₁₀ -C ₅₀	390	-
Total area					103
Water					
KAW 35-2A	Surface water of Retty Lake	N/A	C ₁₀ -C ₅₀	< 100	-
KAW 35-2B	Surface water of Retty Lake	N/A	C ₁₀ -C ₅₀	< 100	-

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: 2 C: 10	A: 50 B: 500 C: 1000	A: 0.05 B: 1 C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE

INVENTORY FORM/FICHE D'INVENTAIRE - 2002

Site N° <u>KAW-45</u>	Map/Carte N°: <u>23 O/11</u>	Latitude <u>55 ° 33.68</u> N	Longitude <u>67 ° 21.20</u> W
Region/Région: <u>Kawawachikamach</u>		Informant/Informateur <u>Philip Einish Jr. (Pete Guanish on board)</u>	
Date: <u>11 Sept. 2002</u>	By/Par: <u>JB, LO</u>	Priority/Prioritaire <input type="checkbox"/>	Hasard <input checked="" type="checkbox"/> Other: _____

Nb sectors/secteurs: 2 **Sector/Secteur N°:** 1 **Size/Dimension:** _____ m X _____ m
Distance from surface water/Distance de l'eau de surface: _____ m **Soil/Sol:** _____ **Drainage:** _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 1 Dwellings: 4 State/Condition: 3 bases + 1 shed + 1 wood cabin

Description (material/matériaux + volume): Wood/Bois; 10m³ Plywood base near shore/Base contreplaqué près rive: 2m³

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 12 empty/vides: ? full/pleins: _____ residue/residus: 3 piled/empilés: _____ scattered/épars: X

Quantity/Quantité ☒ diesel: 30 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: <5 m Type of area/de milieu: Lake

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ _____ : _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 1 empty/vides: 1 full/pleins: _____ residue/residus: _____ state/état: Good/Bon

Content + quantity/Contenu + quantité: Naphta : 0 L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 0 Condition: _____ **Nb transformers/transformateurs:** 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: 0 Tractor/tracteur: 0 Truck/Camion: 0 Muskeg: 0 _____ :

Conveyor/Convoyeur: 0 Crusher/Concasseur: 0 Generator/Génératrice: 0 _____ :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; 10-15 m³ Al: _____ ; _____ m³ Plastic: _____ ; <1 m³

Rods/Tuyaux (Nb + Volume): _____ ; _____ m³ Cables/Câbles: _____ ; _____ m³ Canvas: _____ ; <1 m³

Wood/Bois: 1 m³ Metal/Métal: <1 m³

Other/Autre: Plastic hoses/boyaux de plastique: <1m³; carpet/tapis: <1m³; styrofoam: <1m³; 1 outhouse/toilette;
 wood debris along the shore/bois le long de la rive; 1 rusted open barrel in the lake/un baril ouvert rouillé dans le lac.
 Caribou tracks and Goose shit/Pistes de caribou et crotin d'Outarde.

No contaminated areas.

Sector 2: 55° 38.49' N; 67° 21.27' W; end of Musset lake. 7 barrels (blue + yellow and red) on other shore at the end/
Extrémité du lac Musset. 7 barils (bleus + rouge et jaune) sur l'autre rive, sur la pointe. See verso/Voir verso

Photo 7



Photo 8



Site KAW-45 (11 September, 2002)

KAW 45**Sector 2:** End of lake Musset. Coord.: 55° 38.49' N 67° 21.27' W.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
KAW 45	Soil under 6 barrels	0-5	C ₁₀ -C ₅₀	20 000	2
Total area					2

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: 2 C: 10	A: 50 B: 500 C: 1000	A: 0.05 B: 1 C: 10

SECTOR OF TASIUJAQ

PJ-1

TQ-1

TQ-4

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° PJ-1 Map/Carte N°: 24 K/13 Latitude 58 ° 57.71' N Longitude 69 ° 35.85' W
 Region/Région: Aupaluk/Tasiujaq Informant/Informateur John Appahatak
 Date: 21 July 2001 By/Par: JB, LO, ST Priority/Prioritaire ☒ Hasard ☐ Other: _____

Nb sectors/secteurs: 9 Sector/Secteur N°: 1-3 Size/Dimension: _____ m X _____ m
 Distance from surface water/Distance de l'eau de surface: _____ m Soil/Sol: _____ Drainage: _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: 2 platforms (one with its structure)
 Description (material/matériaux + volume): wood (volume included below)

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 47 empty/vides: 31 full/pleins: 1 residue/residus: 15 piled/empilés: _____ scattered/épars: ☒

Quantity/Quantité ☒ diesel: 600 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L _____ : _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 5 empty/vides: _____ full/pleins: 5 residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: Paint/Peinture: 12 L Grease/Graisse: 2 kg _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 0 Condition: _____ Nb transformers/transformateurs: 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ High voltage regulator: 1

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ :

Solid Waste and Dry material/Matériaux secs

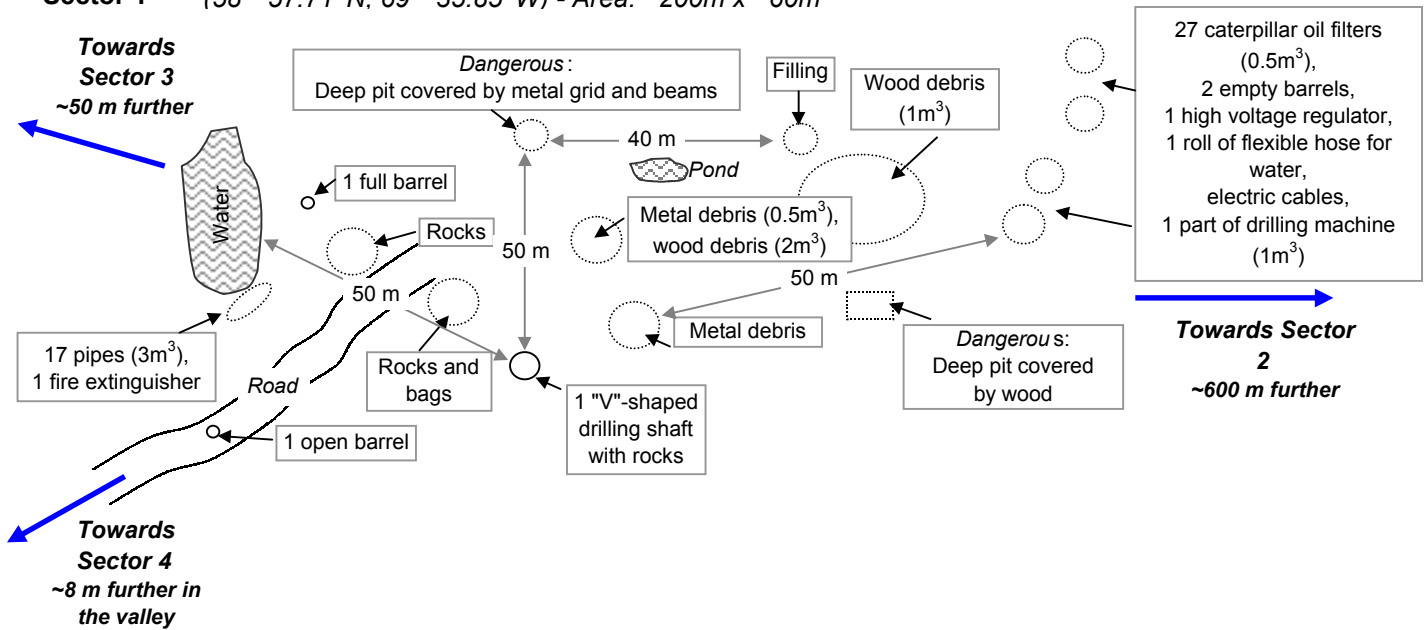
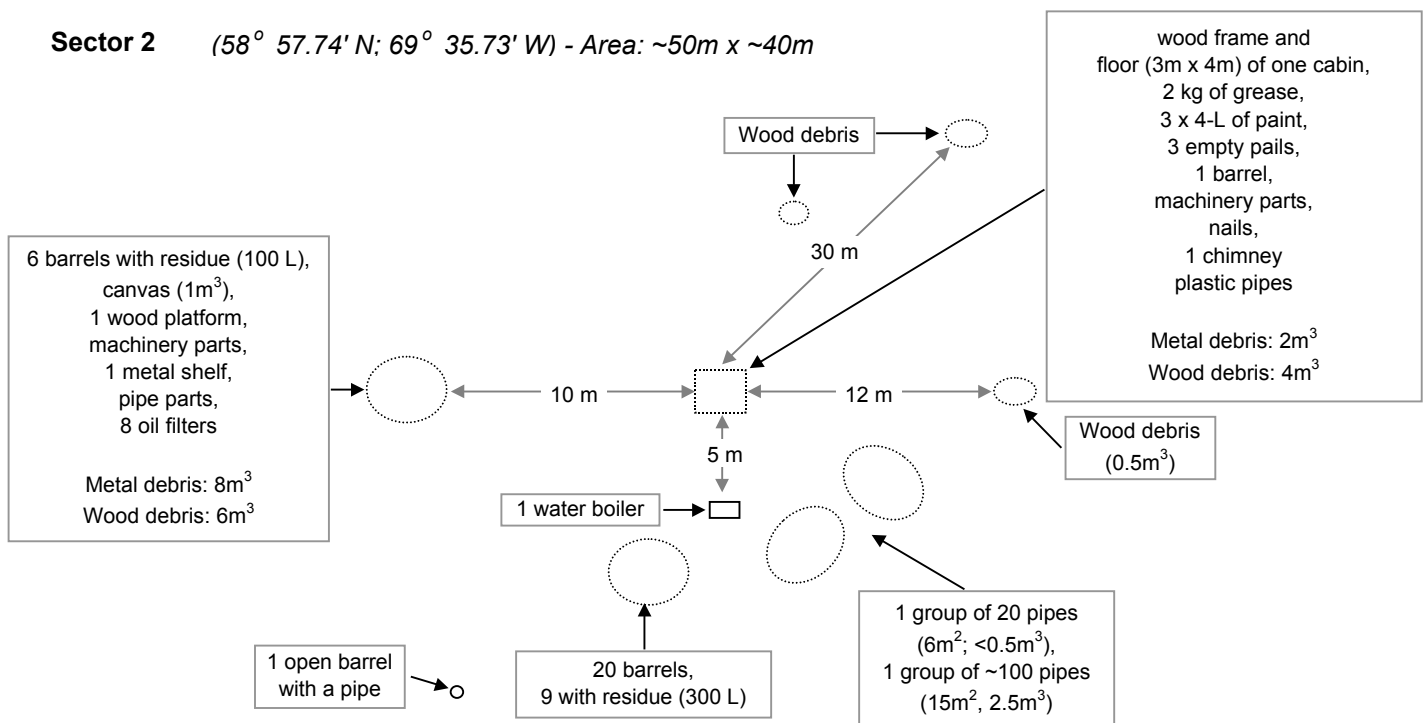
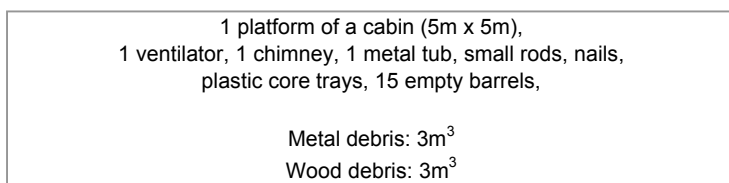
Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; <1-2 m³

Rods/Tuyaux (Nb + Volume): ~140; 6 m³ Cables/Câbles: _____ ; ? m³

Wood/Bois: 15-20 m³ Metal/Métal: 15-20 m³

Other/Autre: _____

1 ventilator, 1 metal tub, 1 water boiler, machinery parts, 1 V-shaped drilling shaft, 27 oil filters for caterpillars
(see page 2)/1 ventilateur, 1 cuve en métal, 1 chaudière à eau, pièces de machinerie, un équipement de forage en
V, 27 filtres à huile, pour chenillette (voir page 2).

Sector 1 ($58^{\circ} 57.71' N$; $69^{\circ} 35.85' W$) - Area: $\sim 200m \times \sim 60m$

Sector 2 ($58^{\circ} 57.74' N$; $69^{\circ} 35.73' W$) - Area: $\sim 50m \times \sim 40m$

Sector 3 ($58^{\circ} 57.95' N$; $69^{\circ} 35.71' W$) - Area: $\sim 20m \times \sim 10m$


ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>PJ-1</u>	Map/Carte N°: <u>24 K/13</u>	Latitude <u>58 ° 58.02'</u> <u>N</u>	Longitude <u>69 ° 35.86'</u> <u>W</u>
Region/Région: <u>Aupaluk/Tasiujaq</u>	Informant/Informateur <u>John Appahatak</u>		
Date: <u>21 July 2001</u>	By/Par: <u>JB, LO, ST</u>	Priority/Prioritaire <input checked="" type="checkbox"/>	Hasard <input type="checkbox"/> Other: _____

Nb sectors/secteurs: 9 **Sector/Secteur N°:** 4 **Size/Dimension:** ~600 m X ~60 m
Distance from surface water/Distance de l'eau de surface: _____ **m** **Soil/Sol:** _____ **Drainage:** _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: 1 wood base

Description (material/matériaux + volume): _____

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 92 empty/vides: _____ full/pleins: _____ residue/residus: _____ piled/empilés: _____ scattered/épars: ☒

Quantity/Quantité ☐ diesel: _____ L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb tanks/réservoirs:

TOTAL: 5 empty/vides: _____ full/pleins: _____ residue/residus: _____ (Size: 10 000 L; 5m³ each)

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ : _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: ~51 empty/vides: _____ full/pleins: ~51 residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: Oil/huile : 4 L Grease/graisse: ~50 tubes : _____ L

Nb propane tanks/Bonbonnes de propane: Note: propane or liquid carbonic or liquid air or oxygene

TOTAL: >20 empty/vides: ☒ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 8 Condition: _____ **Nb transformers/transformateurs:** 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: 2 Tractor/tracteur: _____ Truck/Camion: 1 Muskeg: _____ Trailer : 3

Conveyor/Convoyeur: 2 Crusher/Concasseur: 1 Generator/Génératrice: 3 Machinery : 8

Solid Waste and Dry material/Matériaux secs Crane/Grue : 1

Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

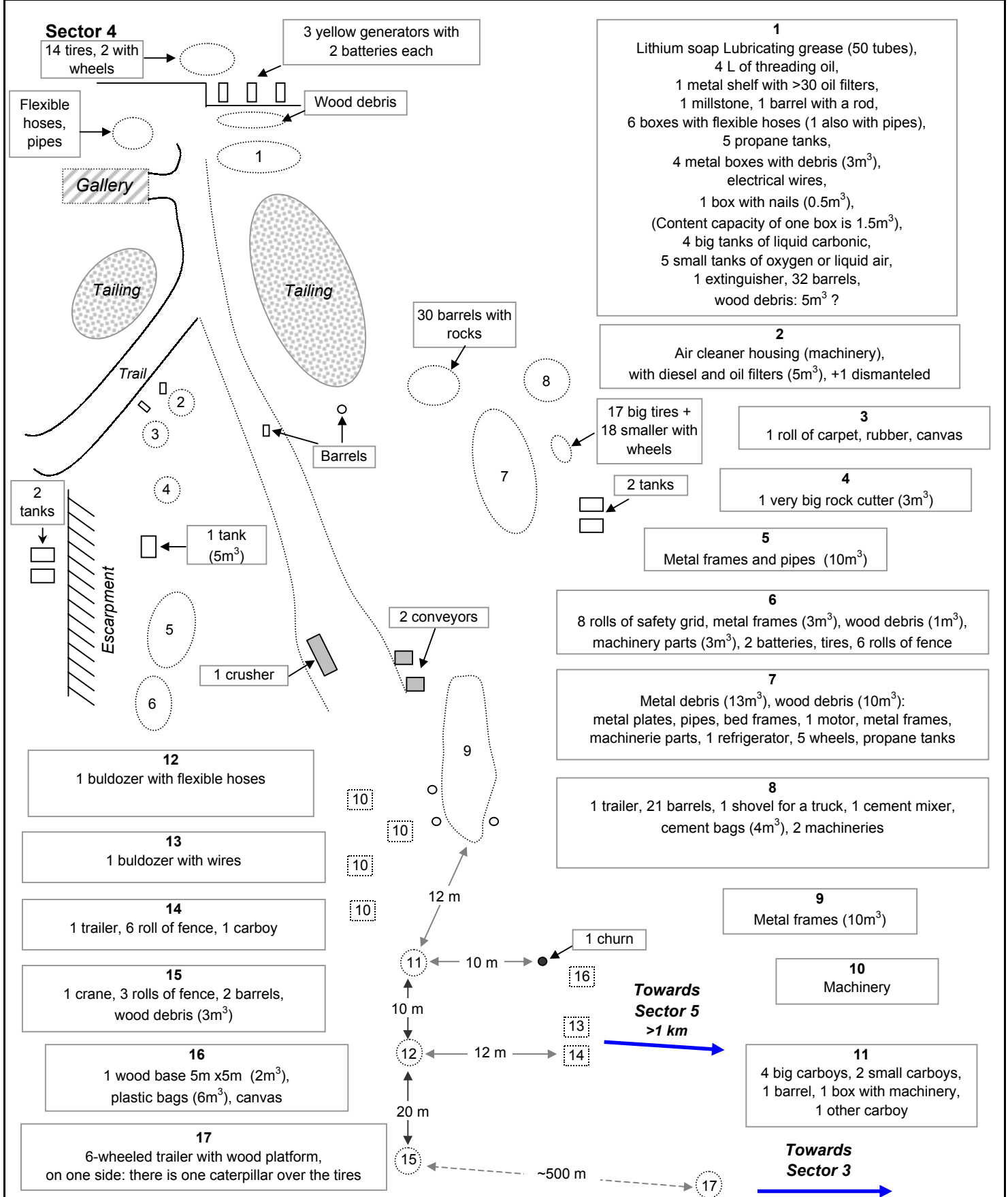
Rods/Tuyaux (Nb + Volume): _____ ; 10-25 m³ Cables/Câbles: _____ ; 1-5 m³

Wood/Bois: 20-30 m³ Metal/Métal: 30-100 m³ Other/Autre: 20-50 m³

Other/Autre: _____

Rolls of fence (17), 1 cement mixer, plastic bags (6m³), 1 refrigerator, 1 alternator, wheels and tires (>40), machinery parts (>3m³), flexible hoses, extinguishers/rouleaux à clôture (17), 1 mélangeur à ciment, sacs de plastique (6m³), 1 réfrigérateur, 1 alternateur, roues et pneus (>40), pièces de machinerie (>3m³), boyaux flexibles, extincteurs.

Ptarminan droppings on the site/Crottin de lagopède sur le site.



ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° PJ-1 Map/Carte N°: 24 K/13 Latitude 58 ° 58.21' N Longitude 69 ° 35.61' W
 Region/Région: Aupaluk/Tasiujaq Informant/Informateur John Appahatak
 Date: 21 July 2001 By/Par: JB, LO, ST Priority/Prioritaire ☒ Hasard ☐ Other: _____

Nb sectors/secteurs: 9 Sector/Secteur N°: 5-7 Size/Dimension: _____ m X _____ m
 Distance from surface water/Distance de l'eau de surface: _____ m Soil/Sol: _____ Drainage: _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 3 Dwellings: _____ State/Condition: 1 good/1 very bad; 1 bon; 1 très mauvais
 Description (material/matériaux + volume): Wood and metal, volume ?/Bois et métal, volume ?

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 65 empty/vides: _____ full/pleins: _____ residue/residus: _____ piled/empilés: _____ scattered/épars: ☒

Quantity/Quantité ☐ diesel: _____ L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: 0 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: 5 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ : _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: 15 m Type of area/de milieu: Lake/Lac

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: _____ : _____ L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane: (include 2 air tanks)

TOTAL: 60 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 12 Condition: _____ Nb transformers/transformateurs: 2 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: 2 Radiator : 1

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: 3 Alternator : 1

Solid Waste and Dry material/Matériaux secs

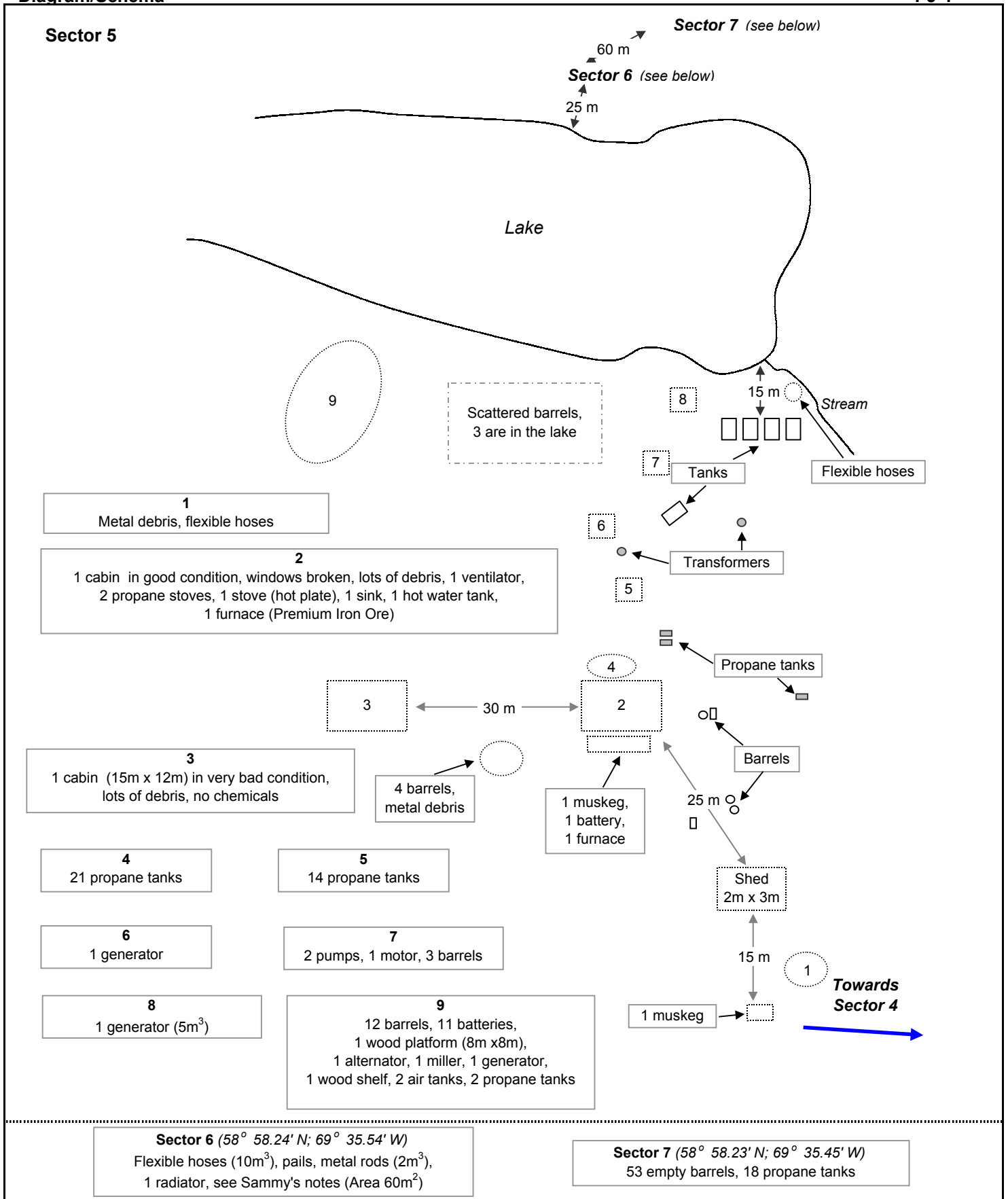
Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): _____ ; 1-3 m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: 10-30 m³ Metal/Métal: 10-30 m³ Other/Autre: 10-30 m³

Other/Autre: _____

3 stoves, 1 sink, 2 furnaces, flexible hoses (>10m³), etc. See page 2/ 2 poêles, 1 réchaud, 2 fournaies, boyaux flexibles (>10m³), etc. Voir page 2.



ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° PJ-1 Map/Carte N°: 24 K/13 Latitude 58 ° 57.56' N Longitude 69 ° 35.87' W
 Region/Région: Aupaluk/Tasiujaq Informant/Informateur John Appahatak
 Date: 22 July 2001 By/Par: JB, LO, ST Priority/Prioritaire ☒ Hasard ☐ Other: _____

Nb sectors/secteurs: 9 Sector/Secteur N°: 8-9 Size/Dimension: _____ m X _____ m
 Distance from surface water/Distance de l'eau de surface: _____ m Soil/Sol: _____ Drainage: _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: 2 platforms/2 plate-formes
 Description (material/matériaux + volume): Wood/Bois, 2-5m³

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: ~200 empty/vides: _____ full/pleins: 3 residue/residus: 23 piled/empilés: ☒ scattered/épars: ☒

Quantity/Quantité ☒ diesel: 1900 L ☒ oil/huile: 50 L ☐ grease/graisse: _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: <10 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ : _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: _____ : _____ L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 1 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 3 Condition: _____ Nb transformers/transformateurs: 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ : _____

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ : _____

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; ? _____ m³ Plastic: _____ ; ? _____ m³

Rods/Tuyaux (Nb + Volume): _____ ; >2 _____ m³ Cables/Câbles: _____ ; ? _____ m³

Wood/Bois: 5-10 m³ Metal/Métal: 2-10 m³

Other/Autre: _____

See page 2/ Voir page 2

Sector 8 (58° 57.56' N; 69° 35.87' W)**8a** *Small area (150 m²) on top of hill*

Plywood,
 plastic core trays,
 First Aid kit with peroxyde,
 6 barrels, 2 with residue
 1 small empty barrel,
 lots of scattered wood (beams and plywood),
 1 propane tank,
 pipes,
 wires,
 oil burning stove (inside a furnace)

8b *Down the hill, near a lake*

Aluminium core trays,
 scattered wood debris,
 5 barrels near lake (3 empty, 1 with diesel and 1 with oil;
one of the barrels with residue is 1m from the lake),
 1 shower,
 1 wood cabin (size of a shower),
 fire extinguisher,
 3 batteries,
 2 water heaters,
 3 furnaces,
 1 wood platform (5m x 5m),
 many scattered barrels,
 wires,
 metal frame,
 1 oil burning stove,
 1 sink

~10 metal bed frames,
 1 table,
 canvas,
 1 base frame for cabin,
 1 can of insecticide (Raid),
 dishesglass jars with bitumen,
 3 fire extinguishers,
 cans,
1 group of barrels opened like a can which are used as dump :
 including metal scrap, cans and food debris;
 1 base of a outhouse,
 1 place for burning wood

 169 barrels: 3 full, 13 with residue (total of 1845 L)
 (barrels are among 3 groups)

Sector 9 (58° 57.76' N; 69° 36.20' W)**9** *Area located in a valley, near a lake between 2 rocky escarpments*

5 barrels near the lake,
 pipes for tripod,
 10 barrels: 4 with residue (total 350 L),
 plastic hoses,
 ~50 metal pipes (2m³),
 wood debris (3m³),
 metal debris (<1m³),
 some plastic canoe holder,
 metal wires,
 1 oil filter

Presence of Canada goose feathers and droppings

PJ-1 (and TQ-20, G24 K13-4)**Sector 1:** Coord.: 58° 57.71' N 69° 35.85' W.**Sector 2:** Coord.: 58° 57.74' N 69° 35.73' W.**Sector 3:** Coord.: 58° 57.95' N 69° 35.71' W.**Sector 4:** Coord.: 58° 58.02' N 69° 35.86' W. Many spots of contaminated soil**Sector 5:** Coord.: 58° 58.21' N 69° 35.61' W.**Sector 6:** Coord.: 58° 58.24' N 69° 35.54' W.**Sector 7:** Coord.: 58° 58.23' N 69° 35.45' W.**Sector 8:** Coord.: 58° 57.56' N 69° 35.87' W.**Sector 9:** Coord.: 58° 57.76' N 69° 36.20' W.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
PJ 1-2	Sector 1: Soil near the shaft and the head frame.	0-5	C ₁₀ -C ₅₀ .	220	-
PJ 1-3	Sector 1: Soil on the southern side of the drilling shaft.	0-5	C ₁₀ -C ₅₀	< 100	-
PJ 1-4	Sector 2: Contaminated soil close to the building. Sample taken near a lot of wood, metal, motors, pipes and garbage. Contaminated depth: 20 cm.	0-5	C ₁₀ -C ₅₀	<u>1000</u>	
PJ 1-5	Sector 2: Under PJ-1-4. Contaminated depth: 20 cm.	5-15	C ₁₀ -C ₅₀	100 000	15
PJ 1-6	Sector 2: Close to ≈ 22 drums.	0-5	C ₁₀ -C ₅₀	110 000	12
PJ 1-7	Sector 1: Soil in a field crack, on the southern side of the shaft and pond.	0-5	Hg Pb C ₁₀ -C ₅₀	120	-
PJ 1-9	Sector 4. Soil on the south shore of the pond.	0-5	C ₁₀ -C ₅₀	200	-
PJ 1-10	Sector 4. Soil under a battery. Sample depth: cm.	0-5	Hg Pb	0,04 84	
PJ 1-11	Sector 4. Soil under a battery.	0-5	Hg Pb	0,10 6	
PJ 1-12	Sector 4. Soil and peat moss near a pond, on its south-eastern side, near wire rolls. Iridescence on the pond.	0-5	C ₁₀ -C ₅₀	140	
PJ 1-13	Sector 4. Soil at the south-western part of sector 4 near drums, wood boxes and the gallery.	0-3	C ₁₀ -C ₅₀	240 000	9

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
PJ 1-14	Sector 4. Soil of the mine tailings.	0-3	C ₁₀ -C ₅₀	< 100	-
PJ 1-15	Sector 5. Under a battery near a shed.	0-3	Hg Pb	0,14 <u>650</u>	1
PJ 1-16	Sector 5. Near a transformer, close to a tank.	0-3	PCBs	< 5,0	-
PJ 1-17	Sector 5. Near 9 batteries on a platform made of wood, ≈ 5 m apart of Pio Lake.	0-3	Hg Pb	<u>4,1</u> <u>580</u>	2,5
PJ 1-19	Sector 5. Soil near the 9 batteries. Contaminated depth: 15 cm.	0-5	C ₁₀ -C ₅₀	310 000	4
PJ 1-20	Sector 6. Soil under 9 lubricant pails. Contaminated depth: 15 cm.	0-5	C ₁₀ -C ₅₀	220 000	9
PJ 1-21	Sector 7. Soil in a pond.	0-5	C ₁₀ -C ₅₀	4000	25
PJ 1-22	Sector 8. In the dump under 2 batteries, 20 m apart from a lake, near a wood platform.	0-5	Hg Pb	< 0,02 <u>640</u>	2,5
PJ 1-23	Sector 9. Contaminated soil on the lakeshore near 5 drums.	0-5	C ₁₀ -C ₅₀	<u>750</u>	35
Total area					115
Water					
PJ 1-1A	Sector 1: Surface water of the pond, close to the shore.	N/A	C ₁₀ -C ₅₀	130	-
PJ 1-1B	Sector 1: Surface water of the pond, close to the shore. Duplicata of PJ 1-1A	N/A	C ₁₀ -C ₅₀	110	-
PJ 1-8A	Sector 4. Surface water of a creek close to the mine tailings. Iridescence at the surface of water..	N/A	C ₁₀ -C ₅₀	140	-
PJ 1-8B	Sector 4. Duplicata of PJ 1-8A.	N/A	C ₁₀ -C ₅₀	240	-
PJ1-18A	Sector 5. Surface water of Pio Lake, near the shore.	N/A	C ₁₀ -C ₅₀	160	-
PJ1-18B	Duplicata of PJ1-18A.	N/A	C ₁₀ -C ₅₀	110	-

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° TQ-1 Map/Carte N°: 24 F/13 E Latitude 57 ° 57.68' N Longitude 69 ° 40.16' W
 Region/Région: Kuuujuaq/Tasiujaq Informant/Informateur Sandy Gordon
 Date: 19 Oct 2001 By/Par: JB, LO, ST Priority/Prioritaire ☐ Hasard ☒ Other: _____

Nb sectors/secteurs: 1 Sector/Secteur N°: 1 Size/Dimension: 40 m X 40 m
 Distance from surface water/Distance de l'eau de surface: <5 m Soil/Sol: _____ Drainage: _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 8 Dwellings: _____ State/Condition: Quite good/Assez bonne
 Description (material/matériaux + volume): Site seems still in use/Le site semble encore utilisé

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ piled/empilés: _____ scattered/épars: _____

Quantity/Quantité ☐ diesel: _____ L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb tanks/réservoirs:

TOTAL: 25 empty/vides: _____ full/pleins: _____ residue/residus: >5

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ fuel ? : >100 L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: <2 m Type of area/de milieu: Lake/Lac

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 1 empty/vides: _____ full/pleins: 1 residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: Gasoline : 20 L : _____ L : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 6 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 1 Condition: good Nb transformers/transformateurs: _____ Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Bulldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ Ski-doo : 1

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): _____ ; _____ m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: _____ m³ Metal/Métal: _____ m³

Other/Autre: _____

It seems that the site is an outfitting camp named "Safari Nordik - Camp Gériido"/Ce site semble être une
 pourvoirie nommée "Safari Nordik - Camp Gériido".

The site does not seem to be very well maintained: debris all over the place/Le site est plutôt mal entretenu:
 débris partout

Photo 16

General view of site TQ-1



Legend: Letters indicate the buildings (A to I) or specific areas (J and K)
Numbers refer to Photo N°, and arrows indicates the direction of the view

Photo 12 Buildings A and B



A: Looks like a shelter for having meals
Outside: 3 barrels, pipes

Photo 11 Buildings B and C



B: Shed of wood and canvas, containing:
debris, 1 outboard motor, 1 battery,
plastic containers, one with 20 L gas,
styrofoam, 1 wood shelf

C: 1 camp containing: 1 small furnace,
1 wood bed, rubber pipes.

Outside: 2 barrels with fuel,
4 propane tanks, 1 tire

Photo 9 Buildings D, E, and F



D: Kitchen containing: 2 stoves,
1 freezer, 1 counter, shelves, plastic
chairs, tables, dishes.

Outside: 1 freezer, 2 propane tanks,
1 trailer, 2 barrels with fuel

E: 1 camp containing: 1 furnace,
3 wood beds, plastic chairs and table,
wood shelves

F: 1 camp containing 4 metal beds, foam
mattresses, plastic chairs,
1 furnace, 1 fire extinguisher

Photo 10 Buildings G and H



G and H: Buildings of wood and canvas.
Each one contains
1 furnace, wood beds, plastic chairs.

Outside:
Core trays (6m³), 4 drums with fuel

Photo 15 Outhouse area



1 outhouse, core trays (9m³),
1 ski-doo, ~10 barrels

Photo 13 Launch area



Area with 3 launches
1 wood dock,
5 or more barrels,
scattered debris

TQ-1 (VP-3, P 24F13-6)

Abandoned mining site transformed in an active hunting camp. Located 10 m apart from Gerido Lake.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
TQ 1-1	Soil under a diesel drum, close to a camp.	0-5	C ₁₀ -C ₅₀	24 000	1
TQ 1-2	Soil under a diesel drum, close to a camp	0-3	C ₁₀ -C ₅₀	460	-
TQ 1-3	Soil under a diesel drum, close to a camp.	0-3	C ₁₀ -C ₅₀	44 000	1
Total area					2

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>TQ-4</u>	Map/Carte N°: <u>24 L/08</u>	Latitude <u>58 ° 15.23'</u> <u>N</u>	Longitude <u>70 ° 07.20'</u> <u>W</u>
Region/Région: <u>Kuujuuaq/Tasiujaq</u>	Informant/Informateur <u>Sandy Berthe/Sandy Gordon</u>		
Date: <u>20 Oct 2001</u>	By/Par: <u>JB, LO</u>	Priority/Prioritaire <input checked="" type="checkbox"/>	Hasard <input type="checkbox"/> Other: _____

Nb sectors/secteurs: 3 **Sector/Secteur N°:** 1-3 **Size/Dimension:** S1: 100 m X 150 m

Distance from surface water/Distance de l'eau de surface: 0 m **Soil/Sol:** _____ **Drainage:** _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 2 Dwellings: _____ State/Condition: Quite dirty/Assez malpropre

Description (material/matériaux + volume): Wood, fiberglass, aluminium, styrofoam/Bois, laine minérale/~10 m³

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 153 empty/vides: 153 full/pleins: _____ residue/residus: 3 piled/empilés: _____ scattered/épars: _____

Quantity/Quantité ☒ diesel: 150 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: 50 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: _____ empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L _____ : _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 3 empty/vides: _____ full/pleins: 3 residue/residus: _____ state/état: Very good/Très bonne

Content + quantity/Contenu + quantité: Gasoline : 60 L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 8 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: _____ Condition: _____ **Nb transformers/transformateurs:** _____ Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ Ski-doo : 1

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ New ice drill : 1

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): ~50 ; 1 m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: 12 m³ Metal/Métal: _____ m³ Other/Autre: 5-10 m³ (fiberglass, foam, tin, ...)

Other/Autre: 1 log cabin collapsed; 1 wood platform/1 cabane en bois rond effondrée; 1 plate-forme de bois

(volume included above; volume inclus ci-haut). Lot of debris scattered: carpet, styrofoam, 1 plastic tank,

insulating Al sheet, core trays, fiberglass, 1 furnace, plywood/Beaucoup de débris épars: tapis, styrofoam,

1 réservoir de plastique, isolant en Al, plateau à carottes, laine minérale, 1 fournaise, contreplaqué.

According to the informant, Mario Carreau uses that camp from Tasiujaq/Mario carreau utiliserait ce camp à partir de Tasiujaq.

Sector 2: dikes form two previous "bladders" (rubber reservoirs). ~100 barrels (3 with diesel), few cans, 1 plywood sheet.

Sector 3: includes 15 barrels. Presence of caribou and goose droppings. Total area of Sectors 2 and 3 is about 50m x 100 m.

Photo 20 General view of **Sector 1**

2 cabins and 1 collapsed log cabin,
1 wood floor
Scattered debris:
1 rolled carpet, Al insulating sheet, tar paper,
1 metal tripod, Al core trays,
~50 pipes, bottles, cans, styrofoam,
insulating foam, ~plywood sheets,
1 collapsing outhouse, 1 sink,
1 plastic tank, 8 propane tanks, 1 furnace,
fiberglass, furnace debris,
24 grouped barrels,
~7 or more scattered barrels,
2 barrels along the shore

Photo 25 Inside of Cabin 1



1 brand new ice drill,
1 furnace, 1 barrel, traps,
Al insulating sheets, various debris

Al cores (cover walls), fiberglass,
3 x 20-L gas containers full of gas,
traps, 1 Coleman stove, debris of
insulating foam (rust color)

Photo 28 Inside of Cabin 2



Photo 32



Aluminium insulating sheet
on the ground

Photo 22 General view of **Sector 2**

Sector 2:
Ditches of 2 previous
rubber tanks ("bladders";
"circle" areas of the ditches
are about
6m x 15m and 6m x 20m),
plywood, few cans.
~100 barrels,
3 barrels contain diesel (150 L)
Total area is about 50m x 100m,
including Sector 3

Sector 3 (not shown): 15 barrels near shore,
caribou and Canada goose droppings
Sector 3 is about 30m from Sector 2

TQ-4 (VP-2)

Sector 1: Camps 40 m apart from Garigue Lake.

Sector 2: Group of 99 diesel drums 50 m from Garigue Lake.

Sector 3: Group of 15 drums, 1 m apart of Garigue Lake.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
TQ 4-1	Sector 1. Soil under the group of drums.	0-5	C ₁₀ -C ₅₀	< 200	-
TQ 4-2	Sector 2. Soil under the group of piled drums.	0-5	C ₁₀ -C ₅₀	< 100	-
TQ 4-3	Sector 2. Soil in the foundation of the bladders.	0-5	C ₁₀ -C ₅₀	< 100	-
TQ 4-4	Sector 2. Soil in the foundation of the bladders.	0-5	C ₁₀ -C ₅₀	< 100	-
TQ 4-5	Sector 2. Soil in the foundation of the bladders.	0-5	C ₁₀ -C ₅₀	< 100	-
TQ 4-6	Sector 3. Soil under the group of drums.	0-5	C ₁₀ -C ₅₀	< 400	-
TQ 4-7	Sector 2. Soil under the group of piled drums.	0-5	C ₁₀ -C ₅₀	< 200	-
Total area					0

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: 2 C: 10	A: 50 B: 500 C: 1000	A: 0.05 B: 1 C: 10

SECTOR OF AUPALUK

PJ-10

PJ-17

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>PJ-10</u>	Map/Carte N°: <u>24 M/01</u>	Latitude <u>59 ° 15.07'</u> <u>N</u>	Longitude <u>70 ° 06.52'</u> <u>W</u>
Region/Région: <u>Aupaluk</u>		Informant/Informateur <u>John Appahatak</u>	
Date: <u>20 July 2001</u>	By/Par: <u>JB, LO, ST</u>	Priority/Prioritaire <input checked="" type="checkbox"/> Hasard <input type="checkbox"/> Other: _____	

Nb sectors/secteurs: 2 **Sector/Secteur N°:** 1-2 **Size/Dimension:** 400 m X 150 m
Distance from surface water/Distance de l'eau de surface: <5 m **Soil/Sol:** _____ **Drainage:** _____

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: Platforms and debris
Description (material/matériaux + volume): See description above + page 2/Voir description ci-dessous + page 2

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 62 empty/vides: 28 full/pleins: _____ residue/residus: 34 piled/empilés: _____ scattered/épars: X

Quantity/Quantité ☒ diesel: 1400 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: 10 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: 1 empty/vides: 1 full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L _____ : _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 9 empty/vides: _____ full/pleins: 9 residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: Grease?/Graisse ? : 2 x 20 L Motor oil/Huile : 7 x 40 L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 15 empty/vides: 10 full/pleins: _____ residue/residus: 5 state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 1 Condition: _____ **Nb transformers/transformateurs:** 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ :

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; 2-5 m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): ~200 ; 2-3 m³ Cables/Câbles: _____ ; ~1 m³

Wood/Bois: 20-50 m³ Metal/Métal: 12-30 m³

Other/Autre: Aforementioned estimates include Sectors 1 and 2/Les estimations ci-dessus incluent les secteurs 1 et 2

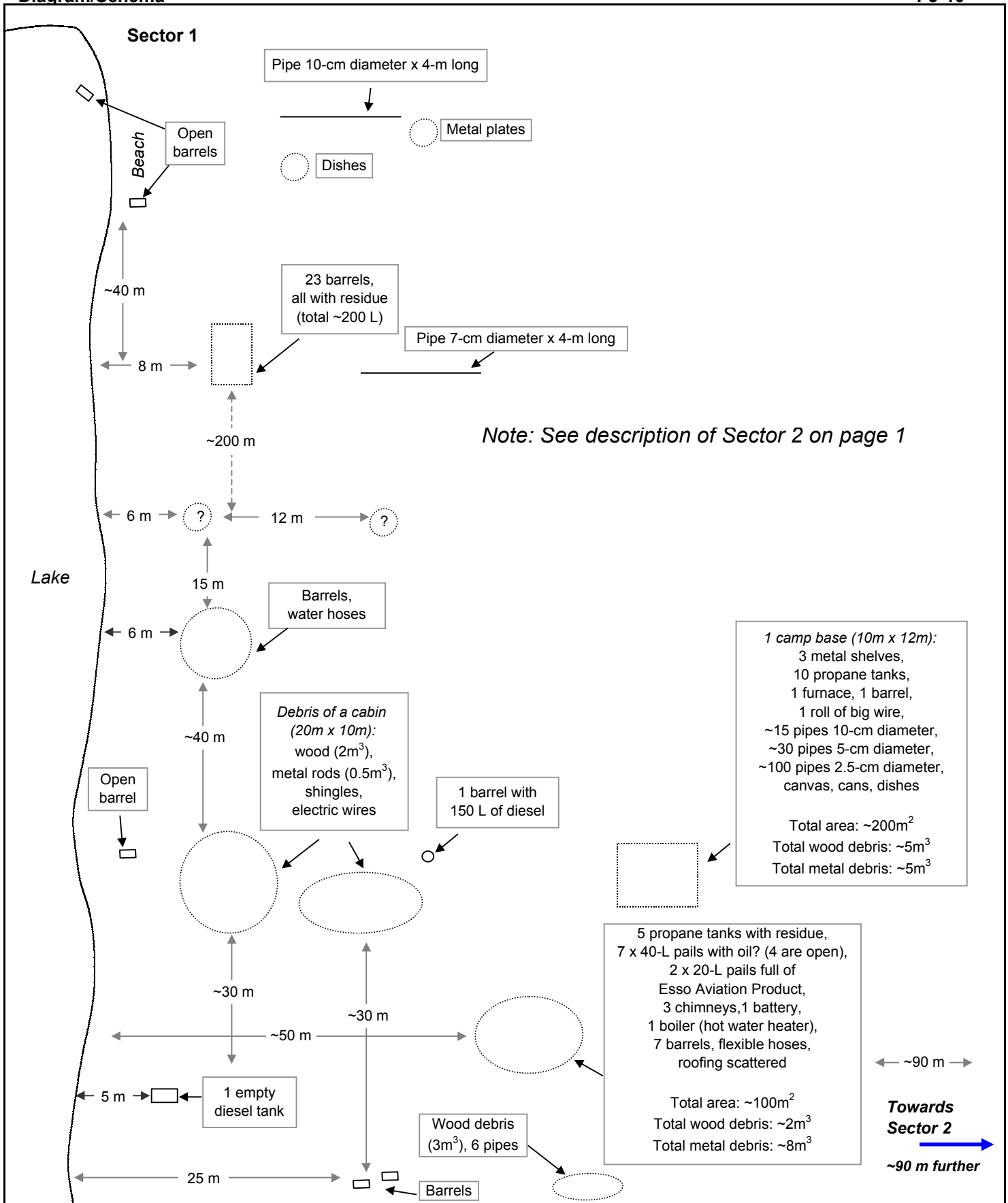
Sector 1: see description on page 2/Secteur 1: voir description à la page 2

Sector 2: 1 area of 100m² with wood pallets (core trays?), Al core trays (wood debris: 5m³; metal debris: 5m³);

1 area of 100m² with wood debris of a cabin (2m³) and metal debris (3m³): roofing, 1 furnace, windows;

1 area 4m x 5m with 10 barrels; 1 area with 15 barrels (9 full (or half full ?) of diesel, 1 with 150 L).

Note: Along the shore 1 mile West: 1 tin building.



PJ-10

Sector 1: 50 m apart from Ford lake.

Sector 2: Lot of 15 drums 500 m. apart from the lake.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
PJ 10-1	Sector 1. Contaminated soil in a lot of drums.	0-5	C ₁₀ -C ₅₀	360 000	1
PJ 10-2	Sector 1. 3 m apart from PJ-10-1, closer to the lake.	0-5	C ₁₀ -C ₅₀	8000	
PJ 10-3	Sector 2. Contaminated soil in the lot of drums. Contaminated depth: 15 cm.	0-5	C ₁₀ -C ₅₀	130 000	19
PJ 10-4	Sector 2. Under PJ-10-3.	5-15	C ₁₀ -C ₅₀ .	65 000	
PJ 10-5	Sector 2. Contaminated soil in the lot of drums.	0-5	C ₁₀ -C ₅₀ .	270 000	
PJ 10-6	Under PJ-10-5.	5-15	C ₁₀ -C ₅₀	160 000	
PJ 10-7	Sector 2. Contaminated soil in the lot of drums.	0-10	C ₁₀ -C ₅₀	440 000	
PJ 10-8	Sector 2. Contaminated soil in the lot of drums.	0-10	C ₁₀ -C ₅₀ .	150 000	
Total area					20
Water					
PJ 10-9	Sector 2. Surface water of Lake Ford near the shore, downstream of PJ-10-1.	N/A	C ₁₀ -C ₅₀	190	
PJ 10-10	Sector 2. Surface water of Lake Ford near the shore, east of PJ-10-9.	N/A	C ₁₀ -C ₅₀	240	

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: 2 C: 10	A: 50 B: 500 C: 1000	A: 0.05 B: 1 C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° PJ-17 Map/Carte N°: 24 N/05 Latitude 59 ° 20.29' N Longitude 69 ° 45.93' W
 Region/Région: Aupaluk Informant/Informateur John Appahatak
 Date: 20-21 Jul 2001 By/Par: JB, LO, ST Priority/Prioritaire ☒ Hasard ☐ Other: _____

Nb sectors/secteurs: 3 Sector/Secteur N°: 1-3 Size/Dimension: 1500 m X 100 m
 Distance from surface water/Distance de l'eau de surface: 100 m Soil/Sol: Sand/Sable Drainage: Good/Bon

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 1 Dwellings: _____ State/Condition: Quite good/Assez bonne
 Description (material/matériaux + volume): Not estimated, maybe >10-15m³/Pas estimé: peut-être >10-15m³

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 285 empty/vides: 270 full/pleins: _____ residue/residus: >15 piled/empilés: _____ scattered/épars: ☒

Quantity/Quantité ☒ diesel: >500 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ ☐ Jet-B: _____ L _____ : _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: ~100 m Type of area/de milieu: Lake/Lac

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 1 empty/vides: _____ full/pleins: 1 residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: Grease/Graisse: ~100 L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 40 empty/vides: 27 full/pleins: _____ residue/residus: 13 state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 5 Condition: 2 broken Nb transformers/transformateurs: 1 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: 1 Muskeg: _____ Motors/Moteur : 9

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ Runway roller : 1

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): _____ ; 1-2 m³ Cables/Câbles: _____ ; 1-3 m³

Wood/Bois: 10-15 m³ Metal/Métal: 20-30 m³ Other/Autre: ~10 m³

Other/Autre: **Sector 1:** see page 2/**Secteur 1:** voir page 2 *The site has been partially cleaned by the village.*

Sector 2: 58 barrels for sampling (there are rocks inside), scattered barrels; at ~50m of a wetland.

Sector 3: 1 metal sled, 1 battery, cans, dump, 5 motors, barrels, metal debris (6m², 4m³);

scattered: muskeg caterpillars, 1 motor, 1 crushed container for gasoline, metal debris (2m³).

Also, about 100m from a lake: 212 barrels with 150 L residue, 40 propane tanks: 13 with residue, some are for welding.

Note: the description might be incomplete (problems with photos taken as a reference)... Missing data: inside of the garage.

[Site PJ-17 A: 64 empty drums on the shore of the bay (Hope Advance Bay), on rocks (59° 20.54' N; 69° 43.81' W)]

Sector 1

2 open barrels with
rocks, wood debris
(3m^3 ; $<1\text{m}^3$)

1 antenna standing, with wires .
Nearby: beams in the ground, 1 open barrel

Tin cabin collapsed

1 barrel at ~50m and
1 at ~100m
Telecommunication wires
(~300 long) from the cabin.
On at least 1km, there are
~10 wood poles.
There is a runway .

Scattered debris:
tin and metal

Sand mound with scattered debris :
tar paper (3m^3), 5 barrels, 1 antenna
(15m long) on the ground, 3 stoves

Tar paper (3m^3), 1 barrel,
2 stoves, wires, various
debris, cabin behind

Sector 3
(See page 1)

Scattered : 1 scraper for
runway, water boiler,
stove pipes, metal sled

Cement base (6mx4m),
1 transformer,
2 batteries, wires,
grease gun, 2 motors,
fire extinguishers,
1 propane tank, wires.
Nearby: 1 battery (partly
buried), 3 open barrels
with debris

~25 beams under
the ground
(12m x 4m), tar
paper, cabin,
antenna

Poles

Wheels and tires, wood
debris partly burned,
plywood sheet, dump
(burned debris: oil filter,
canvas, wood, cans)

15 barrels
with residue

Barrels

In the garage:
1 truck, 1 empty propane tank, 1 x 20-L pail full of
grease, 1 x 40-L empty pail, 3 empty drums, tires, lots
of machinery parts, 2 radiators, 2 furnaces,
1 shelf, 1 motor, contaminated soils, and more...
Metal debris: 6m^3

Garage
(20mx12m)

10mx3m

Metal debris
(1.5m^2 ; 3m^3)

Metal debris, pipes,
1 water boiler
(15m^2 ; 3m^3)

Wood and
metal debris

Open pit
(2m x 0.5m x
0.5m depth)

Note:
There are droppings of
Canada geese, Snowshoe hare, black
bear and caribou on the site.

Sector 2
(See page 1)

PJ-17**Sector 1:** Coord: 59° 20.29' N 69° 45.93' W.**Sector 2:** Coord: 59° 20.27' N 69° 45.95' W.**Sector 3:** Coord: 59° 20.27' N 69° 45.60' W.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
PJ 17-1	Sector 1. Behind the building, ≈ 15 drums with residue. 1 km apart from Hope Advance Bay. Soil sampled on the southern side of the lot of drums. more than 30 cm deep in the sandy soil.	0-5	C ₁₀ -C ₅₀	26 000	16
PJ 17-2	Soil sampled under PJ17-1.	5-15	C ₁₀ -C ₅₀	39 000	
PJ 17-3	Sector 1. Soil sampled on the northern side of the lot of drums.	0-5	C ₁₀ -C ₅₀	74 000	
PJ 17-4	Sector 1. Soil sampled under PJ-17-3.	5-15	C ₁₀ -C ₅₀	21 000	
PJ 17-5	Sector 2. Between the building and Hope Advance Bay. ≈ 55 drums, 700 m apart from the Bay: Soil sampled near the lot of drums.	0-5	C ₁₀ -C ₅₀	< 100	
PJ 17-6	Sector 2. Soil sampled under PJ-17-5.	5-15	C ₁₀ -C ₅₀	< 100	
PJ 17-7	Sector 3. 500 m apart from the Bay. Soil sampled near the lot of drums.	0-5	C ₁₀ -C ₅₀	< 100	
PJ 17-8	Soil of the building.	0-5	C ₁₀ -C ₅₀ Hg Pb	66 000 0,02 160	108
PJ 17-9	Soil under a battery close to the building.	0-3	Hg Pb	< 0,02 2000	1
PJ 17-10	Soil under the transformer close to the building.	0-5	PCBs	< 0,05	
PJ 17-11	Soil under a battery on the border of sector 3.	0-5	Hg Pb	< 0,02 180	
PJ 17-12	Sector 3. Soil under motor parts, filters and a battery.	0-5	Hg Pb	< 0,02 83	
PJ 17-13	Sector 3. Soil under motor parts, filters and a battery.	0-5	C ₁₀ -C ₅₀	<u>2600</u>	
Total					125

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: 2 C: 10	A: 50 B: 500 C: 1000	A: 0.05 B: 1 C: 10

SECTOR OF KANGIRSUK

TW

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>TW</u>	Map/Carte N°: <u>25 C/05 W</u>	Latitude <u>60 ° 05.45'</u> <u>N</u>	Longitude <u>69 ° 55.48'</u> <u>W</u>
Region/Région: <u>Kangirsuk</u>	Informant/Informateur <u>None</u>		
Date: <u>22 Jul 2001</u>	By/Par: <u>JB, LO, ST</u>	Priority/Prioritaire <input type="checkbox"/>	Hasard <input type="checkbox"/> Other: <u>Addition</u>

Nb sectors/secteurs: <u>1</u>	Sector/Secteur N°: <u>1</u>	Size/Dimension: <u>100 m X 100 m</u>	
Distance from surface water/Distance de l'eau de surface: <u><1 m</u>		Soil/Sol: _____	Drainage: <u>Variable</u>

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: 2 wood platforms

Description (material/matériaux + volume): (10m x 4m; 5m x 3m)

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 83 empty/vides: 70 full/pleins: _____ residue/residus: 13 piled/empilés: X scattered/épars: X

Quantity/Quantité ☒ diesel: 1230 L ☐ oil/huile: _____ L ☒ grease/graisse: 100 L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: 30 ? m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ _____ : _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 6 empty/vides: (2) full/pleins: 4 residue/residus: _____ state/état: (2 brown glass bottles broken)

Content + quantity/Contenu + quantité: Fire extinguisher powder: 20 L Grease/Graisse: 2 x 4 L ; 1 x 2 kg

Nb propane tanks/Bonbonnes de propane:

TOTAL: 11 empty/vides: 7 full/pleins: _____ residue/residus: 4 state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 0 Condition: _____ **Nb transformers/transformateurs:** 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ Pipe threader : 1

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; 10-15 m³ Al: _____ ; 5-10 m³ Plastic _____ ; _____ m³

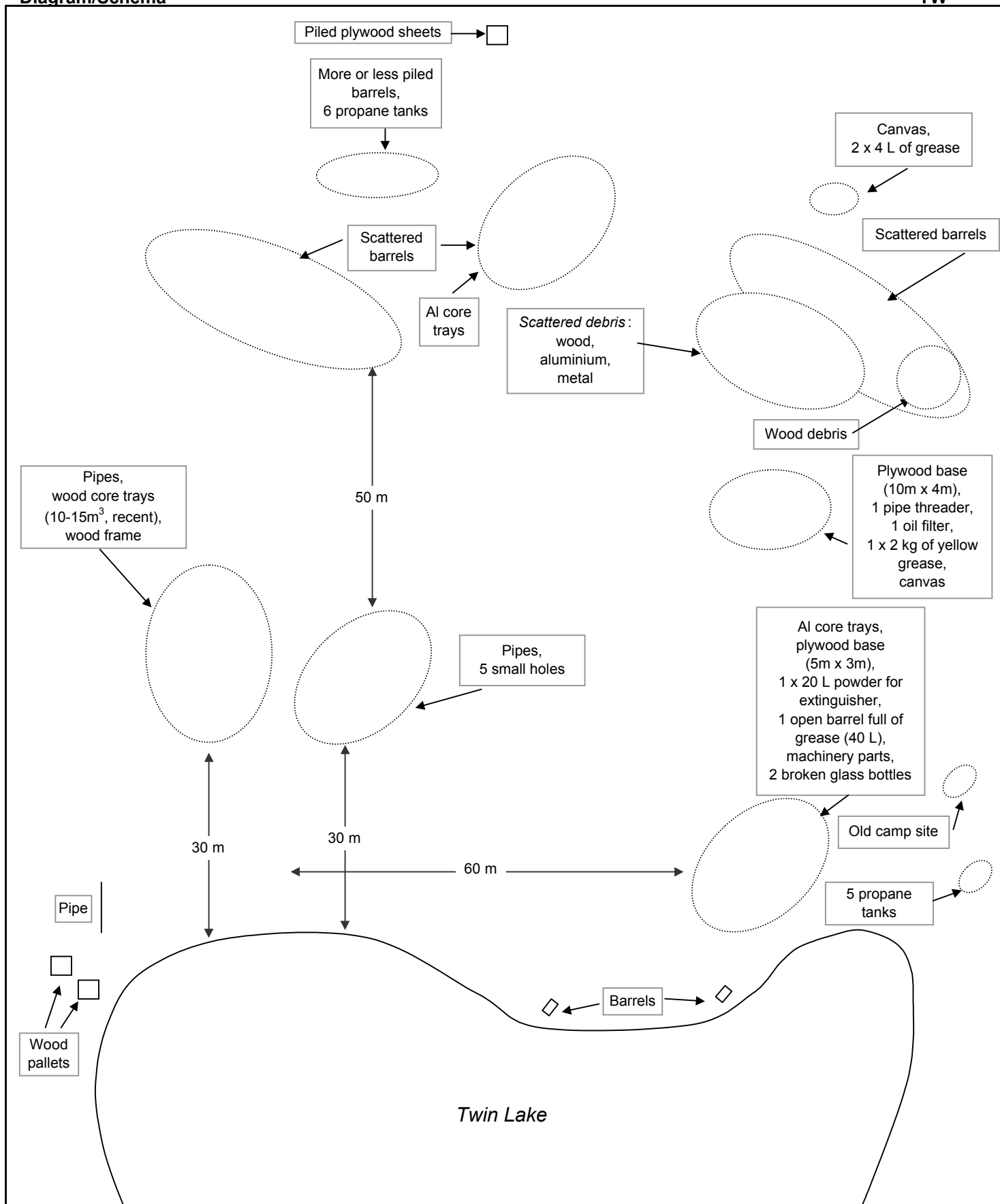
Rods/Tuyaux (Nb + Volume): >10 ; <1 m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: 10-15 m³ Metal/Métal: 1-5 m³

Other/Autre: _____

See page 2 for description/Voir page 2 pour description: plywood sheets, wood and Al core trays, 1 pipe threader, machinery parts, scattered barrels (some with diesel), containers with grease, container with powder for fire extinguisher, wood pallets, canvas / feuilles de contreplaqué, plateaux à carottes en bois et en Al, 1 machine à fileter lestuyaux, pièces de machinerie, barils épars (quelques-uns avec diesel), contenants avec graisse, poudre chimique pour extincteur, palettes en bois, toile.

Many caribou droppings on the site/Nombreux crottins de caribous sur le site.



TW (Twin Lake)

Site located near Twin Lake.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
TW 1-1	Soil under a plywood sheet, 15 m apart from Twin Lake.	0-5	C ₁₀ -C ₅₀	28 000	1
TW 1-2	Soil contaminated with grease under a grease pail, 6 m apart of Twin Lake and 3 m apart of a brook running into Twin Lake.	0-5	C ₁₀ -C ₅₀	74 000	1
Total area					2
Water					
TW 1-3A	Surface water of the brook which runs into Twin Lake, 3 m apart of a grease pail.	N/A	C ₁₀ -C ₅₀	180	-
TW 1-3B	Duplicata of TW -1-3A.	N/A	C ₁₀ -C ₅₀	120	-

MENV criteria:

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

**SECTOR OF
KANGIQSUJUAQ**

K-28

K-61

WB-3

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE

INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>K-28</u>	Map/Carte N°: <u>35 H/11 E</u>	Latitude <u>61 ° 34.65'</u> N	Longitude <u>73 ° 14.75'</u> W
Region/Région: <u>Kangiqsujaq</u>	Informant/Informateur <u>Amaamak Jaaka</u>		
Date: <u>9 Sept 2001</u>	By/Par: <u>JB, LO, ST</u>	Priority/Prioritaire <input checked="" type="checkbox"/>	Hasard <input type="checkbox"/> Other: <u> </u>

Nb sectors/secteurs: 3 **Sector/Secteur N°:** 2 **Size/Dimension:** m X m
Distance from surface water/Distance de l'eau de surface: m **Soil/Sol:** Organic **Drainage:** Very poor

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: Dwellings: 1 State/Condition: Tent collapsing/Tente effondrée

Description (material/matériaux + volume): Wood and canvas/Bois et toile; 3m³

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres) :

TOTAL: 60 empty/vides: 50 full/pleins: 10 residue/residus: piled/empilés: scattered/épars: ☒

Quantity/Quantité ☒ diesel: 2000 L ☐ oil/huile: L ☐ grease/graisse: L ☐ : L

Distance from a sensitive area/d'un milieu sensible: m Type of area/de milieu:

Nb tanks/réservoirs:

TOTAL: 2 empty/vides: 2 full/pleins: residue/residus: Note: they are quite crushed

Quantity/Quantité ☐ diesel: ☐ Jet-B: L ☐ : L ☐ : L

Distance from a sensitive area/d'un milieu sensible: m Type of area/de milieu:

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 0 empty/vides: full/pleins: residue/residus: state/état:

Content + quantity/Contenu + quantité: : L : L : L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 9 empty/vides: 3 full/pleins: residue/residus: 6 state/état:

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 0 Condition: **Nb transformers/transformateurs:** 0 Condition:

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: Tractor/tracteur: Truck/Camion: Muskeg: Motor : 1

Conveyor/Convoyeur: Crusher/Concasseur: Generator/Génératrice: :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: 20 ; ? m³ Al: ; m³ Plastic ; m³

Rods/Tuyaux (Nb + Volume): ~50 ; ? m³ Cables/Câbles: ; m³

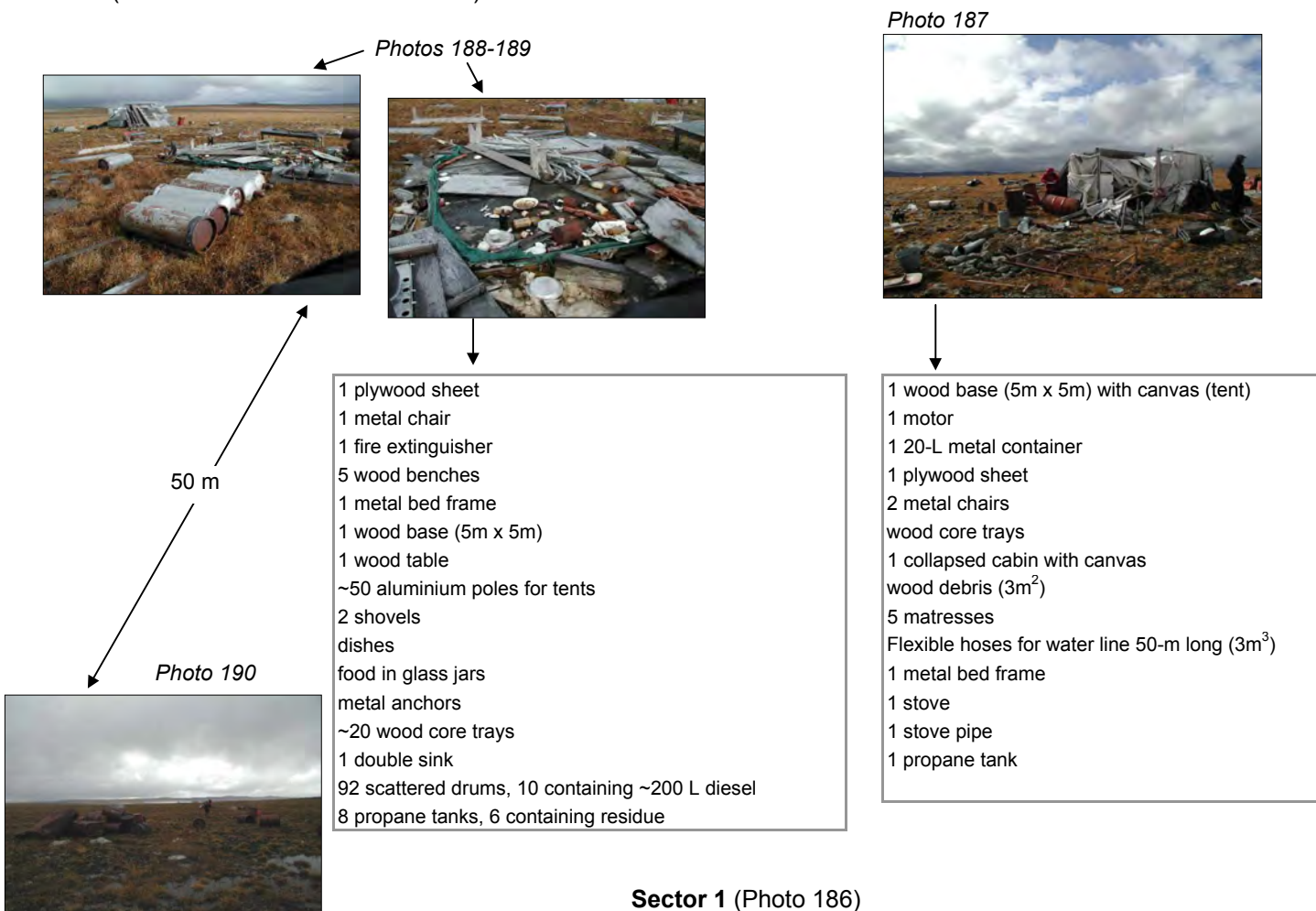
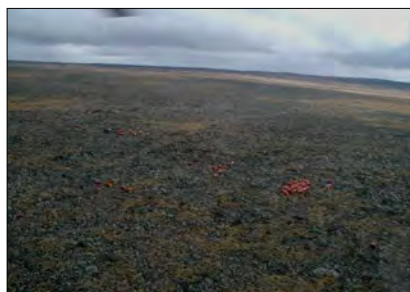
Wood/Bois: 20-30 m³ Metal/Métal: 10-20 m³ Other/Autre: 5 m³

Other/Autre:

See detail at the back/Voir le détail au verso

Sector 1: 61° 34.91' W; 73° 14.15' N. 70 drums.

Sector 3: 61° 34.48' W; 73° 15.43' N. Active tripod. Recent equipment, CaCl₂ (de-icing salt), 4 drums of Jet-B.

Sector 2 (located between Sectors 1 and 2):**Sector 1** (Photo 186)

40 scattered drums
2 diesel tanks (each having 1000-L capacity)
4 wood beams 1.25-m long
1 metal pipe
2 tanks (quite crushed)

Sector 3 (Photos 191 and 192)

Global amount (m³) of :
- wood debris: 20-30
- metal debris: 10-15
- other: 5

K-28**Sector 1:** Coord: 61° 34.91' N 73° 14.15' W**Sector 2:** Coord.: 61° 34.65' N. 73° 14.75' W.**Sector 3:** Coord: 61° 34.48' N 73° 15.43' W.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
K 28 1	Soil near a tent in sector 2.	0-3	C ₁₀ -C ₅₀	350	-
K 28 2	Soil close to a lot of drums in sector 1.	0-3	C ₁₀ -C ₅₀	140 000	5
K 28 3	Soil close to empty drums in sector 3.	0-3	C ₁₀ -C ₅₀ .	<u>1500</u>	-
K 28 4	Soil close to the pallet in sector 3.	0-5	C ₁₀ -C ₅₀	<u>3000</u>	10
Total area					15

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE

INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>K-61</u>	Map/Carte N°: <u>35 H/11 W</u>	Latitude <u>61 ° 33.25' N</u>	Longitude <u>73 ° 27.25' W</u>
Region/Région: <u>Kangiqsujuaq</u>	Informant/Informateur _____		
Date: <u>9 Sept 2001</u>	By/Par: <u>JB, LO, ST</u>	Priority/Prioritaire <input type="checkbox"/>	Hasard <input type="checkbox"/> Other: <u>Seen/Vu</u>

Nb sectors/secteurs: 3 Sector/Secteur N°: 1-3 Size/Dimension: 500 m X 500 m
 Distance from surface water/Distance de l'eau de surface: >500 m Soil/Sol: gravel/gravier Drainage: good/bon

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 12 Dwellings: _____ State/Condition: 10: quite good/assez bon; 2: collapsed
 Description (material/matériaux + volume): (seem still in use: locks/semblent encore utilisés: cadenas); "Canadian Royalties"

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres) :

TOTAL: ~50 empty/vides: ~25 full/pleins: 10 residue/residus: 5 or + piled/empilés: X scattered/épars: X

Quantity/Quantité ☒ diesel: 2000 L ☐ oil/huile: _____ L ☒ grease/graisse: 45 x 20 L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: >500 m Type of area/de milieu: _____

Nb tanks/réservoirs:

TOTAL: 1 empty/vides: 1 full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L _____ : _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 23 empty/vides: _____ full/pleins: 21 residue/residus: 2 Note: the acid is in one collapsed building

Content + quantity/Contenu + quantité: Acid/acid: ? L Paint/Peinture: 1 x 4 L Grease/graisse: 20 x 1 L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 34 empty/vides: 18 full/pleins: 16 residue/residus: _____ state/état: _____ Oil/Huile: 2 L

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 5 Condition: _____ Nb transformers/transformatrices: _____ Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Bulldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: 2 Motor/Moteur : 6

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ Water heater : 3

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; _____ m³ Al: ~70 ; ? _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): >100; 5-10 m³ Cables/Câbles: _____ ; 2 m³

Wood/Bois: 50-100 m³ Metal/Métal: 50-100 m³

Other/Autre: _____

Volume of debris had not been estimated since the site seems still in use. Active Site ?/Site actif ?

Note: Hazardous products located in one building had been removed by Gov. of Qc on 8 Aug. 2000/Les produits dangereux situés dans un bâtiment ont été enlevés par le gouv. du Qc le 8 août 2000: Ref: Clément Vallières,

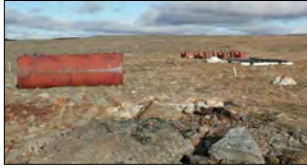
MENV Rouyn, 180 boul. Rideau, 1er étage, Rouyn J9X 1N9. Tel.: (819) 763-3333 ext. 257; clement.vallieres@menv.gouv.qc.ca

Sector 2: 61° 33.44' W; 73° 29.40' N. Empty barrels/Barils vides

Sector 3: 61° 33.34' W; 73° 27.39' N. Dumpsite/Site de déchets

Sector 1

Photo 211



1 40,000-L tank,
15 barrels,
canvas

Photo 210



44 pails full of grease,
10 barrels full of used diesel (2000 L)

1 Yellow muskeg
2 Ski-doo top
wood beams,
wood debris,
1 barrel

Collapsed building with:
shelves,
drilling equipment,
muskeg parts,
acid in a 4-L plastic container ,
2 motors, wires, tires,
20 x 1 L grease
Outside :
wood debris (1m³), metal
shelves, grease (2 x 5gal.),
bolts (1m³)

~100m

Photo 203



Photo 204



Building area
(see page 3)

Photo 200



3 muskeg tracks,
1 propane tanks

Pile of debris
including many
pipes and wood

Photo 206



Photo 205



Photo 209



Tires,
1 propane tank,
4 motors,
wires, metal
debris (1m³)

Photo 208



3 water heaters

1 red muskeg,
oil (2 L),
wood bases
(2 of 10m x 3m;
1 of 5m x 3m),
welding equipment,
1 propane tank

Beside the muskeg :
1 Al bath tub,
Al cube

wood beams,
3 drums,
1 pail full of grease,
metal debris

Material on photo 206
is behind the one that
is on photo 205

Photo 207



Wood boxes,
1 stand with >100 pipes
(2 to 10-cm diameter),
wood boxes and canvas,
water hoses,
wood debris

Note: the inventory is not exhaustive

Building area (buildings are indicated with N° for description)

N° 2: full of core trays inside the building

N° 3: camp still in use

N° 4: door locked

N° 5: door locked

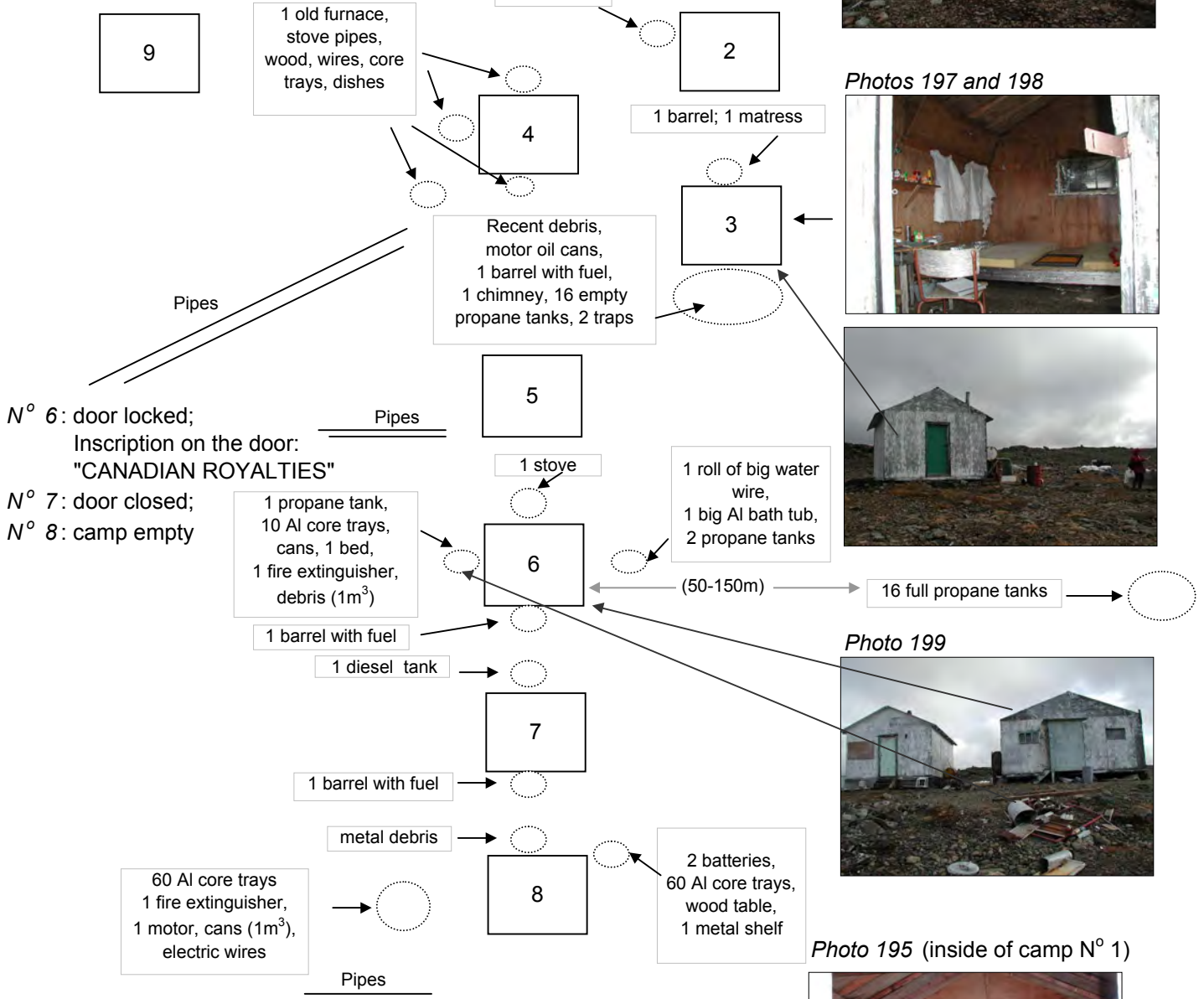


Photo 196

Photos 197 and 198

Photo 199

Photo 195 (inside of camp N° 1)

Total: 10 wood cabins

N° 1: this camp contains 2 sinks, glass bottles (for chemicals),
1 furnace, 2 chimneys, wood shelves. One sign indicates that
hazardous products have been removed from that camp on
8 Aug. 2002 by the MENV - Rouyn.

K-61

Many spots of contaminated soil near dwellings. Total contaminated area: ~ 75 m²

Pile of empty drums coord.: 61° 33.44' N 73° 27.40' W

Dumpsite coord.: 61° 33.34' N 73° 27.39' W

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
KAW 61 1	Soil near a drum connected to a dwelling.	0-3	C ₁₀ -C ₅₀ .	< 200	-
KAW 61 2	Soil near a drum connected to a dwelling	0-3	C ₁₀ -C ₅₀	51 000	2
KAW 61 3	Soil under a battery.	0-3	Hg Pb	< 0,02 130	-
KAW 61 4	Soil under a drum near the muskeg.	0-3	C ₁₀ -C ₅₀	180 000	5
KAW 61 5	Soil under a lot of 8 drums + 20 yellow pails.	0-3	C ₁₀ -C ₅₀	33 000	25
Total area					~ 75

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: 2 C: 10	A: 50 B: 500 C: 1000	A: 0.05 B: 1 C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° WB-3 Map/Carte N°: 35 H/08 W Latitude 61 ° 29.41' N Longitude 72 ° 18.09' W
 Region/Région: Kangiqsujuaq Informant/Informateur Amaamak Jaaka
 Date: 9 Sept 2001 By/Par: JB, LO, ST Priority/Prioritaire ☐ Hasard ☒ Other: _____

Nb sectors/secteurs: 1 Sector/Secteur N°: 1 Size/Dimension: 50 m X 30 m
 Distance from surface water/Distance de l'eau de surface: _____ m Soil/Sol: Rock Drainage: Very good

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: Damaged/Damaged
 Description (material/matériaux + volume): 1 wood base surrounded by a tin sheet/1 plateforme entourée de tôle

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 85 empty/vides: 76 full/pleins: 9 residue/residus: _____ piled/empilés: _____ scattered/épars: X

Quantity/Quantité ☒ diesel: 675 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: <10 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: _____ empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L _____ : _____ L _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: _____ empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: _____ : _____ L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 1 empty/vides: 1 full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: _____ Condition: _____ Nb transformers/transformateurs: _____ Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ : _____

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ : _____

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): _____ ; _____ m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: 15-20 m³ Metal/Métal: 5 m³

Other/Autre: _____

NOTE: Some metal rods are coming out from the rock (0.5-1.25 m high)/Des tiges de métal sortent du roc, elles ont une hauteur de 0,5 à 1,25 m.

An inscription is written on many drums: CANICO (Canadian Nickel Co.)/Plusieurs barils portent une inscription: CANICO (Canadian Nickel Co.).

The site is accessible by ski-doo and all terrain vehicle (4-Wheels)/Le site est accessible par motoneige et véhicule tout terrain (VTT).

Photo 180 Partial view of Site WB-3



The site is accessible by
ski-doo and
all terrain vehicle
(4-Wheels)

Photo 174



Wood base (~3m diameter)
surrounded by a piece of tin

Metal rod coming out of the rock.
There are 3 or more rods like that on the site.

*This could be hazardous for people
travelling by ski-doo.*

Photo 176



Photo 175



Partial view of scattered debris.

Stop-fire paper,
tin pieces,
scattered wood debris (30m x 10m),
1 propane tank,
wood debris and cans <15 from lake,
pipes (2-cm diameter),
1 chimney
1 piece of mosquito net

Photo 177 View from ground



85 barrels close to the shore:
76 are empty, 9 have diesel
(a total of ~675 L)

Photo 178 Aerial view



WB-3

5 m apart of Qulusuttalik Lake. CANICO (Canadian Nickel Co) written on many drums.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
WB 3-1	Soil in a dump of cans and drums.	0-3	C ₁₀ -C ₅₀	<u>3300</u>	2,5
WB 3-2	Soil under a drum, on the western side of the contaminated area.	0-3	C ₁₀ -C ₅₀	280	-
WB 3-4	Soil close to the lot of drums.	0-3	C ₁₀ -C ₅₀	140	-
Total area					2,5
Water					
WB 3-3	Water of Qulusuttalik Lake.	N/A	C ₁₀ -C ₅₀ .	< 100	-

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

SECTOR OF SALLUIT

KV-1

SAL-1

SW-27

SW-34

SW-42

WB-9

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° KV-1 Map/Carte N°: 35 F/07 W Latitude 61 ° 25.64' N Longitude 76 ° 45.46' W
 Region/Région: Salluit Informant/Informateur Paulusie Padlayat
 Date: 9 Sept 2001 By/Par: JB, LO, ST Priority/Prioritaire ☐ Hasard ☐ Other: Informant

Nb sectors/secteurs: 2 Sector/Secteur N°: 1-2 Size/Dimension: 2 X (5 m X 10 m)
 Distance from surface water/Distance de l'eau de surface: < 5 m Soil/Sol: variable Drainage: variable

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: _____

Description (material/matériaux + volume): _____

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 30 empty/vides: 28 full/pleins: 0 residue/residus: 2 piled/empilés: X scattered/épars: X

Quantity/Quantité ☒ diesel: 50 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: > 20 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ _____ : _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Content + quantity/Contenu + quantité: _____ : _____ L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 0 Condition: _____ Nb transformers/transformateurs: 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ : _____

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ : _____

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): 2 ; <1 m³ Cables/Câbles: _____ ; 1 m³

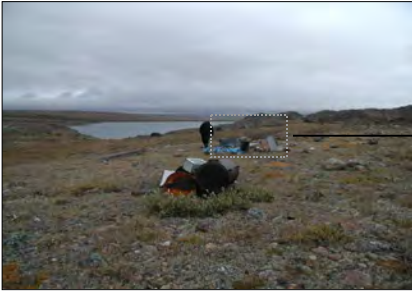
Wood/Bois: 2-5 m³ Metal/Métal: 2-5 m³

Other/Autre: _____

This site has been cleaned according to PA/Le site a été nettoyé selon PA

Sector 1: on a hillock (2m x 10m) see description on page 2/sur une butte, voir description à la page 2.

Sector 2: at less than 5m from the lake, see description on page 2/à moins de 5m du lac, voir description à la page 2.

Sector 1 (on a hillock) (*Photo 151*)

4 open barrels full of debris
 Wood debris (3m3)
 1 pail with garbage
 2 barrels with residue (~100 L)
 2 pipes
 1 water heater
 6 barrels
 Garbage

Below the hillock:
 Metal cables and metal cans (~1m3)

Sector 2 (by the lake) (*Photos 153 and 152*)

15 crushed barrels
 1 wood board

Further:

1 platform for float plane (wood only) near the shore
 4 drums along the shore on the other side of the lake
 6 barrels (empty) at ~60 m
 1 dump site (including 1 empty barrel):



KV-1

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
KV 1-1	Soil under a barrel	0-3	C ₁₀ -C ₅₀ .	<u>2500</u>	2
Total area					2

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>SAL-1</u>	Map/Carte N°: <u>35 G/10 W</u>	Latitude <u>61 ° 31.14'</u> N	Longitude <u>74 ° 53.01'</u> W
Region/Région: <u>Salluit</u>	Informant/Informateur <u>Paulusie Padlayat</u>		
Date: <u>7 Sept 2001</u>	By/Par: <u>JB, LO, ST</u>	Priority/Prioritaire <input type="checkbox"/>	Hasard <input type="checkbox"/> Other: <u>Seen/Vu</u>

Nb sectors/secteurs: 1 **Sector/Secteur N°:** 1 **Size/Dimension:** 50 m X m

Distance from surface water/Distance de l'eau de surface: <20 m **Soil/Sol:** Organic **Drainage:** Poor

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 6 Dwellings: State/Condition: 4 partly collapsed; 2 collapsed

Description (material/matériaux + volume):

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 336 empty/vides: 336 full/pleins: residue/residus: piled/empilés: X scattered/épars: X

Quantity/Quantité ☐ diesel: L ☐ oil/huile: L ☐ grease/graisse: L ☐ : L

Distance from a sensitive area/d'un milieu sensible: <20 m Type of area/de milieu: Lacs Nuvillek (in a wetland)

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: full/pleins: residue/residus:

Quantity/Quantité ☐ diesel: L ☐ Jet-B: L ☐ : L ☐ : L

Distance from a sensitive area/d'un milieu sensible: m Type of area/de milieu:

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 6 empty/vides: 3 full/pleins: 3 residue/residus: state/état: 6 X 40-L pails; 3 full (closed)

Content + quantity/Contenu + quantité: Aviation oil: 3 X 1 L Aviation oil: 3 X 40 L : L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 15 empty/vides: 15? full/pleins: residue/residus: state/état:

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 2 Condition: **Nb transformers/transformateurs:** 0 Condition:

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: Tractor/tracteur: Truck/Camion: Muskeg: :

Conveyor/Convoyeur: Crusher/Concasseur: Generator/Génératrice: :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: ; m³ Al: ; m³ Plastic ; m³

Rods/Tuyaux (Nb + Volume): ; m³ Cables/Câbles: ; m³

Wood/Bois: 60 m³ Metal/Métal: ~10 m³

Other/Autre: 1 refrigerator, 2 furnaces, 1 stove, 1 wood base (4m X 4m), 1 wood table, 1 metal shelf, 2 batteries, flexible hoses, food cans, canvas, plywood, stove pipes. See some photos on page 2./

1 réfrigérateur, 2 fournaies, 1 poêle, 1 base de bois (4m x 4m), 1 table, 1 étagère de métal, 2 batteries, boyaux flexibles, cannettes de nourriture, toile, contreplaqué, tuyaux de poêle. Voir photos en page 2.

Wetland (grass): the slope is orientated towards the lake/Milieu humide: la pente est orientée vers le lac.

The drums are close to the lake/Les barils sont situés près du lac.

Photo 163 (Barrels, debris and buildings)



Photo 164 (Debris)



Photo 165 (3 x 1 L Aviation oil)



Photo 166 (Pails containing aviation oil, inside one building)



Photo 167 (Debris)



Photo 168 (Inside of a building with debris)



SAL-1

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
INC-1	Soil close to the westernmost lot of drums.	0-3	C ₁₀ -C ₅₀	< 100	-
INC-2	Soil under a battery.	0-3	Hg Pb	0,19 140	-
INC-3	Soil under a battery.	0-3	Hg Pb	0,11 380	-
INC-4	Soil close to a lot of drums near 4 buildings.	0-3	C ₁₀ -C ₅₀	< 500	-
Total area					0

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° SW-27 Map/Carte N°: 35 F/08 W Latitude 61 ° 28.76' N Longitude 76 ° 22.93' W
 Region/Région: Salluit Informant/Informateur Paulusie Padlayat
 Date: 6 Sept 2001 By/Par: JB, LO, ST Priority/Prioritaire ☒ Hasard ☐ Other: _____

Nb sectors/secteurs: 4 Sector/Secteur N°: 1-4 Size/Dimension: 4 X (20 m X 20 m)
 Distance from surface water/Distance de l'eau de surface: >1000 m Soil/Sol: Gravel Drainage: Good/Bon

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: 1 wood base/1 plate-forme de bois

Description (material/matériaux + volume): _____

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 87 empty/vides: 73 full/pleins: 6 residue/residus: 8 piled/empilés: X scattered/épars: X

Quantity/Quantité ☐ diesel: 1650 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: >1000 m Type of area/de milieu: _____

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ : _____ L ☐ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 17 empty/vides: _____ full/pleins: 15 residue/residus: 2 state/état: some are open or damaged

Content + quantity/Contenu + quantité: Aviation oil (6) : 6 L Grease (9): 260 L Oil/Huile (2) : 20 L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 1 empty/vides: _____ full/pleins: _____ residue/residus: 1 state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 2 Condition: _____ **Nb transformers/transformatateurs:** 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: 1 Truck/Camion: _____ Muskeg: 1 Trailer : 1

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): _____ ; _____ m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: 20 m³ Metal/Métal: 15 m³

Other/Autre: _____

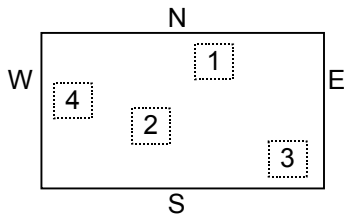
Sector 1: 61° 28.76' W; 76° 22.93' N. Photos 155-156. See/Voir page 2

Sector 2: 61° 28.84' W; 76° 21.68' N. Photos 157-158. See/Voir page 2

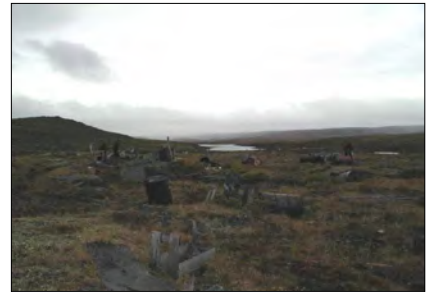
Sector 3: 61° 28.62' W; 76° 21.22' N. Photo 159. See/Voir page 2

Sector 4: 61° 28.95' W; 76° 22.10' N. Photo 154. See/Voir page 2

Distribution of Sectors

**Sector 1** *Photos 155, 156*

21 empty barrels,
3 barrels with diesel (150 L)
6 X 1 L Aviation oil,
numerous fire-stop paper,
3-4 sinks,
wood debris (3m³),
1 large propane tank (residue),
1 core tray,
1 battery,
1 dumpsite,
many beds

**Sector 2** *Photos 157, 158*

45 empty barrels,
6 barrels full of diesel (1200 L),
1 muskeg, 1 trailer,
3 wood beams (6m long),
4 wood beams (3m long),
wood core trays,
plastic core trays,
3 X 20-L pails full of grease (2 with broken caps),
4 X 40-L pails full of grease (3 are damaged),
1 X 20-L pail with oil (10 L),
few cans, canvas,
2 metal pipes, 2 plastic pipes,
1 chain,
1 tractor

Sector 3 *Photo 159*

8 empty barrels,
4 barrels with diesel (200 L),
1 barrel X 100 L diesel,
core trays,
metal debris (30m³),
wood debris,
canvas, few pipes,
2 pickaxes (geologist hammers)

Sector 4 *Photo 154*

7 empty barrels,
2 X 20-L pails full of grease (40 L),
1 X 20-L pail with oil (10 L),
8 drilling poles (3m long),
30 drilling pipes,
flexible hoses,
1 oil stove,
wood beams

SW-27**Sector 1:** Coord: 61° 28.76' N 76° 22.93' W.**Sector 2:** Coord: 61° 28.84' N 76° 21.68' W.**Sector 3:** Coord: 61° 28.62' N 76° 21.22' W.**Sector 4:** Coord: 61° 28.95' N 76° 22.10' W.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
SW 27-1	Sector 1. Soil under a battery.	0-3	Hg Pb	<0,02 30	-
SW 27-2	Sector 2. Soil under a grease pail	0-3	C ₁₀ -C ₅₀	160 000	1
SW 27-3	Sector 2. Soil under a diesel drum.	0-3	C ₁₀ -C ₅₀	59 000	1
SW 27-4	Sector 3. Soil under a diesel drum.	0-3	C ₁₀ -C ₅₀	9400	0,5
Total area					2,5

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° SW-34 Map/Carte N°: 35 G/09 W Latitude 61 ° 34.90' N Longitude 74 ° 28.12' W
 Region/Région: Salluit Informant/Informateur _____
 Date: 10 Sept 2001 By/Par: JB, LO, ST Priority/Prioritaire ☐ Hasard ☐ Other: Seen/Vu

Nb sectors/secteurs: 1 Sector/Secteur N°: 1 Size/Dimension: >500 m X 500 m
 Distance from surface water/Distance de l'eau de surface: <5 m Soil/Sol: Rocky Drainage: Very good

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: _____

Description (material/matériaux + volume): 1 base: Aluminium, canvas, wood; 1-2 m³

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres): Note: also include 60-L and 40-L barrels

TOTAL: ~1500 empty/vides: _____ full/pleins: 1? residue/residus: _____ piled/empiilés: X scattered/épars: X

Quantity/Quantité ☐ diesel: _____ L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ Gasoline : 40 L

Distance from a sensitive area/d'un milieu sensible: >50? m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: _____ empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ _____ : _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants: Note: ~16 pails and 2 bottles

TOTAL: ~18 empty/vides: _____ full/pleins: _____ residue/residus: 2 state/état: Many broken; 2 intact

Content + quantity/Contenu + quantité: Acid ? : 250 ml Powder : Few _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 42 empty/vides: 42 full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 14 Condition: _____ **Nb transformers/transformateurs:** _____ Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ :

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; _____ m³ Al: >20 _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): >100 ; 2 m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: 10-15 m³ Metal/Métal: 10-20 m³

Other/Autre: See pages 2 and 3/Voir pages 2 et 3

Some barrels have an inscription: SPARTAN/Certains barils portent une inscription: SPARTAN

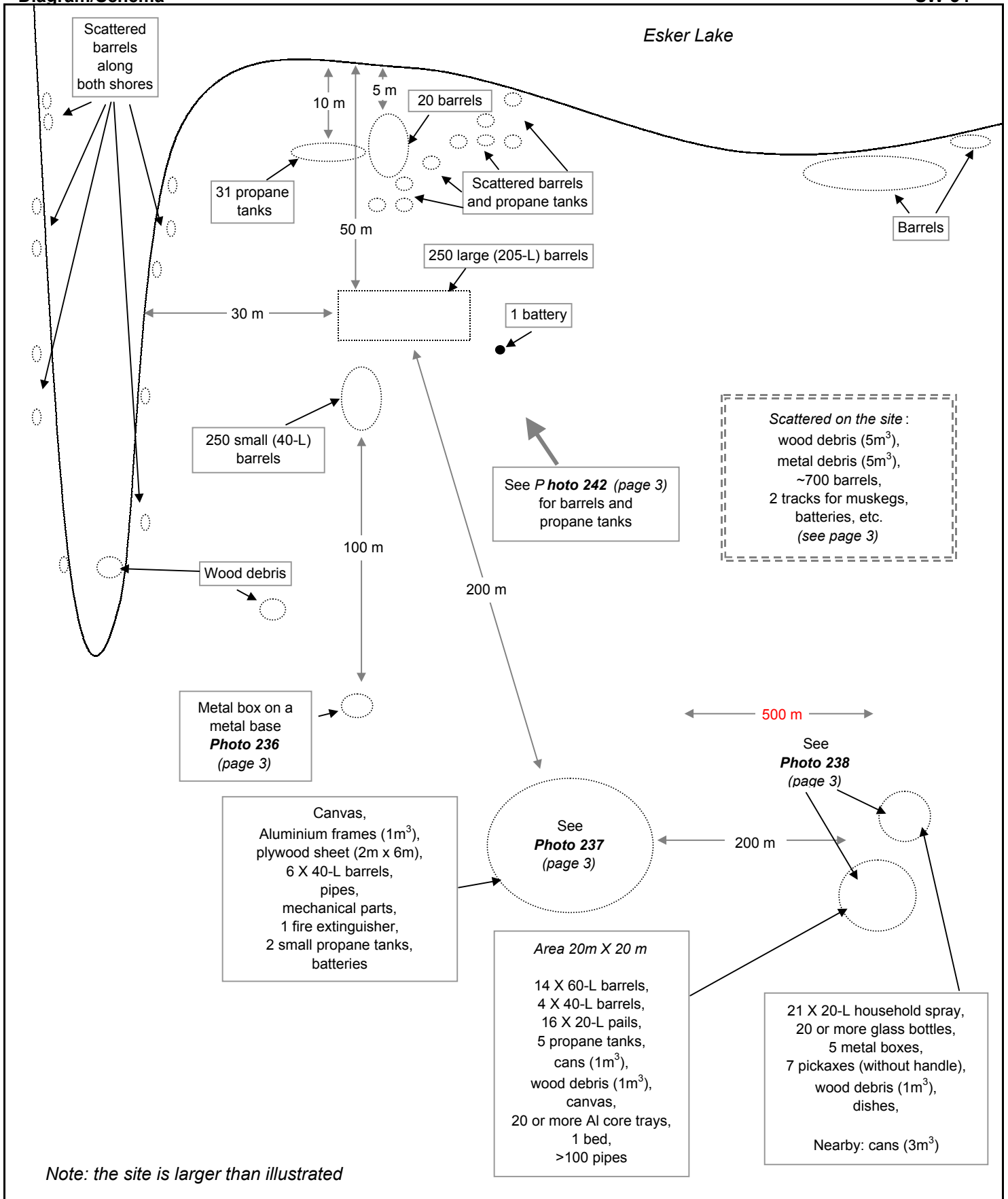


Photo 236



Photo 237



Photo 238



Photo 239



Glass bottles:
one contains about 250 ml chemical
product (probably acid)

GPS:
61° 34.78' N; 74° 27.89' W

Another glass bottle contains
chemicals product (powder),
no photo available;
1 battery,
metal debris

GPS:
61° 34.80' N; 74° 27.88' W

Photo 240



Scattered: wood debris (3m³),
metal debris (3m³).
2 muskeg tracks (caterpillars),
electronic parts,
1 communication antennae,
radio equipment,
many broken glass bottles
(chemicals products ?),
3 batteries,
scattered barrels

Photo 241



Photo 242



250 X 40-L gasoline barrels
(mostly empty: 40 L residue)

250 X 205-L diesel barrels
(all empty)

31 X propane tanks,
10 m from lake

20 X 205-L diesel barrels (empty),
5 m from lake, plus scattered barrels
and propane tanks

SW-34

Many spots of contaminated soils most under drums. Total contaminated area: ~ 90 m².

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
SW 34-1	Soil sample under an old battery	0-3	Hg Pb	0,02 90 000	0,5
SW 34-2	Soil sample under 2 batteries.	0-3	Hg Pb	0,03 6100	0,5
SW 34-3	Soil near the pile of small drums.	0-3	C ₁₀ -C ₅₀	< 500	-
SW 34-4	Soil near the pile of diesel drums.	0-3	C ₁₀ -C ₅₀	120	-
SW 34-5B	Duplicata of SW 34-5A	N/A	C ₁₀ -C ₅₀	380	-
SW 34-6	Soil sample under 2 batteries.	0-3	Hg Pb	1,3 <u>880</u>	0,5
Total area					~90
Water					
SW 34-5A	Water of Esker Lake close to the pile of drums.	N/A	C ₁₀ -C ₅₀ .	< 100	-

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° SW-42 Map/Carte N°: 53 G/09 W Latitude 61 ° 23.92' N Longitude 74 ° 34.40' W
 Region/Région: Salluit Informant/Informateur Paulusie Padlayat
 Date: 10 Sept 2001 By/Par: JB, LO, ST Priority/Prioritaire ☐ Hasard ☐ Other: Informant

Nb sectors/secteurs: 1 Sector/Secteur N°: 1 Size/Dimension: 150 m X 100 m
 Distance from surface water/Distance de l'eau de surface: 30 m Soil/Sol: Shallow Drainage: Variable

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: _____ State/Condition: 1 wood base

Description (material/matériaux + volume): _____

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: 81 empty/vides: 74 full/pleins: _____ residue/residus: 7 piled/empilés: X scattered/épars: X

Quantity/Quantité ☒ diesel: 700 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: 80 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____

Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L ☐ _____ : _____ L ☐ _____ : _____ L

Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: 4 empty/vides: _____ full/pleins: 3 residue/residus: 1 state/état: _____

Content + quantity/Contenu + quantité: grease (3) : 12 L insect repell.(1): 200 ml _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 0 Condition: _____ Nb transformers/transformateurs: 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: _____ Tractor/tracteur: _____ Truck/Camion: _____ Muskeg: _____ : _____

Conveyor/Convoyeur: _____ Crusher/Concasseur: _____ Generator/Génératrice: _____ : _____

Solid Waste and Dry material/Matériaux secs

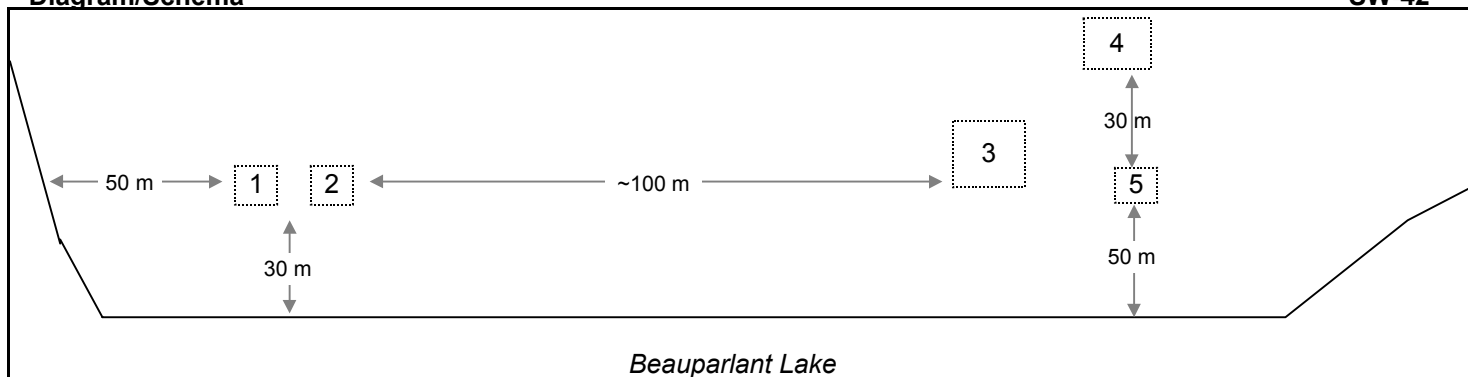
Core trays/Plateau à carottes (Nb + Volume): _____ Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³

Rods/Tuyaux (Nb + Volume): 20 ; <1 _____ m³ Cables/Câbles: _____ ; _____ m³

Wood/Bois: 5-10 m³ Metal/Métal: 2-5 m³ Other/Autre: 1-5 m³

Other/Autre: _____

NOTE: A lot of droppings of Canada goose and caribou are present on the site/ Il y a beaucoup de crottin de bernache du Canada et de caribou sur le site.



1 Photo 233



1 home made stove (1 barrel and stones)

2 Wood base (4m x 5m)

3 Photo 234



6 plywood sheets (25m²),
1 insect repellent (~200 ml),
cans (2m³),
3 X 4-L pails of grease (open; 12 L),
dishes, glass jars,
wood debris (2m³),
1 roll of roofing,
12 Al pipes (5cm dia. X 3m long),
3 Al pipes (2cm dia. X 1.2m long),
4 Al pipes,
scattered metal debris (<1m³)

4 Photo 235



74 empty barrels,
7 barrels with 100 L diesel each
(some are open),
1 empty metal gas container,
1 pipe with a valve

Wet area

5 Wood roof

SW-42

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
SW 42-2	Soil in the lot of 77 drums. 10 cm deep.	0-3	C ₁₀ -C ₅₀	260 000	12
SW 42-3	Soil in the lot of 77 drums under SW 42-2.	3-10	C ₁₀ -C ₅₀	25 000	
Total area					12
Water					
SW 42-1A	Surface water near the campsite.	N/A	C ₁₀ -C ₅₀ .	< 100	-
SW 42-1B	Duplicata of SW-42-1A.	N/A	C ₁₀ -C ₅₀	< 100	-

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2001

Site N° <u>WB-9</u>	Map/Carte N°: <u>35 G/07 E</u>	Latitude <u>61 ° 27.35'</u> <u>N</u>	Longitude <u>74 ° 33.22'</u> <u>W</u>
Region/Région: <u>Kangiqsujuaq</u>		Informant/Informateur _____	
Date: <u>7 Sept 2001</u>	By/Par: <u>JB, LO, ST</u>	Priority/Prioritaire <input type="checkbox"/>	Hasard <input type="checkbox"/> Other: <u>Seen/Vu</u>

Nb sectors/secteurs: -- **Sector/Secteur N°:** **Size/Dimension:** m X m

Distance from surface water/Distance de l'eau de surface: m **Soil/Sol:** **Drainage:**

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: 9 Dwellings: State/Condition: Good/Bonne

Description (material/matériaux + volume): The inventory of the site has not been prepared/Inventaire non effectué

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres):

TOTAL: empty/vides: full/pleins: residue/residus: piled/empilés: scattered/épars:

Quantity/Quantité ☐ diesel: L ☐ oil/huile: L ☐ grease/graisse: L ☐ : L

Distance from a sensitive area/d'un milieu sensible: m Type of area/de milieu:

Nb tanks/réservoirs:

TOTAL: empty/vides: full/pleins: residue/residus:

Quantity/Quantité ☐ diesel: L ☐ Jet-B: L ☐ : L ☐ : L

Distance from a sensitive area/d'un milieu sensible: m Type of area/de milieu:

Nb bottles or other containers/Bouteilles ou autres contenants:

TOTAL: empty/vides: full/pleins: residue/residus: state/état:

Content + quantity/Contenu + quantité: : L : L : L

Nb propane tanks/Bonbonnes de propane:

TOTAL: empty/vides: full/pleins: residue/residus: state/état:

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: Condition: **Nb transformers/transformateurs:** Condition:

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: Tractor/tracteur: Truck/Camion: Muskeg: :

Conveyor/Convoyeur: Crusher/Concasseur: Generator/Génératrice: :

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: ; m³ Al: ; m³ Plastic ; m³

Rods/Tuyaux (Nb + Volume): ; m³ Cables/Câbles: ; m³

Wood/Bois: m³ Metal/Métal: m³

Other/Autre:

FALCONBRIDGE EXPLORATION campsite, still in use. Presence of contaminated soil/

Camp de FALCONBRIDGE EXPLORATION, encore utilisé. Présence de sol contaminé.

No inventory of the site has been made, since it is still in use/**L'inventaire du site n'a pas été effectué** puisqu'il est encore utilisé.

Photo 162 General view of the campsite



Photo 171



Acid in a plastic container,
inside a building

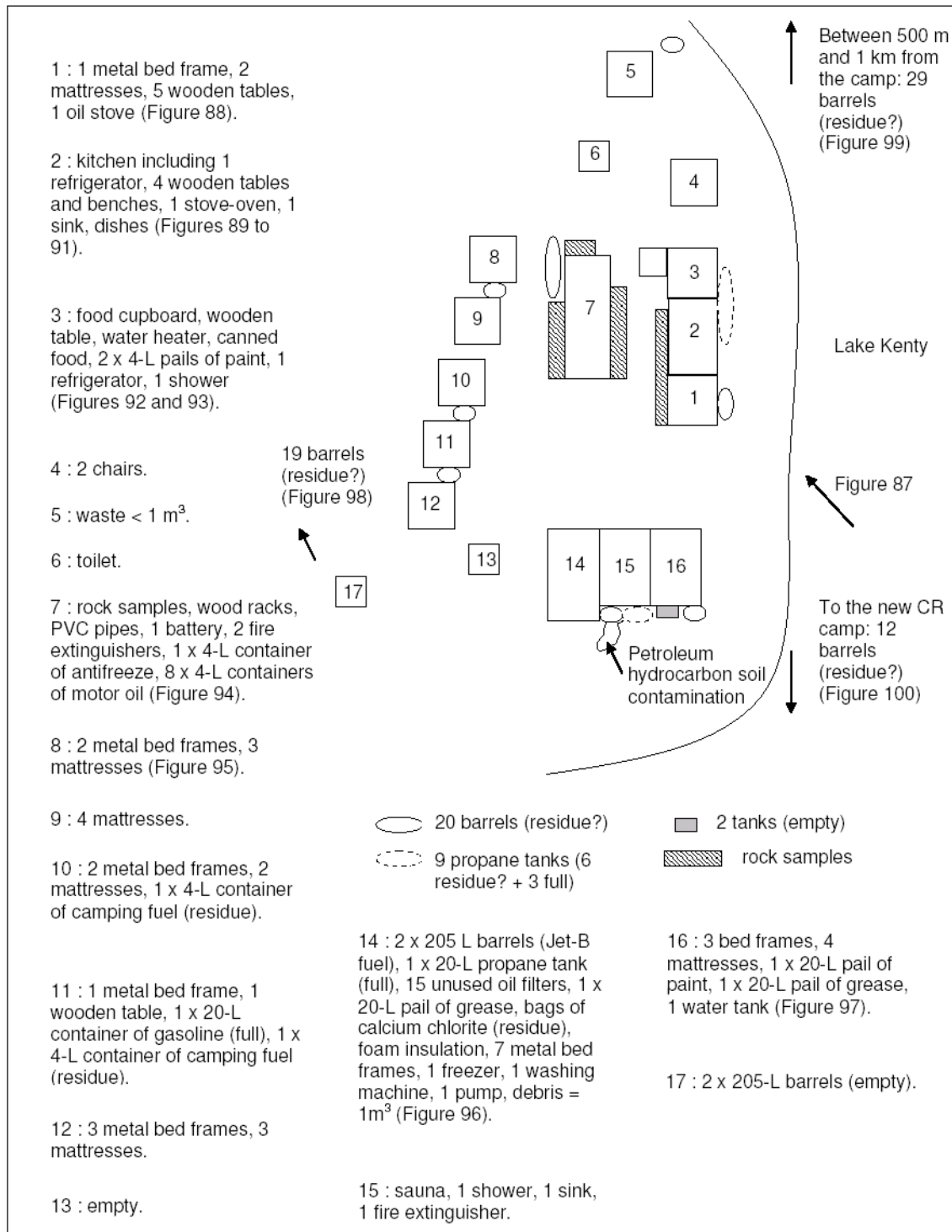
WB-9

Falconbridge campsite which seems still in use.

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
WB 9-1	Soil close to a yellow tank connected to the westernmost group of 3 buildings.	0-3	C ₁₀ -C ₅₀	< 100	-
WB 9-2	Soil under 2 drums connected to the westernmost group of 3 buildings.	0-3	C ₁₀ -C ₅₀	7700	25
Total area					25

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: <u>700</u> C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10



Layout of site WB-9 prepared during the 2007 inspection.

Source: KRG (2007b)

**SECTOR OF
UMIUJAQ**

WHA-1

ABANDONED MINING EXPLORATION SITES/SITES ABANDONNÉS D'EXPLORATION MINIÈRE
INVENTORY FORM/FICHE D'INVENTAIRE - 2002

Site N° WHA-1 Map/Carte N°: 34B/5 Latitude 56 ° 24.08' N Longitude 75 ° 39.30' W
 Region/Région: Whapmagoostui Informant/Informateur Joseph and Matthew Petagumskum
 Date: 25 Sept. 2002 By/Par: JB, LO, MP Priority/Prioritaire ☐ Hasard ☐ Other: From MP

Nb sectors/secteurs: 1 Sector/Secteur N°: 1 Size/Dimension: 120 m X 25 m
 Distance from surface water/Distance de l'eau de surface: 4 m Soil/Sol: Sand Drainage: Quite good

Buildings and dwellings/Bâtiments et habitations

Nb: Buildings/Bâtiments: _____ Dwellings: 10 State/Condition: 1: Bad/Mauvaise/9: floors only
 Description (material/matériaux + volume): Wood/Bois; 25-40m³

Barrels, Tanks and Bottles/Barils, réservoirs et bouteilles

Nb barrels/barils (1 barrel/baril=205 litres): Also: 19 x 40-L (10-gallons) barrels; 4 having residue of diesel (~50 L)
 TOTAL: 4 empty/vides: 4 full/pleins: 1 residue/residus: 3 piled/empilés: _____ scattered/épars: X
 Quantity/Quantité ☒ diesel: 230 L ☐ oil/huile: _____ L ☐ grease/graisse: _____ L _____ : _____ L
 Distance from a sensitive area/d'un milieu sensible: 15 m Type of area/de milieu: Lake/Lac

Nb tanks/réservoirs:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____
 Quantity/Quantité ☐ diesel: _____ L ☐ Jet-B: _____ L _____ : _____ L _____ : _____ L
 Distance from a sensitive area/d'un milieu sensible: _____ m Type of area/de milieu: _____

Nb bottles or other containers/Bouteilles ou autres contenants: (in the outhouse)

TOTAL: 10 empty/vides: ? full/pleins: _____ residue/residus: _____ state/état: Rusted/Rouillé
 Content + quantity/Contenu + quantité: Deodorant cleaner: ? L _____ : _____ L _____ : _____ L

Nb propane tanks/Bonbonnes de propane:

TOTAL: 0 empty/vides: _____ full/pleins: _____ residue/residus: _____ state/état: _____

Batteries and Transformers/Batteries et transformateurs

Nb batteries/batteries: 0 Condition: _____ **Nb transformers/transformateurs:** 0 Condition: _____

Machinery and Equipment/Machinerie et équipement

Nb: Buldozer: 0 Tractor/tracteur: 0 Truck/Camion: 0 Muskeg: 0 _____ : _____
 Conveyor/Convoyeur: 0 Crusher/Concasseur: 0 Generator/Génératrice: 0 _____ : _____

Solid Waste and Dry material/Matériaux secs

Core trays/Plateau à carottes (Nb + Volume): Wood: _____ ; _____ m³ Al: _____ ; _____ m³ Plastic _____ ; _____ m³
 Rods/Tuyaux (Nb + Volume): _____ ; _____ m³ Cables/Câbles: _____ ; _____ m³
 Wood/Bois: scattered: 6 m³ Metal/Métal: 1-3 m³
 Other/Autre: PVC Pipe/Tuyau de PVC: 10m long; burnt wood logs/billots brûlés: 6m³; 1 sidewalk made of wood logs/
trottoir de billots; 1 collapsed outhouse/1 toilette effondrée; cans near the outhouse/cannettes près de la toilette.
In the cabin: stove pipes, 1 half barrel (stove), 1 wood bench, 1 shovel, 1 folding chair, 1 bucket/
Dans la cabine: tuyaux de poêle, un demi-baril (poêle), 1 banc en bois, 1 pelle, 1 chaise pliante, 1 seau.
 Inscription on the cabin/Inscription dans la cabine: Harry Coonishish.

Photo 10

Photo 5

Photo 3

5m

60-70m

Barrel dump:
9 x 40-L barrels,
1 open barrel

Photo WHA8

Outhouse area :
cans, 1 x 40-L barrel,
10 containers of
deodorant cleaner,
wood debris (1-2m³),
metal debris (1m³)

Photo 12

Photo 13

Photo WHA7

Inside of the cabin:
contaminated soil,
stove pipes,
1 stove (barrel),
1 wood bench, 1 shovel,
1 folding chair,
1 bucket

Photo 9

Behind the wood floor:
2 x 200-L barrel (1 full),
4 x 40-L barrels

Photo 3

Photo 5

Wood floors,
barrels

Photo 10

Wood floors,
barrels

Burnt wood logs (~6m3),
1 barrel,
1 broom

WHA 1

Number	Sample	Depth (cm)	Parameters	Analytical results (mg/kg)	Contaminated area (m ²)
Soil					
WHA1-1	Soil under a barrel close to a lot of wood	0-5	C ₁₀ -C ₅₀	< 100	-
WHA1-2	Soil close to a group of 4 barrels	0-5	C ₁₀ -C ₅₀	< 200	-
WHA1-3	Soil on the floor of a dirty cabin	0-3	C ₁₀ -C ₅₀	<u>3400</u>	6
WHA1-4	Soil under the floor of the same dirty cabin	0-5	C ₁₀ -C ₅₀	< 250	-
WHA1-5	Soil of the shore of a swamp near the dirty cabin	0-5	C ₁₀ -C ₅₀	< 100	-
WHA1-6	Soil under a barrel along the same swamp than WHA1-5	0-3	C ₁₀ -C ₅₀	< 100	-
Total area					6

MENV criteria :

Soil C ₁₀ -C ₅₀ (mg/kg)	Surface water C ₁₀ -C ₅₀ (mg/L)	Soil Hg (mg/kg)	Soil Pb (mg/kg)	Soil PCBs (mg/kg)
A: 300 B: 700 C: 3500	3500	A: 0.2 B: <u>2</u> C: 10	A: 50 B: <u>500</u> C: 1000	A: 0.05 B: <u>1</u> C: 10

APPENDIX 4

Photographs of Sites Requiring Major Clean-Up, Before and After Clean-up Work

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<i>Tasiujaq Sector</i>	<i>20</i>
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Landing strip near site TQ-1	39
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<i>Aupaluk Sector.....</i>	<i>46</i>
PJ-10	46
PJ-17	48
<i>Kangirsuk Sector</i>	<i>53</i>
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<i>Kangiqsujuaq Sector</i>	<i>57</i>
K-28.....	57
K-61.....	60
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<i>Umiujaq Sector</i>	<i>75</i>
WHA-1	75

Kawawachikamach Sector

KAW-35



Photo 1 General view of site KAW-35 during 2001-2002 inventory, September 10, 2002



Photo 2 Overview of site KAW-35 during the inspection visit of September 15, 2011



Photo 3 Close-up view of a portion of the site KAW-35, September 15, 2011



Photo 4 Close-up view of a portion of the site KAW-35, September 15, 2011



Photo 5 Sector 2: Tailings and garage during the 2001-2002 inventory, September 10, 2002



Photo 6 Sector 2: Tailings and garage during the inspection visit of September 15, 2011



Photo 7 Sector 3: Two trailers and 4,400 liters reservoir during the 2002-2002 inventory, September 10, 2002



Photo 8 Sector 3: Two trailers and 4,400 liters reservoir during the September 2011 inventory



Photo 9 Barrels near the shore of Lake Retty during the 2001-2002 inventory, September 10, 2002



Photo 10 Along the shore of Retty Lake during the inspection visit on 15 September, 2011 after the removal of barrels (see photo above)



Photo 11 Barrels and small cabin near the shore of Retty Lake during the of 2001-2002 inventory, September 10, 2002



Photo 12 Along the shore of Retty Lake after removal of barrels and a cabin during the inspection visit on 15 September 2011 (see photo above)



Photo 13 Cabin containing an insulated reservoir in the 2001-2002 inventory, September 10, 2002



Photo 14 Cabin containing an insulated reservoir during the inspection visit on September 15, 2011. The wooden structure nearby was demolished.



Photo 15 Buildings and shelter containing samples of rocks and various debris during 2001-2001 inventory, September 10, 2002



Photo 16 Shelter containing samples of rocks, debris and main building during the inspection visit on September 15, 2011. It should be noted that the two small buildings in the background in the previous photo, pole and electrical wires, and some debris have been removed.



Photo 17 Debris, barrels and two small cabins, one with bottles containing 4% hydrofluoric acid during 2001-2002 inventory, September 10, 2002



Photo 18 Where there was debris, barrels, and two small cabins (see photo above) during the inspection visit on September 15, 2011. The metal structure remains.



Photo 19 Pile of debris, reservoir and tailings on site KAW-35 (September 15, 2011)



Photo 20 Wood and metal debris on site KAW-35 (September 15, 2011)



Photo 21 Building, reservoir and other debris at the site KAW-35
(September 15, 2011)



Photo 22 Pile of debris at the site KAW-35 (September 15, 2011)



Photo 23 Burned debris on site KAW-35 (September 15, 2011)

KAW-45



Photo 24 Overview of the site KAW-45 during 2001-2002 inventory, September 11, 2002



Photo 25 Overview of the site KAW-45 during the September 15, 2011 visit



Photo 26 Close-up view of site KAW-45 during the 2001-2002 inventory, September 11, 2002

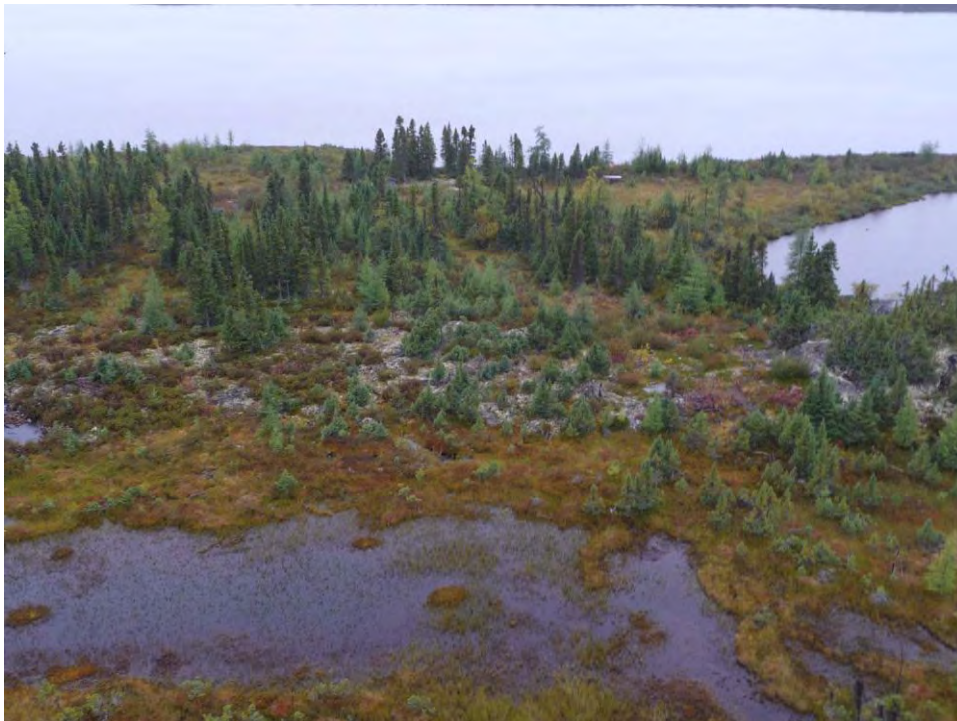


Photo 27 Close-up view of site KAW-45 during the inspection visit on September 15, 2011



A



B



C

Photo 28 Site KAW-45 during the September 11, 2002 inventory (A) and after cleanup during inspection of September 15, 2011 (B and C)



Photo 29 Site KAW-45 during the September 11, 2002 inventory (top) and after cleanup during inspection of September 15, 2011 (bottom)



Photo 30 Core sample trays and wood debris remaining on the site KAW-45 during the inspection of September 15, 2011

Tasiujaq Sector

PJ-1



Photo 31 Sector 4 after cleanup, all the machinery, tanks and other debris were removed from the site PJ-1 (September 16, 2011)



Photo 32 Sector 4 before cleanup, July 21, 2001, PJ-1 site



Photo 33 Sector 4 before cleanup July 21, 2001, PJ-1 site



Photo 34 Sector 4 after cleanup, all the machinery, tanks and other debris were removed from the site PJ-1 (September 16, 2011)



Photo 35 Sector 4: generators, barrels and other debris before cleanup July 21, 2001, PJ-1 site. Background on the hill: 2 reservoirs



Photo 36 Sector 4 after cleanup: generators, barrels and other debris were removed from the site. Background on the hill: the two tanks were removed from the site PJ-1 (September 16, 2011)



Photo 37 Overview of Sector 4 from which generators, machinery, barrels, reservoirs and other debris were removed from the site PJ-1 (September 16, 2011)



Photo 38 Sector 4: Opening leading to the gallery having been secured, PJ-1 site (September 16, 2011)



Photo 39 Sector 4: Varied debris, reservoirs, and tires before cleanup July 21, 2001, PJ-1 site



Photo 40 Sector 4 after cleanup: The various debris, reservoirs, tires were removed from the site PJ-1 (September 16, 2011)

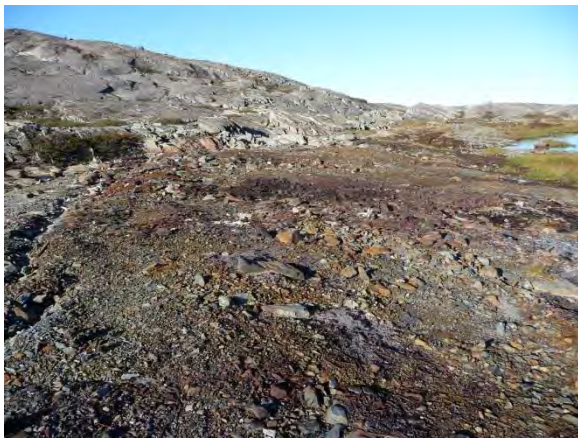


Photo 41 Sector 4 of PJ-1 site after cleanup: All machinery, barrels, reservoirs, and miscellaneous debris were removed from the site and combustible materials were burned (September 16, 2011)



Photo 42 Sector 5: Wooden platform with batteries, barrels and a generator on the site PJ-1 before cleanup, July 21, 2001



Photo 43 Sector 5: Wooden platform of the previous picture after cleanup (September 16, 2011)



Photo 44 Sector 5: Reservoir, barrels and generator on site PJ-1 before cleanup, July 21, 2001



Photo 45 Sector 5: Location shown in the previous photo after cleanup (September 16, 2011)



Photo 46 Sector 5: Trailers, machinery, reservoirs, barrels, drums and various debris at site PJ-1 before cleanup, July 21, 2011)



Photo 47 Sector 5 after cleanup: All debris from the site was evacuated, except a trailer left in place to provide shelter (September 16, 2011)



Photo 48 Sector 5 of site-PJ: Diverse views after cleanup (September 16, 2011)



Photo 49 Sector 6 before cleanup: Buckets, hoses, radiator, various debris, several barrels in the background, site PJ-21 July 2001

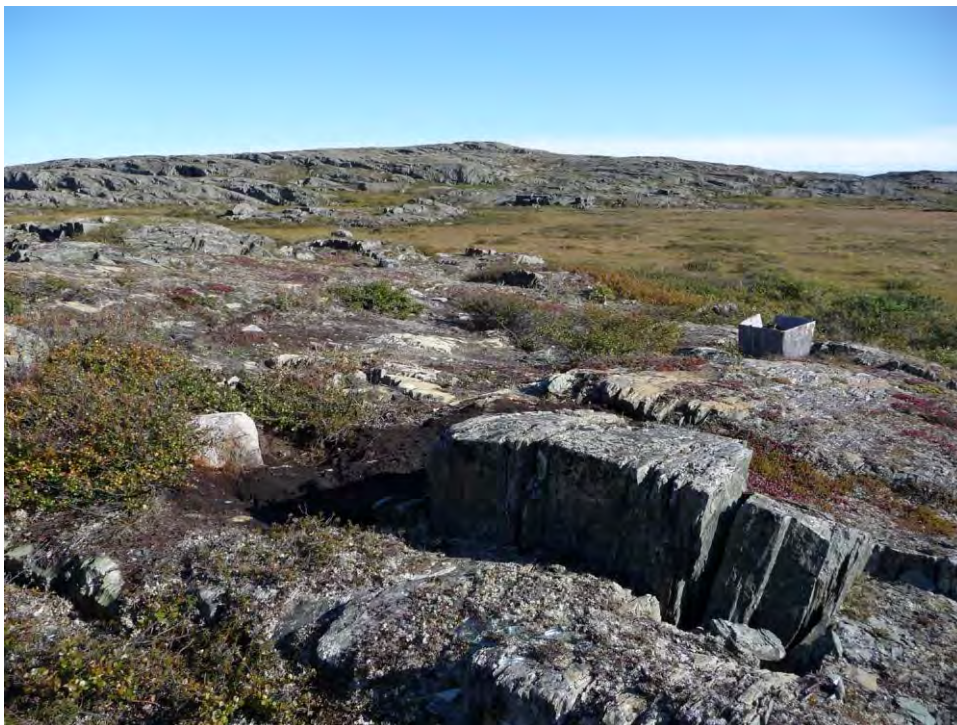


Photo 50 Sector 6 after cleanup, site PJ-1. There is only one wooden box remaining (September 16, 2011)



Photo 51 Sector 6 after cleanup, site PJ-1: close-up view of the background of the previous picture where the barrels were located, all were evacuated (September 16, 2011)



Photo 52 Sector 3 after cleanup: All debris was removed from the site PJ-1 (platform, fan, fireplace, metal trays, pipes, nails, plastic core trays, 15 empty barrels) (September 16, 2011)



Photo 53 Sector 1, PJ-1 site: Pit covered with wood and pit covered with metal during 2001 inventory; portion of area after cleanup of various debris (September 16, 2011)



Photo 54 Sector 1, PJ-1 site: Edge of pond after removal of pipes and fire extinguisher (September 16, 2011)



Photo 55 Sector 8, PJ-1 site after cleanup. There are only rock samples remaining (September 16, 2011)



Photo 56 Sector 9, PJ-1 after cleanup. The barrels, pipes, hoses and various scrap metal and wood have been removed (September 16, 2011)

TQ-1



Photo 57 TQ-1 site: October 19, 2001



Photo 58 TQ-1 Site: September 16, 2011



Photo 59 Two buildings, core trays and various debris at site TQ-1, October 19, 2001



Photo 60 New building for cooking replacing the two buildings that have been demolished from the previous picture. Trays samples are still there, as well as barrels (September 16, 2011)



Photo 61 Inside the kitchen of the previous picture (September 16, 2011)



Photo 62 Toilet and core trays as was in 2001 (September 16, 2011)



Photo 63 Site TQ-1: inside the buildings, September 16, 2001

Site requiring intermediate cleanup work, P-24F13-5



Photo 64 Site P-24F13-5 after cleanup. This site is located near site TQ-1 (September 16, 2011)

Landing strip near site TQ-1



Photo 65 Landing strip near site TQ-1 (September 16, 2011)

TQ-4



Photo 66 Overview of site TQ-4 after cleanup (September 16, 2011)



Photo 67 Closeup view of the building left on site TQ-4 and the remains of the building that was burned (September 16, 2011)



Photo 68 Overview of Sector 2 of site TQ-4 before cleanup, October 19, 2011



Photo 69 Overview of Sector 2 of Site TQ-4 after cleanup. The many barrels and debris were removed (September 16, 2011).



Photo 70 Sector 2: Ditches for rubber bladders, barrels and debris, site TQ-4
October 19, 2001



Photo 71 Sector 2 after cleanup: Rubber bladders in ditches, drums and debris
were removed from site TQ-4 (September 16, 2011)



Photo 72 Content of the cabins that were on site, October 19 2001. All debris was
removed from site TQ-4 and combustibile materials were burned



Photo 73 Sector 1: Log cabins and debris at the site before cleanup TQ-4, October 19, 2001



Photo 74 Sector after a cleanup: The log cabin left on site TQ-4 is as shown in the foreground in the previous picture. The other two were emptied and burned (see picture 67) (September 16, 2011).



Photo 75 Inside the log cabin that was left on the site TQ-4 (September 16, 2011)



Photo 76 Sector after a cleanup: Debris from burned cabins and traces left by old barrels, site TQ-4 (September 16, 2011)



Photo 77 Sector 1: Cabin collapsed, metal tripod and various debris, site TQ-4, October 19, 2001



Photo 78 Sector 1 after cleanup and burning, site TQ-4 (September 16, 2011)

Aupaluk Sector

PJ-10



Photo 79 Overview of the site PJ-10 after cleanup. To the left you can see the traces of the old platforms (September 17, 2011)



Photo 80 Traces left after burning a platform and debris at the site PJ-10 (September 17, 2011)



Photo 81 Comparative photographs before (left) and after cleanup (right) at the site PJ-10 (September 17, 2011)

PJ-17



Photo 82 General views of the site PJ-17 after cleanup (September 17, 2011)



Photo 83 Site PJ-17, Sector 1: Garage before (top, July 21, 2001) and after cleanup (bottom, September 17, 2011)



Photo 84 Site PJ-17: Inside the garage before (left, in 2007) and after cleanup (right, September 17, 2011)



Photo 85 Site PJ-17: Barrels filled with used oil near the garage (in 2007)

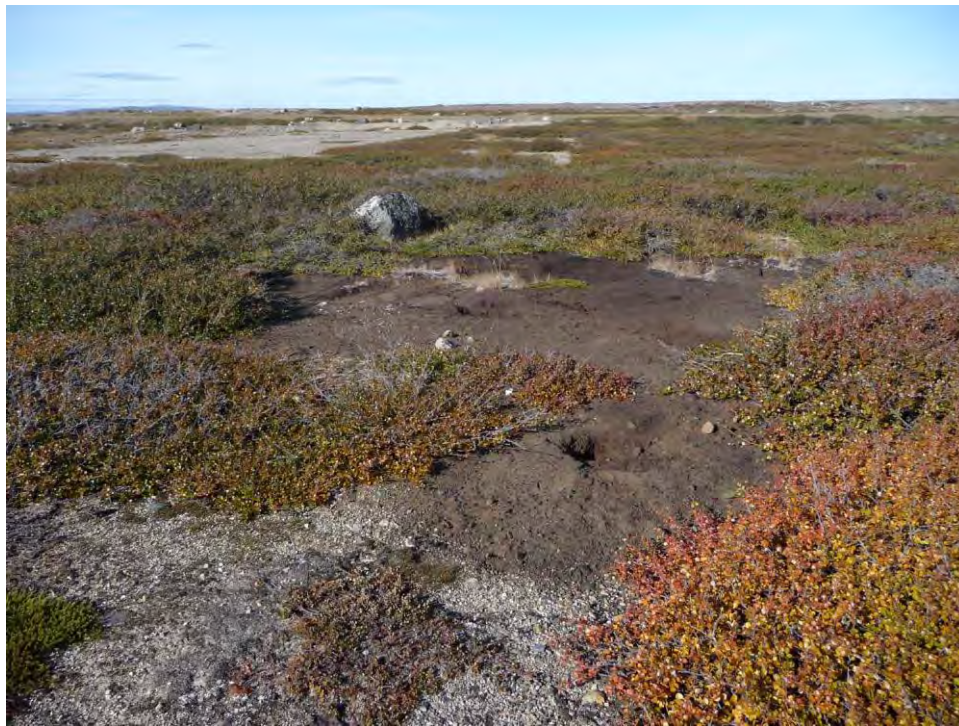


Photo 86 Area shown in previous picture, after removal of barrels (September 17, 2011)



Photo 87 Site PJ-17: Barrels, propane tanks and various debris, July 21, 2001



Photo 88 PJ-17 Site: Area shown in previous picture after cleanup (September 17, 2011)

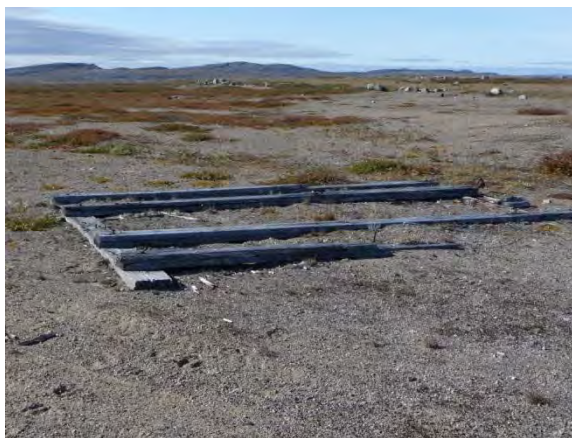


Photo 89 Site PJ-17: Different areas after cleanup (September 17, 2011).



Photo 90 Site PJ-17 after cleanup: One roller was left on the site for maintenance of the airstrip. The metal sheets will be removed from the site once the road between the site and the village of Aupaluk will be completed (September 17, 2011)

Kangirsuk Sector

TW



Photo 91 Site TW before cleanup work (in 2007)



Photo 92 Overview of site TW after cleanup (September 17, 2011)



Photo 93 Site TW before cleanup: Wooden platform, barrel of grease, empty barrels, aluminum sample trays and miscellaneous debris (in 2007).



Photo 94 Site TW: Area shown in previous picture, after cleanup (September 17, 2011)



Photo 95 Site TW before cleanup: wood platform, barrels, debris, industrial pipes in 2007



Photo 96 Site TW after cleanup (September 17, 2011)

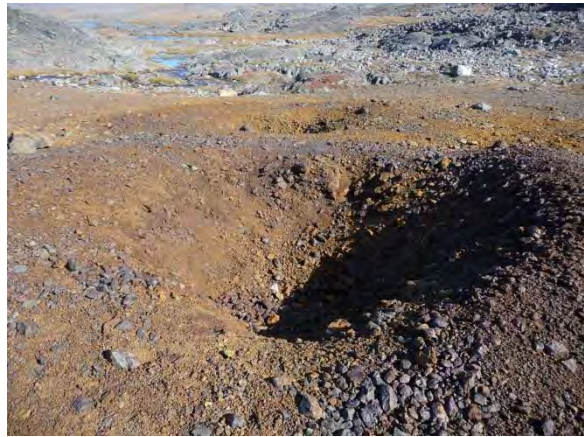


Photo 97 Site TW after cleanup: Top: Core sample trays, tailings; Center: pipes out of the ground; Bottom: Areas free of debris.

Kangijsujuaq Sector

K-28



Photo 98 Site K-28, Sector 1 before cleanup work, September 9, 2001

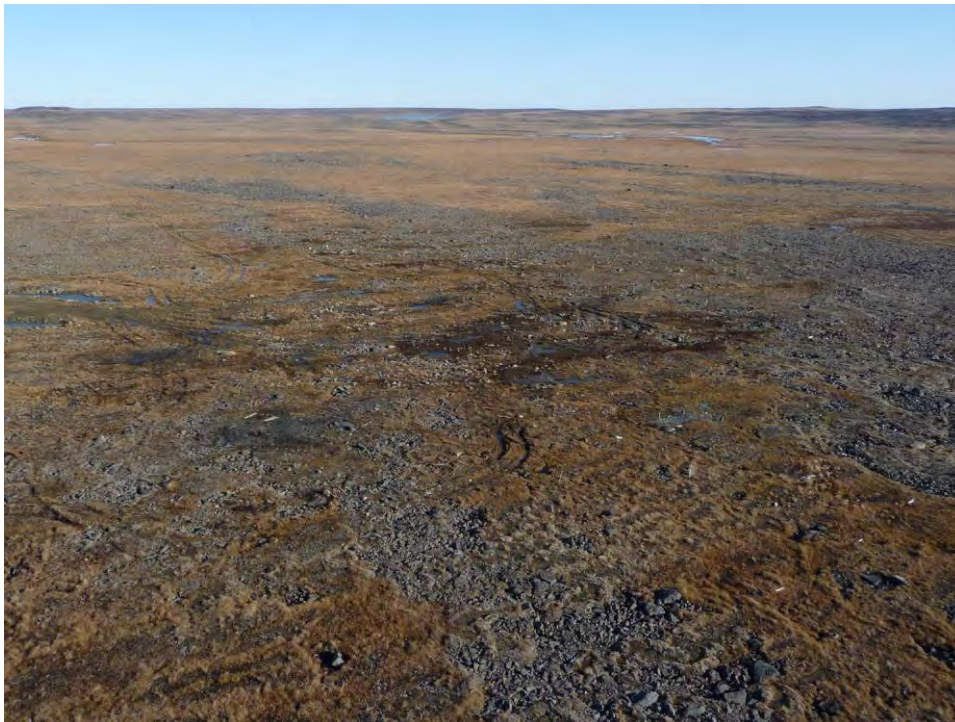


Photo 99 Site K-28, Sector 1 after cleanup (September 17, 2011)



Photo 100 Site K-28, Sector 2 before cleanup work, September 9, 2001



Photo 101 Site K-28, Sector 2 after cleanup (September 17, 2011)



Photo 102 Site K-28, Sector 3: Tripod, drilling equipment, road salt and barrels of Jet-B, September 9, 2001. The site was being used by Canadian Royalties.

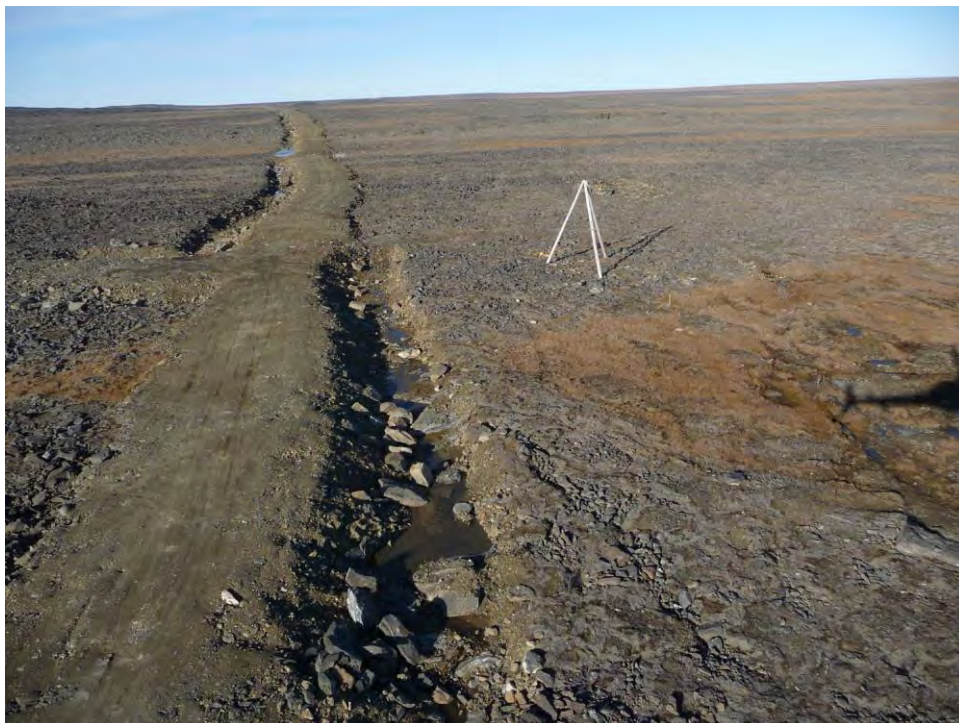


Photo 103 Site K-28: Road and tripod. Active Canadian Royalties site (September 17, 2011)

K-61



Photo 104 Site K-61 (Camp Expo, active site) before cleanup (September 9, 2001)



Photo 105 Site K-61 (Camp Expo, active site) before cleanup (September 9, 2001)



Photo 106 Site K-61 (Camp Expo renovated, active site) before cleanup (July 2008)



Photo 107 Site K-61 (Camp Expo) during cleanup work (2009). Note: The work was completed at the end of August 2009

WB-3



Photo 108 Partial view of the site WB-3 before cleanup, September 9, 2001



Photo 109 Site WB-3 after the cleanup (September 17, 2011)



Photo 110 Site WB-3: Wood debris, scrap metal and propane tanks, September 9, 2001



Photo 111 Site WB-3: Area shown in previous picture, after cleanup (September 17, 2011)



Photo 112 Site WB-3: Wooden platform surrounded by metal sheet, barrels and debris, Sept. 9, 2001



Photo 113 Site WB-3: Area shown in previous picture, after cleanup (September 17, 2011)



Photo 114 Site WB-3: Barrels near the shore, September 9, 2001



Photo 115 Site WB-3: Area shown in previous picture, after cleanup (September 17, 2011)



Photo 116 Site WB-3: Barrels, September 9, 2001



Photo 117 Site WB-3: Area shown in previous picture, after cleanup (September 17, 2011)



Photo 118 Site WB-3: Some cans (top), metal plate with pipes and metal rod coming out of a rock after cleanup work (September 17, 2011)

Salluit Sector

SAL-1



Photo 119 Partial view of the site SAL-1 showing the structures of cabins, barrels and other debris, September 7, 2001



Photo 120 Site SAL-1 after the cleanup. The traces left by the old cabins are visible (September 19, 2011)



Photo 121 Site SAL-1: Many barrels, September 7, 2001



Photo 122 Site SAL-1: Area shown in previous picture, after cleanup (September 19, 2011)



Photo 123 SAL-1 site: Collapsed cabin, propane tanks, barrels and debris, September 7, 2001



Photo 124 Site SAL-1: View of area shown in previous photo, after the cleanup (September 19, 2011)

SW-42



Photo 125 Site SW-42: Remains of a cabin, buckets, pipes and other debris, September 10, 2001



Photo 126 Site SW-42: View of area shown in previous photo, after the cleanup (September 19, 2011)



Photo 127 Site SW-42: Group of 81 barrels, 10 September 2001



Photo 128 Site SW-42: Area shown in previous picture, after cleanup (September 19, 2011)



Photo 129 Site SW-42: homemade stove, September 10, 2001



Photo 130 Site SW-42: Stove area shown in previous picture, after cleanup (September 19, 2011)



Photo 131 Site SW-42 after cleanup work (September 19, 2011)

Umiujaq Sector

WHA-1



Photo 132 Site WHA-1 during an inventory conducted September 25, 2002. The site had 10 cabins (one upright and 9 collapsing), many barrels and debris



Photo 133 Site WHA-1: Burning of combustible materials while cleanup work was carried out in summer 2010

APPENDIX 5

Photographs of Sites Requiring Intermediate Clean-up Work

Kawawachikamach Sector	3
KAW-36.....	3
KAW-59.....	4
KAW-119.....	4
Kuujuaq Sector.....	5
P-24F.....	5
Tasiujaq Sector	6
TA-1	6
TA-2 and TQ-6	8
TQ-10.....	15
TQ-14.....	17
VP-11	17
Aupaluk Sector	19
G-24N04-3	19
PJ-17A.....	24
PJ-19	25
Kangirsuk Sector	26
QC-3.....	26
Kangiqtuaq Sector.....	28
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K-27.....	29
K-37.....	30
K-49.....	30
KAN-1.....	31
KAN-2.....	31
KAN-4.....	32
KAN-6.....	33
KAN-7.....	34
KAN-10.....	34
Salluit Sector.....	35
Parent Lake	35
SW-24	35
Umiujaq Sector	36
GW-8.....	36
Other sites	37

Kawawachikamach Sector

KAW-36



Photo 1 General view of site KAW-36 (September 15, 2011)



Photo 2 Close-up view of barrels near the shore, on site KAW-36 (September 15, 2011)

KAW-59



Photo 3 Overview of the site KAW-59 (September 15, 2011)

KAW-119



Photo 4 Overview of the site KAW-119 (September 15, 2011)

Kuujjuaq Sector

P-24F



Photo 5 Overview of site P-24F (September 15, 2011)

Tasiujaq Sector

TA-1



Photo 6 Overview of site TA-1 (September 16, 2011)



Photo 7 Close-up view of barrels on the site TA-1 (September 16, 2011)

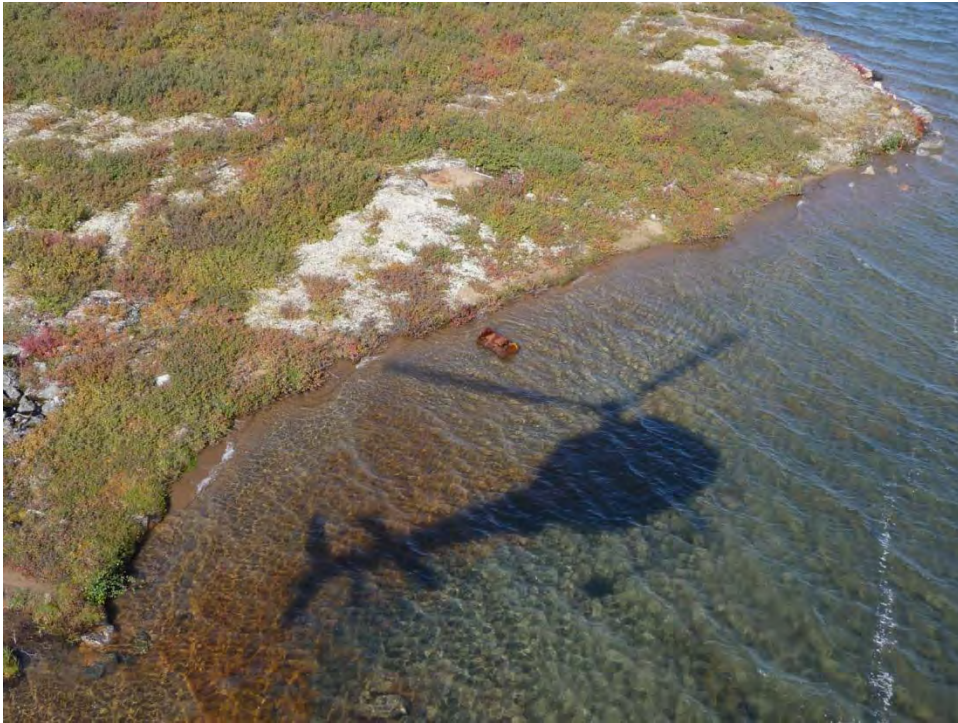


Photo 8 Barrels in the water at site TA-1 (September 16, 2011)



Photo 9 Wood debris at site TA-1 (September 16, 2011)



Photo 10 Close-up view of wood debris at the site TA-1 (September 16, 2011)

TA-2 and TQ-6 (this is actually one site)



Photo 11 Aerial view of part of site TQ-6 (September 16, 2011)



Photo 12 A closer aerial view of the area shown in the background of the previous picture, site TQ 6



Photo 13 Aerial view of another part of the site TQ-6 (September 16, 2011)



Photo 14 Aerial view of another part of the site TQ-6, on a small point (September 16, 2011)



Photo 15 Metal containers along the shore of site TQ-6 (September 16, 2011)



Photo 16 Barrels and scrap metal at site TQ-6 (September 16, 2011)



Photo 17 Barrel and miscellaneous debris at site TQ-6 (September 16, 2011)



Photo 18 Examples of various debris and core sample trays in the background on the site TQ-6 (September 16, 2011)



Photo 19 Barrels and other debris at the site TQ-6 (September 16, 2011)



Photo 20 Sheet metal and other debris at the site TQ-6 (September 16, 2011)



Photo 21 Barrels, pipes and debris (background) at site TQ-6 (September 16, 2011)



Photo 22 Grouping of pipes on the site TQ-6



Photo 23 Barrel, pipes and other debris at the tip of site TQ-6 (September 16, 2011)



Photo 24 Metal container near the shore, site TQ-6 (September 16, 2011)

TQ-10



Photo 25 Aerial view of TQ-10 showing the collapsed bladders and debris (September 16, 2011)



Photo 26 Debris and partial view of a bladder at the site TQ-10 (September 16, 2011)



Photo 27 Hose and some debris on the site TQ-10 (September 16, 2011)

TQ-14



Photo 28 Aerial view of TQ-14 (drums, propane tanks, wood) (September 16, 2011)

VP-11



Photo 29 Aerial view of VP-11 showing the debris of collapsed huts and a barrel (September 16, 2011)



Photo 30 Group of barrels near the shore of site VP-11 (September 16, 2011)



Photo 31 Group of barrels near the shore and logs on site VP-11 (September 16, 2011)

Aupaluk Sector

G-24N04-3



Photo 32 General view of a portion of the site G-24N04-3 with barrels, propane tanks and scattered debris (September 17, 2011)



Photo 33 General view of a portion of the site G-24N04-3 with barrels, propane tanks and scattered debris (September 17, 2011)



Photo 34 Barrels on the site G-24N04-3 (September 17, 2011)



Photo 35 Dump site a with cans and other debris at the site G-24N04-3 (September 17, 2011)



Photo 36 Barrels along the shore at the site G-24N04-3 (September 17, 2011)



Photo 37 Group of barrels near the shore at site G-24N04-3 (September 17, 2011)



Photo 38 Group of barrels near the shore at site G-24N04-3 (September 17, 2011)



Photo 39 Barrels near shore at site G-24N04-3 (September 17, 2011)



Photo 40 Overview of barrels near shore on site G-24N04-3 (September 17, 2011)



Photo 41 Close-up view of barrels near the shore at the site G-24N04-3 (September 17, 2011)



Photo 42 Barrels near shore at siteG-24N04-3 (September 17, 2011)

PJ-17A



Photo 43 Overview of the site PJ-17A, cleaned by Cruise North Expeditions in 2005 (September 17, 2011)



Photo 44 A barrel on the site PJ-19 cleaned by Cruise North Expeditions in 2005 (September 17, 2011). This is probably a barrel marking the snowmobile trail.



Photo 45 Barrel covers on the site PJ-19 cleaned by Cruise North Expeditions in 2005 (September 17, 2011)

Kangirsuk Sector

QC-3



Photo 46 Partial view of site QC-3 (September 17, 2011)



Photo 47 Overview of the site QC-3 with barrels along the shore (September 17, 2011)



Photo 48 Partial view of site QC-3 showing the building, various debris and barrels
(17 September 2011)



Photo 49 Partial view of site QC-3 showing various debris and barrels
(17 September 2011)



Photo 50 QC-3 site, several barrels are very close to shore as shown in this photo.
(September 17, 2011)

Kangijsujuaq Sector

I-32



Photo 51 The site I-32 after cleanup work done by Canadian Royalties
(September 17, 2011)



Photo 52 The site I-32 after cleanup work done by Canadian Royalties
(September 17, 2011)

K-27



Photo 53 The site K-27 after cleanup work done by Canadian Royalties
(September 17, 2011)

K-37



Photo 54 Site K-37 after cleanup work done by Canadian Royalties (September 17, 2011)

K-49

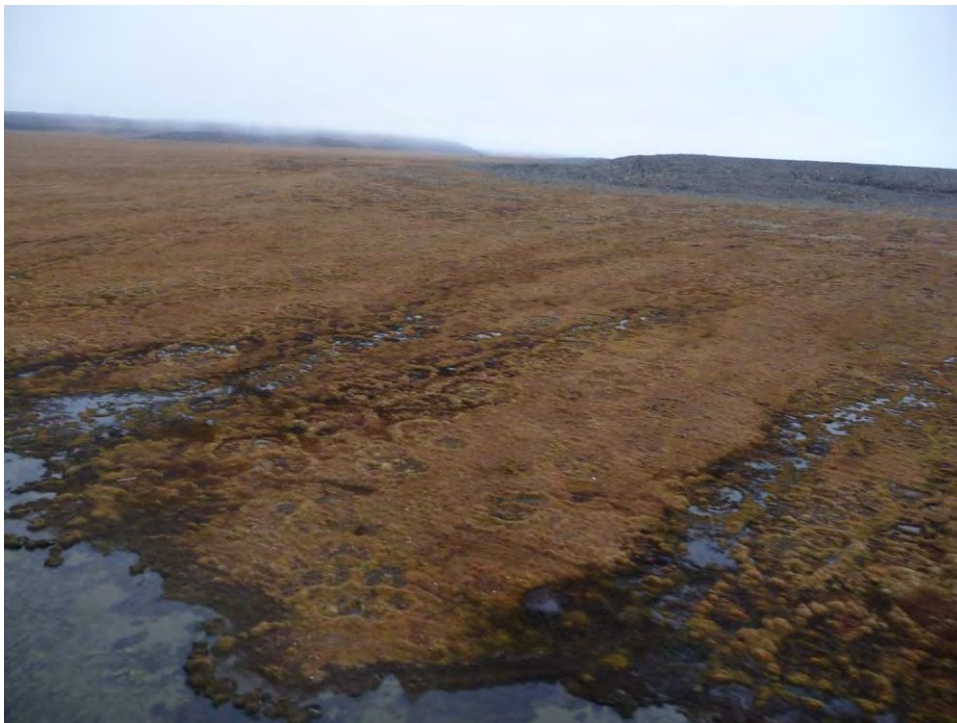


Photo 55 Site K-49 after cleanup work done by Canadian Royalties (September 17, 2011)

KAN-1



Photo 56 Site KAN-1 after cleanup work done by Canadian Royalties (September 17, 2011)

KAN-2



Photo 57 Site KAN-2 after cleanup by Canadian Royalties. There remains a barrel and hoses (September 18, 2011)



Photo 58 Site KAN-2 after cleanup by Canadian Royalties. There are some wooden boards remaining (September 18, 2011)

KAN-4



Photo 59 Site KAN-4 after cleanup by Canadian Royalties There remains only the imprint left by the group of 75 barrels (September 18, 2011)

KAN-6



Photo 60 It was confirmed that the site KAN-6 is an Inuit camp (September 18, 2011)



Photo 61 Close-up view of a building on site KAN-6 (September 18, 2011)

KAN-7



Photo 62 Site KAN-7 after cleanup by Canadian Royalties. There remains only the muskeg and you can see the imprint left by the former group of 75 barrels (September 18, 2011)

KAN-10



Photo 63 Site KAN-10 after the first phase of cleanup work by Canadian Royalties. Propane tanks, barrels and debris have been piled up to be recovered (September 18, 2011)

Salluit Sector

Parent Lake



Photo 64 Barrels and debris at Parent Lake (September 19, 2011)



Photo 65 One of the barrels at Parent Lake (September 19, 2011)

SW-24

No photos available for this "site", which is extensively located along the Puvirnituk River.

Umiujaq Sector

GW-8



Photo 66 Barrels at the site GW-8 (September 25, 2002)

Other sites

Unknown-1



Photo 67 Site "Unknown-1" active (September 15, 2011)

Unknown-2



Photo 68 Site "Unknown-2" (September 16, 2011)



Photo 69 Another angle of site "Unknown-2" (September 16, 2011)

Unknown-3



Photo 70 One of seven barrels observed at site "Unknown-3", near KAN-1 (September 17, 2011)



Photo 71 Debris (pipes, planks of wood, metal rods) observed at the site "Unknown-3", located near a Goldbrook Ventures drilling site around the site KAN-1 (September 17, 2011)

Unknown-4



Photo 72 Site "Unknown-4" (September 19, 2011)

APPENDIX 6

Photographs of the Remaining Sites Requiring Major Clean-up Work

KV-1	3
SW-27	4
WB-9	5
KAW-35	6
SW-34	8
PJ-1 (Aupaluk)	9

KV-1



Photo 1 Piles of crushed barrels along the shore at site KV-1 (2007)



Photo 2 Barrels and debris on site KV-1 (2007)

SW-27



Photo 3 Scattered debris on site SW-27, Sector 1 (2007)



Photo 4 Scattered debris on site SW-27, Sector 4 (2007)

WB-9



Photo 5 Group of barrels on site WB-9



Photo 6 Some of the buildings at site WB-9

KAW-35



Photo 7 Pile of metal and debris on site KAW-35



Photo 8 One of 5 reservoirs remaining on site KAW-35



Photo 9 Wood covered pipeline found on site KAW-35



Photo 10 Building with large reservoir inside on site KAW-35

SW-34



Photo 11 One of the piles of debris remaining at site SW-34



Photo 12 Small dumpsite remaining at site SW-34

PJ-1 (Aupaluk)



Photo 13 Barrels and pipes being stored at Aupaluk's dumpsite



Photo 14 Rolls of metal wire being stored in Aupaluk



Photo 15 1 of 10 reservoir halves filled with scrap metal and being stored in Aupaluk



Photo 16 Piece of heavy equipment remaining in Aupaluk





Ressources naturelles
et Faune
Québec



Fonds Restor-Action Nunavik