

**PRELIMINARY SCREENING REPORT FORM**

<b>PRELIMINARY SCREENER:</b> Gwich'in Land and Water Board <b>REFERENCE / FILE NUMBER:</b> GLWB - G02Q006  <b>TITLE:</b> Quarry Operation – Dempster Highway, km 230.2  <b>ORGANIZATION:</b> GDC Civil Construction Ltd. <b>Date:</b> June 3, 2002.	<b>EIRB REFERENCE NUMBER:</b>
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- Type of Development:** (CHECK ALL THAT APPLY)
- |                                     |                                                   |
|-------------------------------------|---------------------------------------------------|
| <input type="checkbox"/>            | New Development                                   |
| <input type="checkbox"/>            | Amend, EIRB Ref. #                                |
| <input type="checkbox"/>            | Renew, EIRB Ref.#                                 |
| <input checked="" type="checkbox"/> | Requires permit, license or authorization         |
| <input type="checkbox"/>            | Does not require permit, license or authorization |

**Principal Activities (related to scoping)**  
(CHECK ALL THAT APPLY)

- |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Construction<br><input type="checkbox"/> Installation<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Expansion<br><input checked="" type="checkbox"/> Operation<br><input type="checkbox"/> Repair<br><input type="checkbox"/> Research<br><input type="checkbox"/> Water Intake<br><input type="checkbox"/> Other: _____ | <input type="checkbox"/> Exploration<br><input type="checkbox"/> Industrial<br><input type="checkbox"/> Recreation<br><input type="checkbox"/> Municipal<br><input checked="" type="checkbox"/> Quarry<br><input type="checkbox"/> Linear / Corridor<br><br><input type="checkbox"/> Sewage | <input type="checkbox"/> Decommissioning<br><input type="checkbox"/> Abandonment<br><input type="checkbox"/> Aerial<br><input type="checkbox"/> Harvesting<br><input type="checkbox"/> Camp<br><input type="checkbox"/> Scientific/<br><br><input type="checkbox"/> Solid Waste |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Principal Development Components (related to scoping)**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Access Road construction<br><input type="checkbox"/> abandonment/removal<br><input type="checkbox"/> modification e.g., widening, straightening<br><input type="checkbox"/> Automobile, Aircraft or Vessel Movement<br><input type="checkbox"/> Blasting<br><input type="checkbox"/> Building<br><input type="checkbox"/> Burning<br><input type="checkbox"/> Burying<br><input type="checkbox"/> Channeling<br><input type="checkbox"/> Cut and Fill<br><input type="checkbox"/> Cutting of Trees or Removal of Vegetation<br><input type="checkbox"/> Dams and Impoundments <ul style="list-style-type: none"> <li><input type="checkbox"/> construction</li> <li><input type="checkbox"/> abandonment/removal</li> <li><input type="checkbox"/> modification</li> </ul> <input type="checkbox"/> Ditch Construction<br><input type="checkbox"/> Drainage Alteration<br><input type="checkbox"/> Drilling other than Geoscientific<br><input type="checkbox"/> Ecological Surveys<br><input checked="" type="checkbox"/> Excavation<br><input type="checkbox"/> Explosive Storage<br><input type="checkbox"/> Fuel Storage<br><input checked="" type="checkbox"/> Topsoil, Overburden or Soil <ul style="list-style-type: none"> <li><input type="checkbox"/> fill</li> <li><input checked="" type="checkbox"/> removal</li> <li><input type="checkbox"/> disposal</li> <li><input checked="" type="checkbox"/> storage</li> </ul> | <input type="checkbox"/> Waste Management<br><input type="checkbox"/> disposal of hazardous waste<br><input type="checkbox"/> waste generation<br><input type="checkbox"/> Sewage<br><input type="checkbox"/> disposal of sewage<br><input type="checkbox"/> Geoscientific Sampling <ul style="list-style-type: none"> <li><input type="checkbox"/> trenching</li> <li><input type="checkbox"/> diamond drill</li> <li><input type="checkbox"/> borehole core sampling</li> <li><input type="checkbox"/> bulk soil sampling</li> </ul> <input checked="" type="checkbox"/> Gravel<br><input type="checkbox"/> Hydrological Testing<br><input checked="" type="checkbox"/> Site Restoration <ul style="list-style-type: none"> <li><input type="checkbox"/> fertilization</li> <li><input type="checkbox"/> grubbing</li> <li><input type="checkbox"/> planting/seeding</li> <li><input type="checkbox"/> reforestation</li> <li><input type="checkbox"/> scarify</li> <li><input type="checkbox"/> spraying</li> <li><input checked="" type="checkbox"/> recontouring</li> </ul> <input type="checkbox"/> Slashing and removal of vegetation<br><input type="checkbox"/> Soil Testing<br><input type="checkbox"/> Stream Crossing/Bridging<br><input type="checkbox"/> Tunneling/Underground<br><input type="checkbox"/> Other (describe): _____ |
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**NTS Topographic Map Sheet Numbers**  
(LIST ALL THAT APPLY)  
 Aklavik, 107B – 1:250, 000 Scale  
 107 B/7 – 1:50, 000 Scale

**Latitude / Longitude and UTM System:**

Quarry Location: Dempster Highway-Km 230.2, Coord: 68° 10' 23" N 133° 25' 26" W

**Nearest Community and Water Body:**

Inuvik, NT.  
Campbell Lake

**Land Status (consultation information)**

Free Hold / Private       Commissioners Land       Federal Crown Land       Municipal Land

**Transboundary Implications**

British Columbia       Alberta       Saskatchewan       Manitoba       Yukon  
 Nunavut       Wood Buffalo National Park       Inuvialuit Settlement Region

**Type of Transboundary Implication:**       Impact / Effect       Development

Public Concern  
(DESCRIBE)

The land use permit application and associated maps (created in house) were distributed to Federal, Territorial, Municipal, government departments/agencies electronically on Tuesday May 28, 2002. The Board requested that comments be received before Friday May 31, 2002, at 5:00 PM. Maps created at the office of the Board and distributed along with the application located the proposed quarry operation at Km 235.2 of the Dempster Highway; the operation is actually located at Km 230.2. A few government agencies expressed concerns that they are not given enough time to review the applications, as in the past their concerns are not being addressed (see attachment). A Board meeting has been scheduled for Monday, June 3, 2002, for possible permit consideration.

**PHYSICAL - CHEMICAL EFFECTS  
IMPACT**

**MITIGATION**

**1. Ground Water**

water table alteration

- Permittee will be instructed not to quarry below the depth of the water table.

water quality changes

infiltration changes

other

N/A

**IMPACT**

**MITIGATION**

**2. Surface Water**

flow or level changes

Water quality changes

Water quantity changes

Drainage pattern changes

- Will remove any obstructions to natural drainages.

temperature

wetland changes / loss

other:

- No water will be used in this operation.

N/A

**IMPACT**

**MITIGATION**

**3. Noise**

noise in/near water

other: noise increase

- Equipment outfitted with appropriate mufflers and standard emissions equipment.

N/A

**IMPACT**

**MITIGATION**

**4. Land**

geologic structure changes

- Pit walls re-contoured after operation.

soil contamination

- Fuel will be hauled from Inuvik as needed and transferred from a tidy tank mounted on a pick-up truck.  
- Any fuel contamination on the land will be reported to the 24 hour Spill Report line in Yellowknife.  
- Absorbing pads will be on hand when fueling equipment.

buffer zone loss

Must maintain existing treed buffer zone between the Dempster Highway and shale pit.

soil compaction & settling

Destabilization / erosion

- Permittee must install erosion control structures as needed.

permafrost regime alteration

other:

N/A

**IMPACT**

**MITIGATION**

**5. Non Renewable Natural Resources**

resource depletion

- Ongoing restoration of pit as granular resources becomes depleted (optional).

other:

N/A

**IMPACT**

**MITIGATION**

**6. Air/Climate/ Atmosphere**

Ice fog and emissions from generator

Burning of slash from clearing

**BIOLOGICAL ENVIRONMENT  
IMPACT**

**MITIGATION**

**1. Vegetation**

species composition

species introduction

toxin / heavy accumulation

other:

N/A

**IMPACT**

**MITIGATION**

**1. Wildlife & Fish**

effects on rare, threatened or endangered species

- Peregrine falcons and other raptors nest in the Campbell hills area, as in the past, operators are required to shut down their blasting activities between May 15 and July 15 as per condition 2.4 "Shut Down Period" in the land use permit.

fish population changes

waterfowl population changes

- breeding disturbance
- population reduction
- species diversity change
- health changes  
(waste may be harmful to wildlife)
- behavioural changes  
(avoidance behaviour and blockage of migration or movement corridors)
- habitat changes / effects
- game species effects
- toxins / heavy metals
- forestry changes
- agricultural changes
- other:
- N/A

- Operations to be completed expeditiously to minimize impacts to resident wildlife.

- All spills to be reported to NWT 24-hour spill line.

**INTERACTING ENVIRONMENT  
IMPACT**

**MITIGATION**

**1. Habitat and Communities**

- predator-prey
- wildlife habitat / ecosystem  
Composition changes
- reduction / removal of  
keystone or endangered  
species
- removal of wildlife corridor or  
buffer zone
- other:
- N/A

**IMPACT**

**2. Social and Economic**

planning / zoning changes or conflicts

increase in urban facilities or services use  
 rental house

airport operations / capacity changes

human health hazard

impair the recreational use of water or aesthetic quality

affect water use for other purposes

affect other land use operations

quality of life changes

public concern

other:

N/A

**IMPACT**

**3. Cultural and Heritage**

affects to historic property

increased economic pressure on historic properties

change to or loss of historic resources

change to or loss of archaeological resources

increased pressure on archaeological sites

change to or loss of aesthetically important site

affects to aboriginal lifestyle

other:

N/A

**NOTES:**

**MITIGATION**

- The operator must take reasonable safe guards against damage to private property from the operation.

- Complete clean up of garbage, debris must be completed prior to completion of operation.

- Currently two other Contractors and the Department of Transportation have land use permits to work the quarry. Land Use Inspectors are required to designate areas in the quarry for them to work safely. Any new contractors in possession of a valid land use permit to work the quarry, will be instructed on where they could work.

**MITIGATION**

- All garbage and debris will be removed from the area of the land use operation.

- Permittee will be instructed to slope all waste material piles and side hill cuts (embankments) after use.

**PRELIMINARY SCREENER / REFERRING BODY INFORMATION  
(CHECK ALL THAT APPLY)**

	RA or DRA	ADVICE	PERMIT REQUIRED
<b><u>Federal</u></b>			
CANADIAN HERITAGE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CANADIAN TRANSPORTATION AGENCY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENT CANADA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FISHERIES & OCEANS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
INDIAN AFFAIRS & NORTHERN DEVELOPMENT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NATIONAL ENERGY BOARD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NATURAL RESOURCES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PUBLIC WORKS & GOVERNMENT SERVICES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COAST GUARD BASE (HAY RIVER)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NORTHERN OIL & GAS DIRECTORET	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b><u>Territorial</u></b>			
RESOURCES, WILDLIFE AND ECONOMIC DEVELOPMENT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DEPARTMENT OF TRANSPORTATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MUNICIPAL AND COMMUNITY AFFIARS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
INUVIK REGIONAL HEALTH BOARD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CANADIAN WILDLIFE SERVICE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PRINCE of WALES NORTHERN HERITAGE MUSEUM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b><u>Public Boards</u></b>			
MACKENZIE VALLEY LAND AND WATER BOARD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MACKENZIE VALLEY ENVIRONMENTAL IMPACT REVIEW BOARD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GWICH'IN LAND USE PLANNING BOARD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GWICH'IN RENEWABLE RESOURCES BOARD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
INUVIALUIT ENVIRONMENTAL IMPACT SCREENING COMMITTEE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b><u>Aboriginal / First Nation</u></b>			
GWICH'IN LAND ADMINISTRATION (TRIBAL COUNCIL)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GWICH'IN SOCIAL CULTURAL INSTITUTE (Tsiigeh)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NIITAT GWICH'IN RRC/DGO COUNCILS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>Local Government</u></b>			
TOWN OF INUVIK	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**REASONS FOR DECISION**  
**(LIST ALL REASONS AND SUPPORTING RATIONALES FOR PRELIMINARY SCREENING DECISION)**

GDC Civil Construction's application for a land use permit will not have a significant adverse impact on the environment. This development will take place in an area continuously used as a shale quarry since the creation of the Dempster Highway. Standard land use practices and methods will be utilized for operating in a pit. Projected environmental impacts and resource impacts relating to the quarry operation will be localized in nature. Land Use Inspectors will designate an area in the quarry to extract the 3000 cubic metres of shale required by GDC Civil Construction.

<input type="checkbox"/>	<b>PRELIMINARY SCREENING DECISION</b>
<input checked="" type="checkbox"/>	<b>Outside Local Government Boundaries</b>
<input type="checkbox"/>	The development proposal might have a significant adverse impact on the environment, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	<b>Wholly within Local Government Boundaries</b>
<input type="checkbox"/>	The development proposal is likely to have a significant adverse impact on air, water or renewable resources, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>

**Preliminary Screening Organization**

**Signatures**

Gwich'in Land and Water Board

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