

# GLENCORE

## **Hackett River Project**

**2014 Annual Report For  
AANDCC Land Use License N2010C0015**

March 2015

- (a) The camp for the Hackett River Project (Figure 1) was in operation from April 5 to April 30, and again, sporadically through to September 24th, for a total of 40 days.

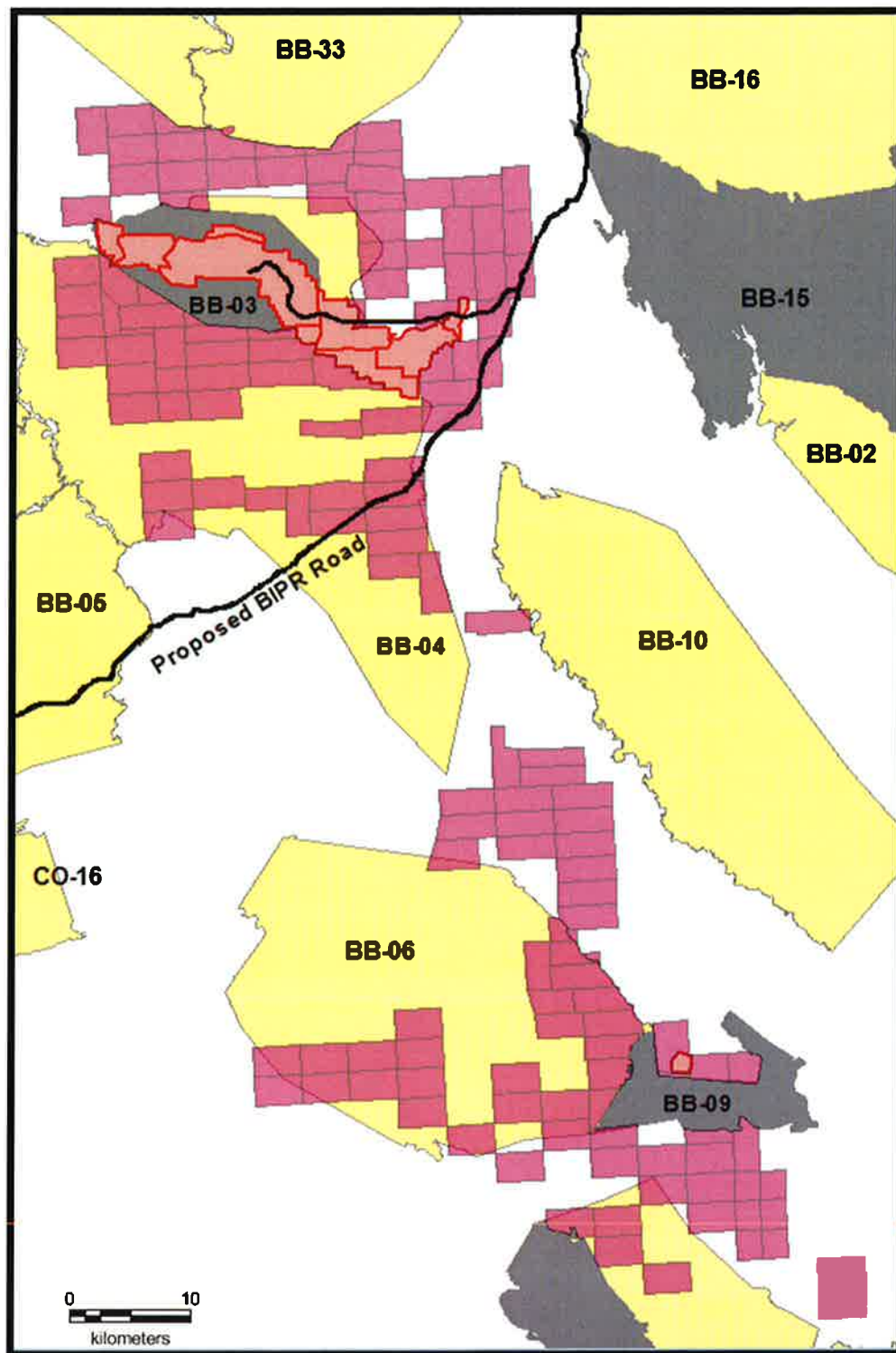


Figure 1 – Glencore's landholdings in the Kitikmeot Region (November, 2014).

- (b) There were no new projects, and no diamond drilling in 2014. Work programs centred on fuel management, waste management and repairing bear damage from several incursions into camp between August, 2013 and July, 2014.

The largest project consisted of repairing bear damage in camp. Glencore was notified in early July that a grizzly sow and 2 cubs were spending all of their time in and around camp. These are likely the same 3 bears that had been in camp in the fall, and created a large mess in and around the incinerator. Minor repairs and bear-proofing was undertaken during the month long visit in April, in addition to cleaning and organizing camp. During the year, extensive cleaning and repairs were undertaken during a 1 week visit in early to mid-July. The bear cubs had apparently spent a long time inside the main dining and dry building and while structural damage was limited, the bears had explored everywhere, and broken, knocked over or spilled the majority of items in the kitchen and dry areas. Door frames were ripped off, windows were broken and some shelving and tables were damaged.

Additionally, bear scat was all over the building, and so future repairs will be needed to enable use of these facilities. These repairs will be made in 2015. Associated clean up consisted of removing items of potential bear attractants from site, including the BBQ, deep fryer, grease trap and several other kitchen appliances. Food items that had been left on site at the end of April were evaluated and anything that could go to town was sent out for distribution amongst the communities.

Secondly, most of the canvas sleeping tents were ripped open. Wildlife cameras placed around camp captured still images of the bear cubs opening up holes in the tents – usually along the corners – and them moving on to adjacent tents, and repeating the process. Only 1 tent was entered, although minimal damage was done inside the tent. Repairs were made, consisting of affixing plywood to the walls to cover the openings. Many of these tents will need to have new skins (canvas) on them before they are habitable.

Fuel drums were removed from all structures around camps, where oil stoves were present. All the sleepers, and office tents, for example, have no drums of fuel at them. The drums in the secondary containment fuel stands were drained, except for the main office and foreman's tent (needed to get the phones up and running on re-opening). 1 sleeper tent also has fuel in the drum. Where possible, the old drums in the secondary containment caddies were replaced with newer Jet drums (which are lined), to prevent rust buildup from condensation during the shut-down period.

Stoves were all tested and any requiring maintenance were pulled from the tents and stored in the old metal core shed. Fuel lines from the drums to the stoves were also disconnected, and stored inside the tents, to prevent further decay caused from UV radiation. Any hoses which were deemed too old, or damaged were removed from service, and new ones will be ordered.

During the April cleanup, all tents were cleaned of all items such as mattresses, foamies and garbage cans. With no bear attractants, the bears had no reason to enter the tents, and it appears they were simply curious, and caused minimal damage all things considered. Additional bear-proofing was installed in the form of bear boards (plywood with nails sticking up through them). Bear boards were emplaced around the kitchen and dry, incinerator and associated metal shed, and the first aid cabin. Boards covering the doors of the tents and buildings on site were re-secured, and metal doors had additional locks and coverings attached.

The remaining work consisted of fuel management programs. The primary aim was to consolidate fuel in a smaller number of berms, for ease of monitoring. Each berm was identified, and the berms of full drums were dug out, the drums were moved to temporary berms, so the existing berms could be inspected, freed from the ground and re-installed. Drums were then put back in the berms, covers re-installed and the process was repeated with the next full berm.

One berm, containing diesel was emptied, and then re-filled, but with drums standing vertically, on pallets. A normal berm will contain 296 full drums, lying on their sides, and 240 drums were able to be stacked on pallets in the same berm. This method of storage allowed for better tie-downs for the cover, as ropes could be run under the bottom pallets. This method does allow for some snow to accumulate between the cover and the berm, as the cover is now fully within the berm, and not covering the edges, as in the past (see photo below). However, the ability to tie it down better, and prevent the cover from blowing off should actually decrease the amount of snow in the berm.

In camp, some berms containing empty drums were removed close to the camp dock. The area below them was levelled and then re-seeded.

- (c) During a visit to camp in early September, for the purpose of bear cleanup, an event occurred which will change how operations continue at Hackett River. At roughly 19:30 hours, on September 6, it was noted that the water level in the lake appeared to be changing. Very shortly thereafter, the nose (E end) of the esker let go, and Camp Lake began to drain very rapidly. Over the next 90 minutes, the lake level dropped at least 2m, at which point it was too dark to see anything more (see Figure 6, below).
- (d) Plans for 2015 include more of the same. The aim is to reduce the number of empty fuel drums on site, and those that do remain will be crushed, so as to reduce the number of berms on site, and aid with monitoring under the fuel management plan. Additionally, Full fuel drums will also be consolidated into a smaller number of berms, and stacked vertically, on pallets, to reduce leak potential from the bungs. Additional work will be required to repair bear damage (replacing floor boards, tables, etc, contaminated with mould, etc.). Minor repairs will also be conducted on some of the damaged tents. It is expected that many will not be habitable again, but they can be patched to prevent further degradation.
- (e) Much of the environmental work on site consisted of camp remediation and some drill sump cleaned up and sludge removal back to camp. A small spill was noticed in early July, and a crew was mobilized to clean it up immediately.  
  
The sump was cleaned, sludge removed and bagged, and silt fencing was erected downhill from the sump. Water testing was undertaken and the site was re-visited on 2 more site inspections by Glencore's environmental monitoring company.
- (f) With limited activity in camp in 2014, the wildlife sightings were limited to grizzlies, and a fox. Wolf, muskox and caribou tracks were also noted in the vicinity of Camp Lake.

- (g) The following table identifies the Nunavut Land Claim Agreement (NLCA) beneficiaries employed by Glencore and total days worked on the Hackett property. The table does not include those workers employed by contractors/suppliers.

During 2014, 5 Inuit workers were employed on the Hackett project by Glencore, working a total of 141 person-days, with a gross payroll value of approximately \$47,177. Inuit workers accounted for 38% of total 2014 project (Glencore) workforce, through the end of September, and 36% of the payroll paid out to Glencore employees.

The following table shows an approximate breakdown of payroll on a community basis.

Name	Position	Community	Days	Gross Payroll
Bob Kohoktak	Camp Hand, Supervisor	Kugluktuk	27	
Chris Ipakohak	Camp Man, Environmental	Kugluktuk	27	
Frank Ipakohak	Camp Hand, Environmental Assistant, Community Relations Manager	Kugluktuk	37	
<b>Total Kugluktuk</b>			<b>91</b>	<b>\$33,296</b>
Martin McCallum	Camp Hand, Carpenter	Cambridge Bay	26	
Lucy Tedjuk	Camp – kitchen/cleaning	Cambridge Bay	24	
<b>Total Cambridge Bay</b>			<b>50</b>	<b>\$13,881</b>
<b>Total Hackett Project</b>				<b>\$47,177</b>

*Table 1 – Glencore's NLCA beneficiaries payroll breakdown (November, 2014).*

In total, Glencore paid \$263,729 to Nunavut companies for work completed on the Hackett River project. Registered Company and Other Nunavut Expenditures represent 14% of the total 2014 project expenditures through the end of September, excluding salaries.

- (f) Glencore and/or Glencore representatives did not carry out any public or community consultations in 2014.
- (g) Inspections that occurred during the 2014 exploration program included:
- On April 22, a 3-person inspection team from AANDC, led by Eva Paul, a Water Resources Officer, arrived on site for the annual winter camp/compliance inspection. The inspection concentrated on fuel management, water management and waste management and an overview of permits. All fuel storage and transfer areas were inspected, along with the water intake system and the grey water discharge and disposal. AANDC were satisfied with their inspection, and minor issues found on site were immediately corrected.
  - July 11, 2014: Eva Paul from AANDC conducted another site inspection, including inspection of the drill cutting spill into Boot Lake.

- During the July visit, site personnel conducted an aerial tour of the property and a spill of drill cutting material (sludge) was noted on the east shore of Boot Lake. This spill was reported to the inspector upon arrival and a spill report filled out (Note that a spill number was never generated due to repeated difficulties with contacting the Spill line). A follow up visit was planned, and undertaken roughly 7 days after the inspection visit. The sludge was collected and brought back to camp and stored in a lined building. Silt fencing was installed along the shoreline to prevent any further material from entering the water body, and further sump investigations were undertaken to check for any additional sump overflows (none were noted).
- 4 monthly site inspections were conducted by ERM-Rescan staff to monitor the integrity of the fuel storages at the camp between July and September of 2014. The items inspected included the condition of fuel containment berms, drums and tanks, presence of leaks in or around berms, water presence in berms, and the condition of rain drains. Monitoring of the drill cutting sumps from previous years' drilling campaigns were inspected for water and measured for pH.
- On September 7, 2014, a small crew of Glencore contractors observed a rapid reduction in the water level in Camp Lake, which continued until their departure from site on September 8. The reduction of water level resulted from a breach in the esker at the south end of Camp Lake. Historically, the esker acted as natural dam at the downstream edge of the lake, with Camp Lake outflow flowing around eastern edge ("nose") of esker where it turns south. The eastern portion of the esker was primarily ice, with a thin veneer of silt, sand and vegetation over top.
- A new team of experts from ERM/Rescan was deployed on September 25-26, 2014, to inspect and investigate the esker breach. A report is underway and will be submitted within the next few days. Authorities were notified about this event.

(h) No community members visited Hackett River Project in 2014.





Figure 3. Aerial image of Hackett camp and Camp Lake.

- (i) Personnel, equipment and supplies are mobilized to the property by fixed wing aircraft including De Havilland DHC-5 Buffalo, Dornier 228, Dash-7, and Twin Otter on the ice strip in spring and float equipped Twin Otter aircraft on the lake in the summer. The ice strip on Camp Lake was operational from early April until the end of the month. Subsequent trips to camp in July and September utilized the gravel air strip located approximately 7 km south of camp, and/or landed on floats on Camp Lake. A total of 43 planes flew into Hackett River in 2014, bringing in roughly 11,000 pounds of freight and supplies. Of the planes that were at Hackett, 21 of them were for shuttling fuel and salt (643 drums, 1500 bags of salt) to another project. A total of approximately 46,000 lbs of material was backhauled to Yellowknife for disposal.

Regularly scheduled supply flights started landing on Camp Lake on July 4th. Photographic evidence shows the last ice left the lake on June 26<sup>th</sup>. The final float plane of the season took off from Camp Lake on September 4th, at which point, Camp Lake suffered catastrophic water level drops, making lake landings impossible. The final planes for the year utilized the esker strip, south of camp and the final plane departed the project on September 24th, and the camp has been closed up since then.

- (j) Helicopter support during 2014 activities was very limited. A Bell 206 helicopter was used on, when needed, to perform property tours by Glencore's environmental contractor for drill sump monitoring.

- (k) With no new drilling undertaken in 2014, minor reclamation was done around the old drill sites, such as dried cuttings removal, and garbage pickup, if anything was spotted.

Reclamation work in the camp itself continued, with bear damage to buildings repaired, and the building materials disposed of properly.

Two berms containing empty drums were removed from the area closest to the dock. The drums were added to partially filled berms, and a new berm was begun to house the empties. Partial berms with full drums of fuel were rearranged as fuel was shuttled out, or used in camp, and berms with damage, or on uneven ground were removed, and the contents placed in new berms on level ground.

The gasoline drums were inspected and several were determined to be contaminated, so they were sent back to town for disposal at an approved fuel disposal site. The AvGas on site was sent back to town for use by a local float plane pilot.

A total of 92 drums of waste material (ash, waste oil, steel) were sent back to town, as were over 14,500 lbs of other garbage.

All salt (CaCl) was consolidated in camp, while 1320 bags were sent to Back River, for use by Sabina Gold & Silver.

- (l) Glencore has, to the best of our knowledge, conducted this operation in full compliance with the terms and conditions annexed to the permits, and we are actively working with inspectors and regulators to address any issues or concerns which arise and to improve the way in which we operate. We strive to maintain a high standard of performance in the course of all of our operations.