BGC ENGINEERING INC.
AN APPLIED EARTH SCIENCES COMPANY

INDIAN AND NORTHERN AFFAIRS CANADA

POLARIS MINE ABANDONMENT AND RECLAMATION

AUGUST 24, 2008 SITE VISIT AND INSPECTION

FINAL

PROJECT NO.: 0131-013-06
DATE: NOVEMBER 6, 2008

DISTRIBUTION LIST:

INAC	2 COPIES
BGC CALGARY	2 COPIES
BGC VANCOUVER	1 COPY

BGC ENGINEERING INC.
AN APPLIED EARTH SCIENCES COMPANY
200, 1121 Centre Street NW
Calgary, Alberta
Canada T2E 7K6
Tel: (403) 250-5185
Fax: (403-250-5330

Project No. 0131-013-06
November 6, 2008

Mr. Kevin Buck
Manager, Waters Division
Indian and Northern Affairs Canada
Building 918
P.O. Box 100
Iqaluit, NU
X0A 0H0

RE: POLARIS MINE, AUGUST 24, 2008 INSPECTION REPORT- FINAL

Dear Kevin:

Please find attached a two CD's containing electronic copies in Microsoft WORD and extractable PDF format, and two hard copies of our above referenced final report dated November 6, 2008. We have included any comments received from your staff on our draft copy dated September 30, 2008.

Should you have any questions or comments, please do not hesitate to contact me at the number listed above.

Yours truly,
BGC ENGINEERING INC.
per:

Holger Hartmaier M. Eng., P. Eng.
Senior Geotechnical Engineer

HHH/sf

TABLE OF CONTENTS

APPENDICES

LIMITATIONS OF THE REPORT

BGC Engineering Inc. (BGC) prepared this report for the account of Indian and Northern Affairs Canada (INAC). The material in it reflects the judgment of BGC staff in light of the information available to BGC at the time of report preparation. Any use which a third party makes of this report, or any reliance on decisions to be based on it are the responsibility of such third parties. BGC accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

As a mutual protection to our client, the public, and ourselves, all reports and drawings are submitted for the confidential information of our client for a specific project. Authorization for any use and/or publication of this report or any data, statements, conclusions or abstracts from or regarding our reports and drawings, through any form of print or electronic media, including without limitation, posting or reproduction of same on any website, is reserved pending BGC's written approval. If this report is issued in an electronic format, an original paper copy is on file at BGC Engineering Inc. and that copy is the primary reference with precedence over any electronic copy of the document, or any extracts from our documents published by others.

1.0 INTRODUCTION

The Polaris Mine site is located in Canada's high Arctic at about Latitude 75° N and Longitude 97° W on Little Cornwallis Island. The mine is approximately 140 km by air northwest of Resolute Bay.

During operations, Polaris Mine was the most northerly metal mine in the world. Operating between 1981 and 2002, the mine produced about 300,000 wet tonnes of lead and 250,000 wet tonnes zinc concentrate per year from its underground mining developments. Ore was crushed and concentrates were stored on site during the winter, then shipped to overseas smelters during the brief summer shipping window.

Mining operations ceased in 3rd Quarter, 2002 due to lack of ore. An Abandonment and Reclamation Plan (A&R Plan) was prepared by Teck Cominco and approved by the Nunavut Water Board in April 2002. Decommissioning and reclamation of the mine site was conducted by Teck Cominco and its contractor's between 2002 and 2004. Since that time, post-closure monitoring and annual inspections have been carried out as required by the current water licence NWB1POL0311 which expires on December 31, 2011.

Closed mine site status was obtained from Environment Canada on July 27, 2006 confirming that Polaris Mine had no further obligations under the Metal Mining Effluent Regulations (MMER).

On June 24, 2008, Teck Cominco requested a reduction in the amount of security being held by the Crown in recognition of the reclamation work completed to date and the results of ongoing monitoring which show that all parameters are within regulatory limits. In addition, Teck Cominco has requested that the annual water quality monitoring requirements be reduced in recognition of these stabilized conditions.

1.1 Terms of Reference and Objectives

BGC Engineering Inc. (BGC) was requested by the Nunavut Regional Office of the Department of Indian Affairs and Northern Development (DIAND) to undertake a site inspection of the Polaris Mine site. The work was undertaken under the terms of Standing Offer Agreement 6013, Call-up No. 5. This inspection trip is part of an overall review of technical information associated with the ongoing Abandonment and Reclamation work being completed by Teck Cominco for the Polaris Mine. This technical review will facilitate DIAND's interventions to the Nunavut Water Board (NWB) and review of Crown Land Leases.

The objectives of the site visit were to review progress of the reclamation work and prepare a report. This information will be used as part of the ongoing assessment of the Crown's remaining liability for the site based on reclamation work that has been confirmed/verified during the site visit.

The site visit was initially attempted on July 16, 2008 but had to be cancelled due to continuous foggy weather. The visit was subsequently re-scheduled and completed on August 24, 2008 under Amendment No. 1 to Call-up No. 5.

2.0 SUMMARY OF SITE INSPECTION OBSERVATIONS

2.1 General Itinerary

Mr. Holger Hartmaier, P. Eng. of BGC carried out the inspection on August 24, 2005 accompanied by the following individuals:

- Mr. Bruce Donald, Teck Cominco
- Mr. Kevin Robertson, INAC

Ken Borek Air in Resolute Bay provided a Twin Otter aircraft under charter to Teck Cominco for transportation to and from the site. Simon Idlout, of Resolute Bay and Chairman of the local Hunters and Trappers Association (HTA) was employed by Teck Cominco as a bear monitor during the inspection trip.

The charter departed Resolute Bay at approximately 09:15 on August 24, 2008, arriving approximately 30 minutes later at the Polaris mine site. The inspection was carried out using quads left on site at the camp by Teck Cominco. The inspection was completed by 15:30, returning to Resolute Bay by 16:00.

Weather during the inspection trip was generally overcast, with frequent snow squalls, temperature of about -5^{o} C and a north to northwest wind of about 20 km/h. The site was generally bare of snow except for drifts in low, wind sheltered areas and gullies and did not hinder the inspection.

The inspection tour was done in two parts:

- In the morning, the more distant components of the mine site were visited first, in case weather conditions became worse during the course of the day. These sites included the following areas:
    - Garrow Lake Dam.
    - Garrow lake wave break structure.
    - Frustration Lake causeway and access road.
    - New Quarry area.
- After lunch, the rest of the mine site was inspected, including the following areas:
    - Operational Landfill.
    - Marine foreshore.
    - Main Portal and Conveyor Portal.
    - Little Red Dog Quarry.
    - North Portal.
    - Subsidence Zone.

The following sections summarize the observations and recommended follow-up action items or issues (if any) noted at each of the above locations. Appendix A contains the captioned site inspection photographs for the sites that are referred to herein.

2.2 Garrow Lake Dam

BGC conducted a visual inspection of the breached section of the dam. Foot access was to the right abutment area (facing downstream) only. The riprap lining the channel through the breached embankment appears to be in sound condition, with no obvious signs of physical breakdown or deterioration. The channel base appears stable with no signs of scour or erosion. Flow in Garrow Creek was clear and across the full width of the channel, to an average depth of 10-15 cm. A section of exposed channel liner noted in previous inspections was cut out by Teck Cominco this year as placing additional rip rap on top of it would have raised the creek bed enough to impede flow. The creek bed appears stable and armoured at that location and should be of no further concern. Downstream of the breached toe, the right bank has been armoured with riprap by Teck Cominco in response to erosion caused by tributary streams entering Garrow Creek. This area is now stabilized.

The downstream slopes of the breached dam on both sides of Garrow Creek appear stable, with no signs of erosion. The cut slopes within the breached sections show a very minor degree of shallow slumping within granular materials that now appear stabilized with no signs of active erosion. The upstream slope of the dam on the right abutment is covered with irregular heaps of granular material left over from previous work when snow was buried by dumped material during the dam breaching activities. This area now appears stabilized. The upstream slopes on the left bank side of the breached dam are stable.

No other issues or concerns for follow up were noted by BGC at this location.

2.3 Garrow Lake Wave Break Structure

Since the level of Garrow Lake was lowered and the wave break structure removed, natural processes have pushed up a low, crescent-shaped gravel bar across the outlet at the south end of Garrow Lake. The height of this gravel bar seems to increase year by year. Currently, the maximum height is about 1.2 m at the west side of the lake, the site of the original outlet channel. The gravel bar is composed of thin flat shale fragments that are seasonally pushed up from the shallow-sloping lakebed by wind-driven sheets of ice. At the time of the inspection, the lake was completely ice free.

At the east side of the lake, the height of the gravel bar is about 30 cm and there are signs of periodic breaching. The side slopes of the dam are at the natural angle of repose for the material and currently appear to be free draining. Seepage is evident through the downstream toe and slope of the material as well as the foundation, composed of granular lake bed materials.

The formation of the gravel bar does not appear to be affecting the elevation of Garrow Lake significantly. It is suspected that in late winter, the interior of the natural embankment is frozen and acts as a more effective seepage barrier, possibly raising the level of the lake slightly. The gravel bar is then likely breached at local low spots along the crest and Garrow Lake water levels drop back to stable levels. As the open water season progresses, seepage through the gravel bar and its granular foundation controls flow out of Garrow Lake.

The wave break structure was originally constructed at this location because of the presence of a natural gravel bar. The base of the decommissioned wave break structure is visible downstream of the current gravel bar, but it is below lake level. Decommissioning guidelines required that material from the wave break structure be removed only down to the original channel grade and the flow into Garrow Creek restored.

The formation of the gravel bar that has evolved naturally since decommissioning of the wave break structure should be allowed to continue as it is part of the natural lake process at this location. No further action on the part of Teck Cominco is required.

2.3.1 Garrow Lake Shoreline Stability

Teck Cominco has discontinued using the erosion monitoring pins installed around the shoreline of Garrow Lake. Visually, there is no sign of active erosion or suspended sediment. The former lakebed soils now exposed along the shoreline appear to be freezing back and there is only limited and localized erosion noted where shorelines are exposed to wind-driven wave action, such as the southwest corner of the lake, adjacent to the former wave break structure.

There are no issues that require follow up in this area.

2.4 Frustration Lake Access Road and Causeway

2.4.1 Access Road to Frustration Lake

The approximately 4 km long access road to the former freshwater intake at Frustration Lake has been reclaimed and cut by several water bars. The water bars were placed to ensure that natural runoff from the adjacent hillsides was unimpeded. During the initial reclamation effort, some excessive erosion was noted at some of these locations. Since then, Teck Cominco has improved the alignments and the channels now appear stabilized.

The adjacent pipeline alignment parallel to the road has also been reclaimed and the water bars extend across this alignment to tie in with natural swales and drainage courses originating upslope.

No further work is required on the access road or pipeline alignment, although the following precautionary note should be addressed. The water bars tend to become filled in with drifting snow. As a result, site inspection and monitoring staff travelling on quads on the decommissioned access road tend to divert across the adjacent tundra to get around the deep pockets of snow or irregular terrain associated with the water bar. During the summer, the surficial soils may be soft and water saturated, leading to rutting and potential for degradation of the protective soil cover and underlying permafrost. The exposed soils may also contribute suspended sediment to runoff and erosion may become a problem. BGC recommends that all quad traffic be restricted to the existing access road and the practice of cutting across the tundra be discontinued to minimize further potential damage to the natural terrain.

As noted below, the Frustration Lake causeway appears to be relatively stable and not generating suspended sediment. Therefore, the ongoing need for water quality sampling and inspection in this area should be reviewed so that further traffic down this road can be eliminated and the area allowed to restore itself naturally.

2.4.2 Frustration Lake Causeway

The rock fill causeway into Frustration Lake was left during decommissioning since removal would have generated an excessive amount of suspended sediment loading into the lake. The structure is expected to gradually succumb to the erosive action of waves and ice over a long period of time, resulting in negligible release of suspended sediment into the water. The causeway has an overall length of about 140 m. The structure is aligned in a northwesterly direction, generally across the prevailing wind direction. For this reason, the north-facing side and end of the causeway are continually exposed to wave and ice action, whereas the south side is in relatively calm water on the leeward side.

The windward slopes of the causeway have become armoured with larger rock fragments, whereas little or no erosion was noted on the leeward side. Since decommissioning, there has been relatively limited degradation of the causeway. The water surrounding the structure is clear, even with waves acting against the sides.

Current water licence requirements call for a water quality sample and inspection of this structure. The original concern was that erosion of the causeway would release excessive amounts of suspended sediment into the water. If this occurred, Teck Cominco was required to take mitigative action. This monitoring requires access down the decommissioned road to the causeway. As noted above, vehicle traffic has diverted around the rougher sections of the water bars onto the adjacent tundra and is beginning to show some minor damage to the ground surface. BGC recommends that this sampling and monitoring requirement be removed as there is no longer a concern about suspended sediment resulting from degradation of this structure.

2.5 New Quarry

During the 2006 site inspection, BGC noted several erosional gullies that had developed around the perimeter slopes of the New Quarry. Notably, two deep gullies had incised across the fill of the decommissioned haul road along the southwest side of the quarry. These gullies formed as a result of runoff from existing drainage courses further upslope, including the outlet of Loon Lake. Debris fans of material were washed onto the floor of the quarry. In 2006, Teck Cominco completed remedial work on these areas has flattened the gully slopes and armoured the channels with riprap. No water was flowing in either channel at the time of the inspection, however the channel sides appeared to be stabilized and have shown no deterioration over the last 2 years of service.

A third gully is located on the southeast corner of New Quarry. The head of this gully is close to the edge of the Frustration Lake access road and was inspected by BGC. At this location, the gully is about 30-40 cm deep with steep side slopes that are becoming self-armoured with gravel sized rock fragments. The lower part of this gully was infilled with drifted snow and was not visually inspected.

Further monitoring of these gullies is recommended for the remainder of the licence period. The channels appear to have become stabilized, however minor repairs may be necessary if the flow regime in the drainage course is increased by an intense rainfall event or rapid snowmelt.

2.6 Operational Landfill

The cover of the Operational Landfill consists of two major components:

- A sloping portion facing south, roughly parallel to the natural slope.
- A horizontal portion which extends close to the toe of the natural slope above the landfill.

Teck Cominco has installed four thermistors cables with dataloggers to monitor ground temperatures in the cover and underlying waste to confirm that the seasonal active zone remains within the cover. The thermistors were replaced in 2006 and the data is reported by Teck Cominco in their annual reports. The results of the 2008 measurements will be reported in the third quarter report being prepared at the time of this inspection. In general both areas of cover appeared stable with no signs of settlement, heaving or waste materials working their way through the cover. The thickness of the horizontal portion of the cover was locally increased near the eastern end during construction. Finer grained granular material was placed to fill in voids between rockfill that was too coarse.

Previous temperature measurements have shown that the waste material remains frozen and the seasonal active zone remains well within the 1.8 m (minimum) thickness of cover material.

Previous inspections noted an area of erosion along the slope above the landfill. During this inspection, it was difficult to find where this area was located, so it appears to have become stabilized and no further concerns were noted.

2.7 Marine Foreshore

The reclaimed shoreline zone is composed of a coarse gravel beach. Seasonal ice action affects the immediate beach area. Ice pans driven by wind and wave action bulldoze into the sloping beach materials resulting in small, local ice-thrusted mounds and ridges. During the winter, the sea ice becomes grounded and frozen to the beach and protects the shoreline from wave erosion. During the open water season, grounded ice either melts in place or plucks granular material from the shoreline and the shoreline is exposed to wave action. At the time of the inspection, the open water conditions were calm and there were numerous grounded ice pans along the shoreline.

An extensive area of the shoreline appears to have settled with respect to the overall profile. This was noted in several of the previous inspections and is possibly due to melting out of ice that was buried when the foreshore area was backfilled. The settled zone does not seem to be progressing further and there is no concern about instability.

The foreshore area will continue to be modified by natural processes and no additional mitigative measures are required.

2.8 Portal Backfill

There were three portals into the underground workings that were backfilled with granular materials during decommissioning:

- Main Portal
- Conveyor Portal
- North Portal

The Main and Conveyor portals are located adjacent to the marine foreshore area, where the toe of the hill slope meets the beach. A significant slump has occurred in the Main Portal backfill. According to Teck Cominco, it must have occurred in the past month, as the backfill appeared undisturbed in July 2008. The tongue-shaped flow slide appears to have affected only the surficial backfill material. The tunnel opening itself remains sealed. The cause of the slump may be due to the use of backfill containing a higher percentage of fines, combined with excessive water from snowmelt and slightly oversteepened slope angle.

BGC recommended that the overall slope angle of the backfill should be reduced by placing a berm of coarser grained rockfill along the toe. This material can be borrowed from the adjacent slope without undercutting any of the slope above. Teck Cominco will undertake this repair work in 2009.
The Conveyor Portal backfill looks stable. It should be noted that the average slope angle of the Conveyor Portal backfill appeared flatter than the Main Portal backfill.

The North Portal backfill is stable. In fact, it was difficult to determine exactly where the North Portal was located, because the backfill blended in so well with the surrounding slope.

2.9 Slopes above Marine Foreshore

Reclamation work was undertaken by Teck Cominco on portions of the slope above beach level. This included some excavation and grading, such as the area above and below the former tank farm. Other portions of the slope above beach level are natural slopes. There were no obvious areas of instability noted during the inspection. The re-graded slopes all remain stable, with no sign of erosion or slumping.

2.10 Little Red Dog Quarry Landfill

The LRD Quarry landfill cover appears stable. Four thermistor cables monitor ground temperatures. Past readings have indicated that the active zone remains in the cover and the underlying waste remains frozen. The 2008 set of readings will be included in the 3rd quarter report, currently in preparation by Teck Cominco.

Miscellaneous pieces of scrap metal and demolition debris collected by Teck Cominco from around the site during their annual visits has been placed on top of the landfill cover within the quarry. Teck Cominco intends to bury this material within the LRD Quarry Landfill next year as part of the final site clean up before removing their equipment from site. BGC recommended that the location for disposal of this debris should be chosen carefully to avoid disturbing the cover. BGC suggested excavating close to the south-facing side of the quarry, along the toe of the rock slope, where the active zone within the fill may be deeper due to warming from the adjacent rock. The excavation may have to proceed in stages to allow frozen backfill to melt. The debris should be covered with the same minimum thickness of cover as used elsewhere in the LRD Quarry Landfill.

2.11 Subsidence Zone

The surface expression of the subsidence zone has not changed visually from previous inspections. The subsidence trough runs roughly north-south and is flanked by several large cracks that were noted in all previous inspections. Teck Cominco conducts an annual survey of the topography across the subsidence zone that showed no significant change from year to year. This year, Teck Cominco initiated mapping of the visible cracks by survey. This information will help to support the interpretation from past surveys that the subsidence zone has stabilized since closure.

In previous reports, Teck Cominco had indicated that they had contacted Golder Associates to prepare an assessment of the subsidence zone due to their involvement with mine rock mechanics during operation and familiarity with the initial cause of the subsidence. To date, Golder has not responded to Teck Cominco's request. BGC recommends that Teck Cominco submit all supporting documentation and monitoring data compiled on the subsidence zone to INAC with their 3rd Quarter 2008 report or 2008 annual report. BGC is prepared to undertake this assessment on behalf of INAC, to evaluate the long-term risk of future instability in this area.

3.0 SUMMARY

In general the site conditions indicate physical stability of the reclaimed areas, except for a few areas of concern:

- Development of minor areas of surface degradation by quad traffic adjacent to the Frustration Lake access road.
- Slump of portal backfill at Main Portal.
- Disposal of miscellaneous debris being stockpiled on the cover of the LRD Quarry Landfill.
- Assessment of subsidence zone long term stability.

BGC understands from Teck Cominco that the camp and all remaining on-site equipment and facilities will be removed in 2010. Therefore the 2009 inspection will be the last inspection where equipment will be available for mitigation. The recommendations provided by BGC in this report should address these outstanding areas of concern. BGC recommends that DIAND consider conducting the 2009 inspection visit to coincide with the period of time that Teck Cominco is doing the work on site, so that any last minute outstanding issues can be addressed before the equipment is demobilized.

4.0 CLOSURE

We trust this report meets with your requirements and look forward to receiving your comments. Upon receipt of your comments, BGC will prepare a final report.

BGC ENGINEERING INC.
Per:

ISSUED AS DIGITAL DOCUMENT.
SIGNED HARDCOPY ON FILE WITH
BGC ENGINEERING INC.

Holger Hartmaier, M. Eng., P. Eng.
Senior Geotechnical Engineer

Geoff Claypool, M. Eng., P. Eng.
Geological Engineer

APPENDIX A
AUGUST 24, 2008 SITE INSPECTION PHOTOS

Polaris Site Inspection- August 24, 2008

Airstrip and Accommodation Complex Area

Photo 33: Twin Otter from Ken Borek Air parked next to storage and shelter facilities on airstrip.

Photo 30: Quads and sea container at airstrip.

Photo 66: Trailers for quads stored on apron. In background is track-mounted auger drill rig.

Photo 68: Survival shack and storage building next to apron.

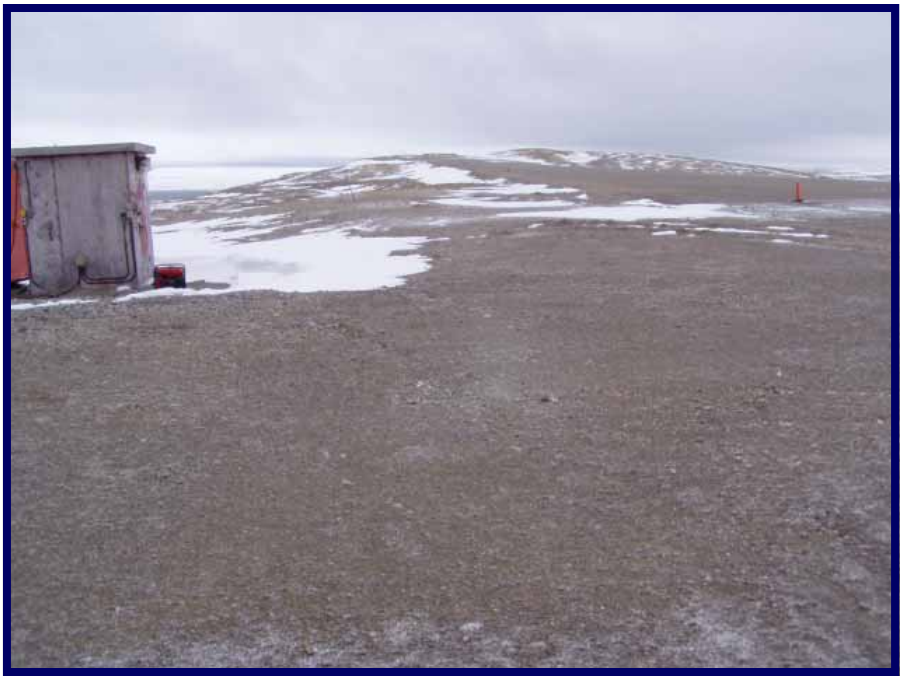

Photo 110: View along west side of airstrip looking north from apron area.

Photo 111: View looking northeast towards temporary camp next to Loon Lake.

Photo 113: View of airstrip looking north along east side.

Photo 114: View along east side of airstrip looking south along east side.

Photo 116: View of bench where accommodation complex was located, looking north from airstrip apron area.

Photo 112: View of temporary camp on far side of Loon Lake.

Photo 120: Some local residents.

Garrow Lake Dam

Photo 34: Garrow Creek downstream of dam, looking downstream. Note riprap on channel sides extends across top of bank on right, as shown in next photo.

Photo 40: Erosion protection extending across top of right bank of Garrow Creek, downstream of dam.

Photo 35: Looking upstream along right bank towards breached section of dam. Note riprap lined channel and flat slopes of breached cut in dam, seen in section in this photo.

Photo 36: Looking across channel carrying Garrow Creek flow towards left bank side of dam breach.

Photo 37: Upstream slope of dam on right side of Garrow Creek. Slope surface is irregular as this material was originally placed on top of snow and ice, which has since melted out and drained away.

Photo 38: View across breached dam to left bank side, along upstream slope of dam.

Photo 39: Looking downstream along right bank of Garrow Creek through breach in dam.

Garrow Lake Wave Break Structure

Photo 41: Naturally formed berm composed of a bar of shaly gravel at south end of Garrow Lake on east side. Maximum height above water level is in the 20-30 cm range. This area was originally breached when the Wave Break structure was removed and has formed by ice action over subsequent seasons.

Photo Photo 42: Looking downstream from location of previous photo. Garrow Lake Dam is in distant background. Water is entirely from seepage through the natural berm or under seepage through the pervious former lakebed gravels. Surface disturbance of gravels is due to previous episode of flow when natural berm was breached by overtopping. Berm has since re-healed itself.

Photo 43: Looking east along downstream side of natural gravel bar across south end of Garrow Lake. Material to right is foundation footprint of former wave break structure. Note seepage exiting along toe of berm. Berm is at maximum height at this point, about 1.2 m (see

Photo 44: View of natural berm along crest from close to the east abutment side.

Photo 45: Seepage through the foundation along downstream side of gravel bar at east end. Note old scour channel from previous breach in this area.

Photo 46: Slightly coarser material marks channel where berm was breached for a brief period. This may occur in the spring when the body of the gravel bar is still frozen and lake levels rise to overtopping. Once the bar thaws out, the water balance of the lake is maintained by seepage through the berm and foundation.

Photo 47: Close up view of natural berm showing imbricated structure of gravel on upstream side, suggesting thrusting by ice.

Photo 48: Ground level view of natural berm downstream slope at same location as previous photos (use gloves as reference). Berm is less than 30 cm high at this point.

Photo 49: Maximum section of berm near west end, approximately waist height on individual in photo.

Photo 50: Seepage along downstream toe at point of maximum height.

Frustration Lake Causeway

Photo 51: Wave washed windward (north) side of causeway.

Photo 53: End of causeway, larger riprap still intact.

Photo 54: Leeward (south) side of causeway. Generally causeway looks in sound shape, with no real degradation or erosion.

New Quarry Area

Photo 55: General view of west side of New Quarry area looking south to southeast from crest of reclaimed slope.

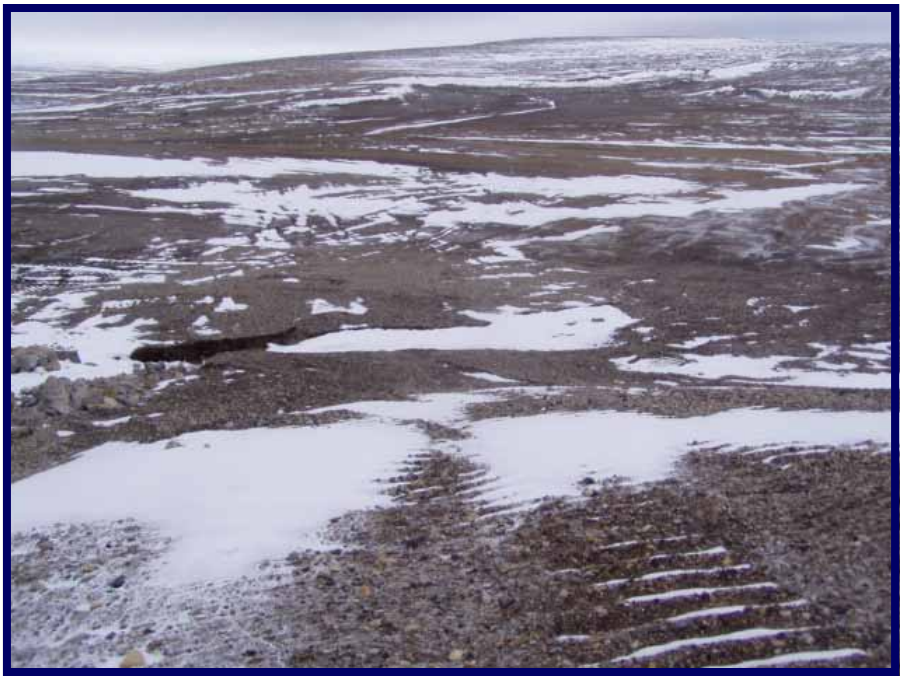

Photo 56: General view looking east, from crest of reclaimed slope on west side. A fan of eroded material can be seen at the toe of the slope on left side of photo. This material was eroded in 2006 along an ephemeral stream channel due to concentrated flow along the slope during spring melt. The channel was subsequently armoured with riprap in 2006 and is now stable.

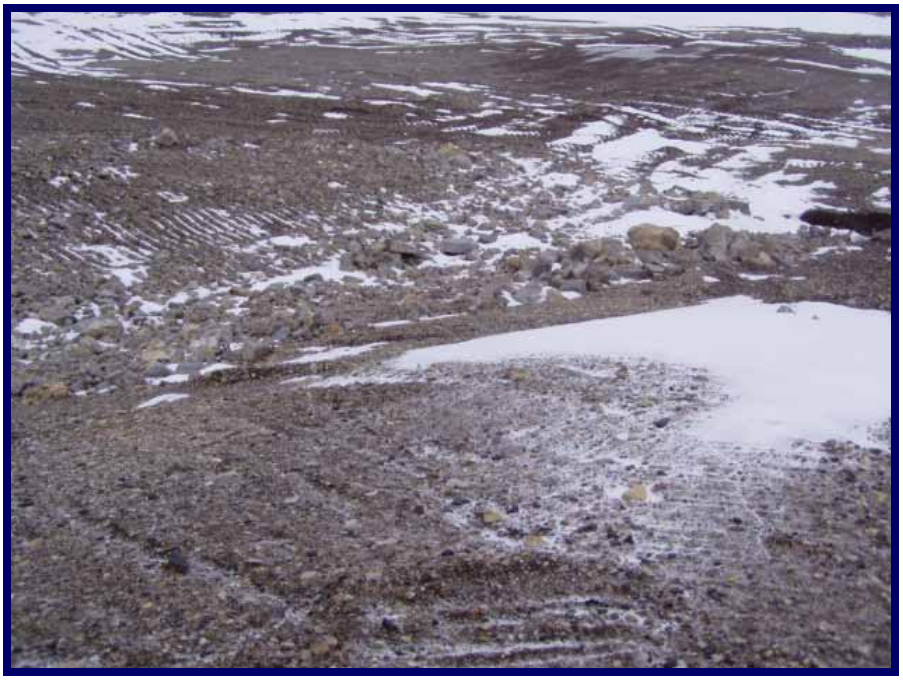

Photo 57: View of riprap in stream channel along slope on west side of New Quarry.

Photo 58: View looking upstream along riprap lined channel.

Photo 59: Same stream channel as in previous photos. This portion of channel is parallel with the crest of the slope and intercepts runoff from further upslope sources.

Photo 60: View of second riprap lined channel on west side of New Quarry, adjacent to one shown in above photos.

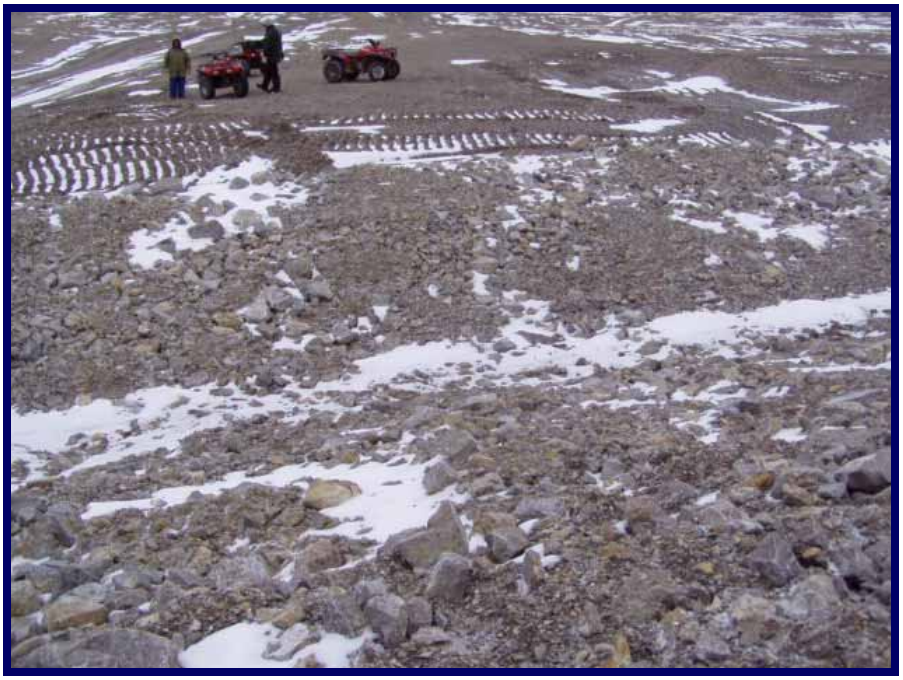

Photo 61: View of same channel as in previous photo showing riprap lining where channel cuts across decommissioned haul road. Looking south along west side of New Quarry.

Photos 62: General view of reclaimed landscape looking north to northwest along decommissioned haul road along west side of New Quarry. Interceptor ditch leading to riprap lined channels shown in previous photos is visible along left side of road, infilled with drifting snow.

Photo 63: General view of reclaimed area west of New Quarry, looking west from haul road in previous photo towards Teck Cominco's temporary camp.

Photo 64: General view of reclaimed area west of New Quarry, looking west to southwest from same point as previous photo. Teck Cominco's temporary camp is in the distance. To the left of the camp is a small stream channel that flows towards the ditch in the foreground and is picked up in the riprap lined channels shown in previous photos.

Operational Landfill

Photo 70: Plywood protective cover for thermistor installation to monitor ground temperatures in landfill cover.

Photo 71: Looking north across horizontal portion of landfill cover. Note thermistor box on right side of photo. Cover shows no signs of erosion, settlement or heave.

Photo 73: Looking west along south-facing slope portion of cover. No signs of any erosion, settlement or heaving.

Photo 74: General view of horizontal portion of cover, near east end of landfill. This portion of the cover was supplemented by a layer of finer grained rockfill (gravel size) to fill in voids in coarse rockfill originally placed in this area during construction.

Photo 75: General view of reclaimed backslope above landfill, looking west from top of landfill at eastern end. The area of seepage and erosion previously noted by Gartner Lee geotechnical inspection in 2006 was not visible during this inspection.

Marine Foreshore and Former Plant Site Area

Photo 76: View looking north along shoreline from point where former shops were located.

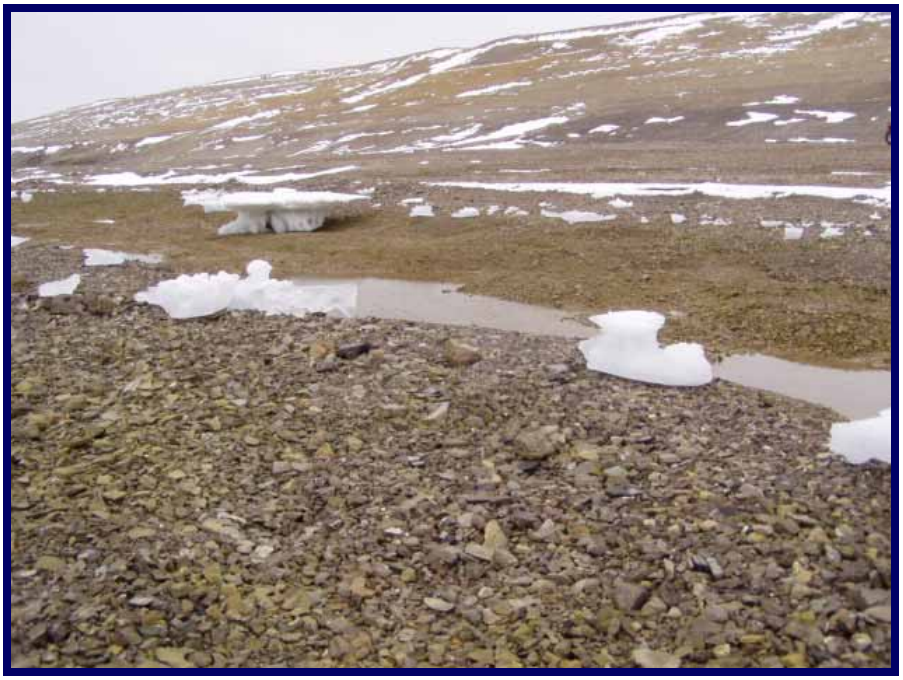

Photo 77: General view of restored beach condition. The depressed area parallel to beach may be the result of some subsidence due to melting out of ice buried in the foreshore fill and/ or ice scouring along the beach in the winter.

Photo 79: Looking south along marine shoreline from same point as previous photo. Note grounded icebergs and natural-looking reclaimed shoreline.

Photo 81: Naturally sculpted clear ice piece on beach. Note composition of beach material in this area.

Photo 83: Looking south to southeast from beach towards former tank farm area (bench on slope in background). Note reclaimed slopes are stable, with no signs of erosion or slumping.

Photo 84: Closer view of reclaimed slopes around former tank farm area.

Photo 85: Marine foreshore area in vicinity of former docksite.

Photo 86: Reclaimed foreshore area in front of Main Portal, looking north.

Photo 87: Looking west towards former dock area.

Photo 88: Looking south along beach from former dock site area.

Portals

Photo 89: Slump in backfill of Main Portal. Reclaimed barge/plantsite area in foreground.

Photo 90: Conveyor portal backfill appears intact and stable.

Photo 91: View of reclaimed slope just to the north of Main Portal (visible on right side of photo).

Photo 93: Close-up view of slump in Main Portal backfill. It appears this was due to backfill being placed too steeply and becoming saturated with snowmelt from a snowdrift.

Photo 94: Seepage water coming from slumped material at toe of failure zone.

Photo 95: Some green vegetation that has grown around the seepage zone in front of the Main Portal backfill indicating a long-term source of water in this area.

Photo 96: General view of Main Portal showing classic tongue-shaped flow slide and green zone of vegetation associated with seepage from the backfill.

Photo 100: North Portal area. Very difficult to tell where portal was.

Photo 101: Reclaimed shoreline area in front of North Portal, looking west.

Photo 102: Reclaimed area in front of North Portal, looking east.

Little Red Dog Quarry Landfill

Photo 97: Looking east across landfill cover. Box in distance is thermistor installation. Quads are parked next to a small pile of debris collected by Teck Cominco from around the site. This material will be buried next year in a designated area within Little Red Dog Quarry.

Photo 98: Looking south across landfill cover towards excavated rock slopes. Plywood box housing dataloggers for thermistors is in foreground.

Photo 99: Looking northeast across landfill cover. In general cover looks stable with no signs of erosion, settlement or heaving.

Subsidence Zone

Photo 103: Looking southeast towards reclaimed area around subsidence zone from area around North Portal.

Photo 104: Looking north-northwest across north end of subsidence zone. There is no noticeable visual change in this area from previous inspections.

Photo 105: Looking north across subsidence zone. No sign of any change from previous inspections.

Photo 106: Looking south along one of several large cracks found in subsidence zone. Crack can be traced for several tens of metres. Width varies up to 150 mm and ground is open 10 to 30 cm deep. These have been reported in previous inspections and there is no obvious change. Teck Cominco has now surveyed all these in for record purposes.

Photo 107: Same crack as in previous photo, looking north.

Photo 108: Close up of another snow-filled crack in subsidence zone.

Photo 109: View along crack showing irregular trace and lateral extent.