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April 5, 2000

To: Rita Becker
Licensing Administrtor
Nunavut Water Board
Gjoa Haven, NU

Re: Exploration Meliadine East Project
NIRB: 00WR084 NWB: NWB 2ATU9899

Enclosed is the completed NIRB Screening Decision Report on a water permit application for a water licence for mineral exploration at Aitutik Lake by Cumberland Resources near Rankin Inlet.

NIRB has screened this application for ecosystemic and socio-economic impacts of the proposal.

NIRB's indication to the Minister is: 12.4.4 (a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;

Please contact me at (867) 983-2593 if you have any questions about the Screening Report.

Yours truly,

Gladys Joudrey
Environmental Assessment Officer

[redacted]

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SCREENING DECISION

Date: April 5, 2000

Thomas Kudloo
Chairperson
Nunavut Water Board

Dear Mr. Kudloo:

RE: Screening Decision of the Nunavut Impact Review Board (NIRB) on Application:
NIRB 00WR084 NWB 2ATU9899
Cumberland Resources- Mineral Exploration at Atutik Lake

Authority:

Section 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;
b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

Primary Objectives:

The primary objectives of the Nunavut Land Claims Agreement is referenced in the screening section 12.4.4 (a) are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.

The decision of the Board in this case is 12.4.4 (a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;

ᐃᖃᓗᒃᑐᑦᑎᐊᖅ, ᓄᓇᕗᒥ/P.O. Box 2379 Cambridge Bay, NT /EKALUKTUTIAK, NUNATIAMI X0E 0C0 • ᐅᖄᓘᑎᖓ/Phone/HIVAYAOTA: (867) 983-2593 • ᑎᑎᖅ ᐅᖄᓘᑎᒃᑯᑦ/Fax/FAX-KOT: (867) 983-2594

Reasons for Decision:

NIRB's decision is based on specific considerations that reflect the primary objectives of the Land Claims Agreement. Our considerations in making this decision included:

- the impact of drilling activities on the ecosystem;
- disposal of drill cuttings and waste water;
- impact to water quality, aquatic habitat and wildlife and fish populations from chemicals, drill waste, drill fluids and potential fuel spills;
- storage and disposal of chemicals, fuel, garbage, sewage, and gray water, and impact of these on the ecosystem;
- the impact of noise from drilling activities and their disturbance to wildlife;
- the movement of vehicles and equipment and the impact on wildlife;
- the movement of vehicles and equipment on terrain;
- the impact of exploration activities on archaeological sites or cultural landmarks in the area; and
- clean up/restoration of the camp site and drilling locations upon abandonment;
- cumulative effects from activities within the area.

Terms and Conditions:

- That the terms and conditions attached to this screening report will apply.

Drill Sites

1. The Permittee shall not conduct any land based drilling within thirty (30) metres of the normal high water mark of a water body.
2. The Permittee shall conduct any the lake-based winter drilling, in accordance with *the Interim Guidelines for On-Ice drilling.*
3. The Permittee shall ensure that all drill cuttings are removed from ice surfaces.
4. The Permittee shall not use drilling muds or additives in connection with drill holes unless they are recirculated or contained such that they do not enter the water, or are certified to be non-toxic.
5. The Permittee shall ensure that the release of total suspended solids in the receiving environment shall be in compliance with *Guidelines for Total Suspended Solids* contained in the *Canadian Council of Ministers for the Environment's (CCME) Canadian Water Quality Guidelines, Chapter 3 - Freshwater Aquatic Life* (i.e. 10mg/L for lakes with background level under 100mg/L, or 10% for those above 100mg/L).
6. The Permittee shall ensure that any drill cuttings and waste water that cannot be re-circulated be disposed of in a properly constructed sump or an appropriate natural depression that does not drain into a waterbody.

7. The Permittee shall ensure that the sump/depression capacity be sufficient to accommodate the volume of waste water and any fines that are produced so that there will be no additional impacts.
8. The Permittee shall not locate any sump within thirty (30) metres of the normal high water mark of any water body.
9. The Permittee shall ensure that disturbance of vegetation from deposit of drill fluids/cuttings is restricted to the area of the sump and the ground prepared for revegetation upon abandonment.
10. The Permittee shall, where flowing water from bore holes is encountered, plug, the bore hole in such a manner as to permanently prevent any further outflow of water. If an artesian occurrence shall be reported to the Nunavut Water Board and Land Use Inspector within 48 hours.

Water

11. The Permittee shall ensure that all water intake hoses are equipped with a screen with an appropriate mesh size to ensure that there is no entrapment of fish.

Fuel and Chemical Storage

12. The Permittee shall ensure that fuel storage containers are not located within thirty (30) metres of the ordinary high water mark of any body of water.
13. The Permittee shall ensure that any chemicals, fuels or wastes associated with the project do not spread to the surrounding lands or enter into any water body.
14. The Permittee shall take all reasonable precautions to prevent the possibility of migration of spilled petroleum fuel or chemicals over the ground surface.
15. The Permittee shall have one extra fuel storage container on site equal to, or greater than, the size of the largest fuel container.
16. The Permittee shall examine all fuel and chemical storage containers for leaks. All leaks should be prepared immediately.
17. The Permittee shall have an emergency response and spill contingency plans in place prior to the commencement of the operation
18. The Permittee shall immediately report all spills of petroleum and hazardous chemicals to the twenty four (24) hour spill report line at (867) 920-8130 to NWB.

Waste Disposal

19. The Permittee shall not discharge or deposit any refuse substances or other waste materials in any body of water, or on the banks thereof, which will impair the quality of the waters of the natural environment.
20. Any areas designated for waste disposal shall not be located within thirty (30) metres of the ordinary high water mark of any body of water, unless otherwise authorized.
21. The Permittee shall construct a sump to contain all greywater discharged and shall ensure drainage is away from any waterbody.

22. The Permittee shall incinerate all combustible and food wastes to eliminate potential for wildlife problems created by the attraction of wildlife to garbage.
23. The Permittee shall ensure that all non-combustible wastes generated through the course of the operation are backhauled and disposed of in an approved dumpsite.
24. The Permittee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.
25. The Permittee shall not bury any metal wastes.
26. The Permittee shall dispose of all toxic or persistent substance in a manner approved by the NWB and the land use inspector.

Wildlife

27. The Permittee shall ensure that there is no damage to wildlife habitat in conducting this operation.
28. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
29. The Permittee shall cease activities that may interfere with migration or calving, such as airborne geophysics surveys, movement of equipment or drilling activities until the caribou and their calves have vacated the area.
30. The Permittee shall ensure that pilots adhere to recommended flight altitudes of greater than 300 m above ground level as to not disturb wildlife. In the event that caribou or muskox cows and calves are present all overflights by aircraft should be suspended. Raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by aircraft at all times.
31. The Permittee shall ensure compliance with Section 36 of the *Fisheries Act* which requires that no person shall deposit or permit the deposit of a deleterious substance on any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.
32. The harmful alteration, disruption or destruction of fish habitat is prohibited under Section 35 of the *Fisheries Act*. No construction or disturbance of any stream/lake bed or banks of any definable watercourse is permitted unless authorized by DFO.
33. The Permittee shall not obstruct the movement of fish while conducting the land use operation.
34. The Permittee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.

Environmental

35. The Permittee shall ensure that the land use area is kept clean and tidy at all times.
36. The Permittee shall prepare the site in such a manner as to prevent damage to the ground surface.
37. The Permittee shall be required to undertake any corrective measures in the event of any damage to the land or water as a result of the permittee's operation.
38. The Permittee shall not use any equipment except of the type, size and number that is listed in the accepted application.

39. The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.
40. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.
41. The Permittee shall remove all ice bridges prior to spring break-up or completion of the land use operation.
42. The Permittee shall not use any material other than water in the construction of ice bridges.

Camp

43. The Permittee shall not erect camps or store material on the surface ice of lakes or streams.
44. The Permittee shall locate all camps and storage facilities on gravel, sand or other durable land.

Attachments

45. The Permittee shall refer to the attached Department of Sustainable Development comments and recommendations and the Fisheries and Oceans letter of advice addressed to the Permittee.

Archaeological Sites

46. The Permittee shall follow all terms and conditions for the protection and restoration of archaeological resources as outlined by the Prince of Wales Northern Heritage Centre (PWNHC) in attached letter.

Reclamation

47. The Permittee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material upon abandonment.
48. The Permittee shall undertake ongoing restoration for any land or improvements which are no longer required for the Permittee's operation on the land.
49. The Permittee shall cap all drill holes and cut off any drill casings that remain above ground to ground level upon abandonment of the operation.

Other Recommendations

1. NIRB would like to encourage the proponent to hire local people and services, to the extent possible.
2. NIRB advises proponents to consult with local residents regarding their activities in the region.
3. Any amendment requests deemed by NIRB to be outside the original scope of the project will be considered a new project.

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NUNAVUT IMPACT REVIEW BOARD
SCREENING FORM

1. General File Information on Screening

NIRB #: 00XR064 (yy-xxx) Authorizing Agency #(s): NWB permit or licence #

NWB3ATI0899

Project Title: Exploration Melladine East.
Title of Project

Proponent: Cumberland Resources Ltd.
Company/Applicant

Proponent's Address: #906-595 Howe St.

Vancouver, BC

V6C 2T5
Full Address

Contractor
Company / persons doing the work if different from the proponent

address and contact numbers

Proposed Starting Date of Activity: May 30, 2000
(yyyy-mm-dd)

EA Starting Date: February 22, 2000
Date application accepted (yyyy-mm-dd)

Date Application Referred for Comments: February 23, 2000
(yyyy-mm-dd)

Deadline for Comments: March 21, 2000
(yyyy-mm-dd)

NIRB's EA Indication: 12.4.4 (a)

Date of Indication: April 5, 2000
(yyyy-mm-dd)

Project Cancelled: Yes, Give Reason

Comments:

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2. Authorizing Agencies

Authorizing Agency(ies): Kivalliq I.A., Kitikmeot I.A., QIA, NWB, NWMB, DIAND, DFO, DOE, NRI, RWED, Other: _____

Authorizing Agency Contact Person: Rita Becker
(office where project file is located, contact person, number)

Land Status: Inuit Owned ✓ Crown ____ Commissioner's ____ Marine Areas ____

Type of Application: water licence.
(e.g. water licence, land use permit, quarry permit, research permit, lease, reserve)

Type of Approval being sought: renewal
(e.g. new, renewal, amendment, cancellation)

Other required approvals, permits or licences: _____
(e.g. water licence, land use permit, quarry permit, lease, reserve)

Present Authorizations (active): N97C0098
(file number)

Previous Authorizations (inactive/expired): _____
(file number)

3. Project Location

Kivalliq ✓ Kitikmeot ____ Baffin ____

Land Use Planning Region: Kivalliq
(e.g. West Kitikmeot, North Baffin, South Baffin, Kivalliq)

Geographic Place Name: Aftutik Lake
(nearest place name or geographic feature)

Local/Traditional Name: _____

National Topographic Sheet (NTS) Number: _____ Scale: _____

Latitude/Longitude: 62° 56' N ; 98° 55' W
(degrees, minutes seconds)

Drainage Region and Watershed: _____
(nearest creek, river or lake system)

Nearest Settlement: Rankin Inlet

Adjacent Settlement/Out-post camps: _____

Special Designation: NO
(Yes/No –e.g. Heritage River, Wildlife Reseserve, Park)

Does the project have Nunavut transboundary implications? Yes ____ No ✓

If yes, what additional procedures/contacts are needed? _____

4. Project Description and Assessment

Physical Work, Activity(ies): Camp, exploration
(drilling, construction, camp, research, water works, installation, modification, maintenance)

Multiple Activities: Yes_____ No ✓

Project Category Code: Point Multiple Points Linear (Area)

Phase of Project: exploration
(exploration, bulk sampling, development, operations, decommissioning, abandonment/restoration)

Project Description Summary (non-technical)

(duration of project, size of project, number of personnel on site, related physical activities, machinery used, fuels and chemical use and storage, associated infrastructure, methods of transportation, amount and source of resources needed eg. Gravel)

Attach Project Overview (English and Inukitut)

Alternatives Considered:
(list all alternatives to the project and/or components of the project to avoid unnecessary amendments, (e.g. alternatives to location of ice road or camp logistics)

5. The Proponent's Public Consultation Process

Description of Proponent's Public Consultation Process

Did proponent make use of traditional knowledge? Yes___ No___

Was information available in the community's preferred language? Yes___ No___

In NIRB's opinion, was the proponent's public consultation adequate? Yes___ No___

If no, explain why the proponent's consultation program was found deficient.

MELIADINE EAST PROJECT PROPOSAL-2000
Atulik Lake, Rankin Inlet area
NTS 55J/13, 55J/14, 55N/1, 55K/16 IOL RI-01
Camp Location: W091° 55' 10" N62° 57' 24"

KIA Land Use Permit No. KI97C098
NWB Water Use Pemit No. NWB2ATU9899 (expired Dec 31, 1999)

The 2000 project activities are tentatively planned for the period from May 30st – October 15th, 2000. Approximately 8-12 employees and contractors will work out of the seasonally occupied camp located on the western end of Atulik Lake, at the above coordinates. The location of the camp, property outline (subsurface rights), and proposed trends of work are shown in the 1:250,000 scale sketch Figure 1. A schematic of the camp area is shown in Figure 2.

Exploration activities may include surface gridding, geological mapping, prospecting, geochemical sampling, geophysical surveying and diamond drilling. A helicopter will used for support, and traverses were completed on foot. The contractors to be used on site during this program remained to be selected. Major Midwest Drilling of Winnipeg, Manitoba currently have diamond drills and equipment on site.

WATER USE
Water will be used for domestic purposes and diamond drilling. Approximately 15-20 land based diamond drillholes will be proposed during the program. Site selection will be contingent on results from the concurrent exploraiton program. Water for drilling will be drawn from recharging ponds and lakes near the drill sites, and will be discharged into natural depressions.

Water used for domestic purposes will be drawn from Atulik Lake, to the south of the camp. The intake uses a screen to prevent entrapment of fish. Before ice break up, water is drawn intermittently from the lake and retained in interior holding tanks which are cleaned and distinfected pre and post season. The campsite has been in use for in excess of 8 years, with no illnesses reported related to water quality.

WASTE DISPOSAL
Greywater is discharged into a sump located to the north of the camp, and combustible and kitchen wastes are incinerated. Scrap metal and bulky items are recycled for other use, were possible, or disposed of to the municipal dump of Rankin Inlet. Empty drums are either refilled if they are in good condition, or are returned to Rankin Inlet to be crushed are shipped to Churchill, for recycling and/or disposal. Waste oil and grease are sent to a company in Rankin Inlet for further recycling and use.

Human wastes are disposed of into outhouses which are dug into the gravel of an esker in the camp area. Each site is buried and covered after use.

CAMP INFRASTRUCTURE

The camp on this site has been used seasonally since 1990, and was originally selected as the best site near the Discovery deposit located 2km to the north. This area was the focus of early exploration activities. The camp consists of two wooden structures (kitchen and coreshack), with several weatherhaven and jutland type tents with wooden flooring (. Gravel walkways and wooden pallets connect the main walkways between these structures. No tracked or wheeled vehicles are used in camp or in the project area.

FUEL/CHEMICAL STORAGE

During the program, diesel, Jet B, gas and propane fuel are stored at the camp site, and cache sites, as approved the KIA. We anticipate further deliveries of fuel into camp this spring will bring the maximum fuel in camp to the below levels. Empties held in camp will be refuelled and returned to camp, or will be crushed and disposed of.

Pending levels of fuel to be stored/used at camp:
80 drums of diesel fuel
160 drums of Jet B fuel (sealed)
30-100lb propane
4 drums gasoline

Pending levels of fuel to be distributed between two cache sites (contingent on approval by KIA):
20 drums of diesel fuel
40 drums of Jet B fuel

77% calcium chloride flake (used in drilling) is contained in 50kg triple bags, and is stored in wooden crates on pallets in the campsite. Drilling additives and grease are stored in sealed 5 gallon pails within a locked wooden shed containing drill parts.

The fuel storage areas in camp and at the cache sites will be checked regularly during the exploration program, and spills will be reported. Absorbant matting will be used as required in camp and at drill sites to prevent/contain spills, as required.

ABANDONMENT and RESTORATION

As Cumberland Resources Ltd, together with Complex Minerals Corporation, is planning to execute additional exploration programs on the property during 2000 and beyond, no plans have been made for abandonment/reclaimation of the permit site.

Respectfully Submitted,

CUMBERLAND RESOURCES LTD.

Janice Fingler, Project Manager, P.Geo.

Feb 15, 2000
Date

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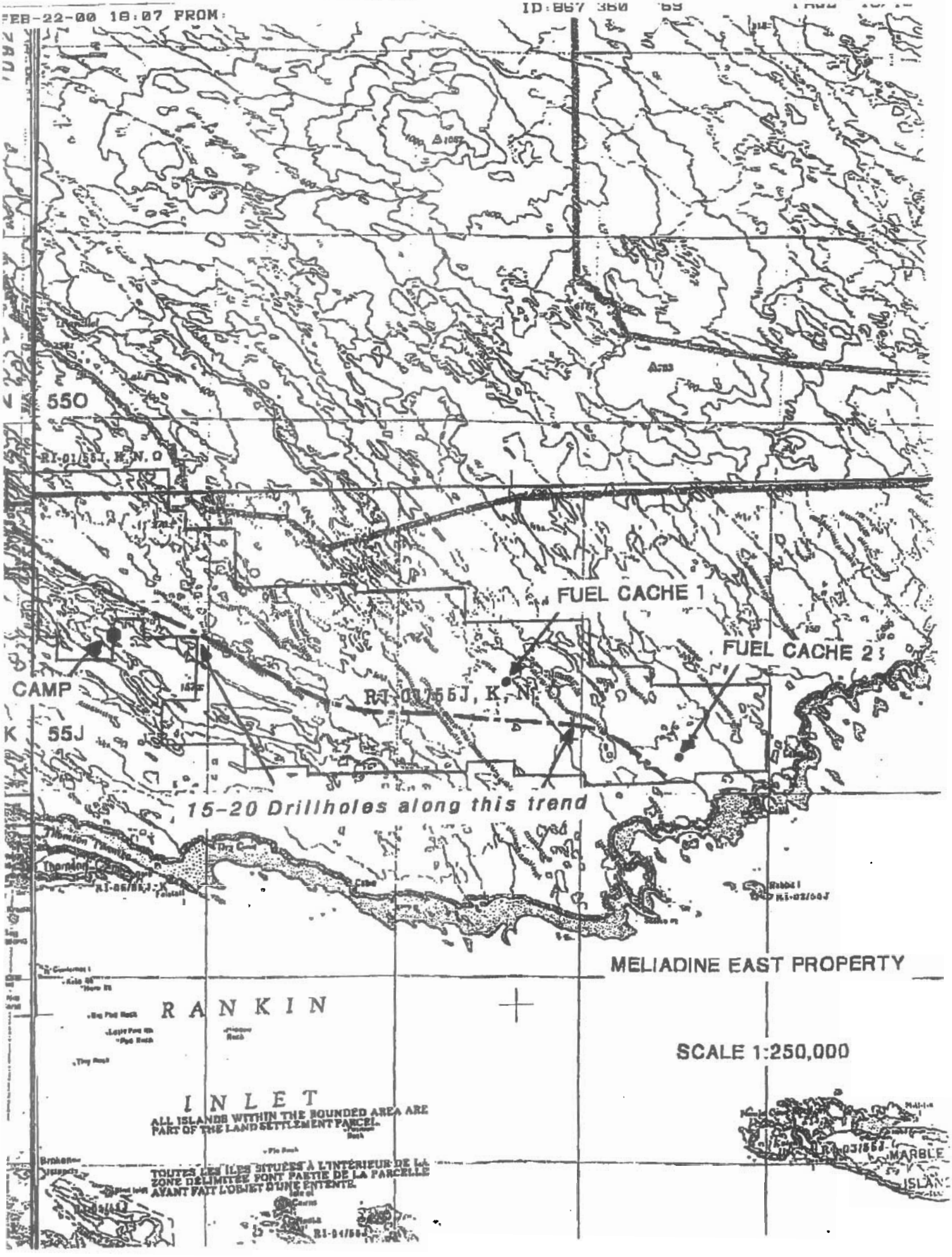
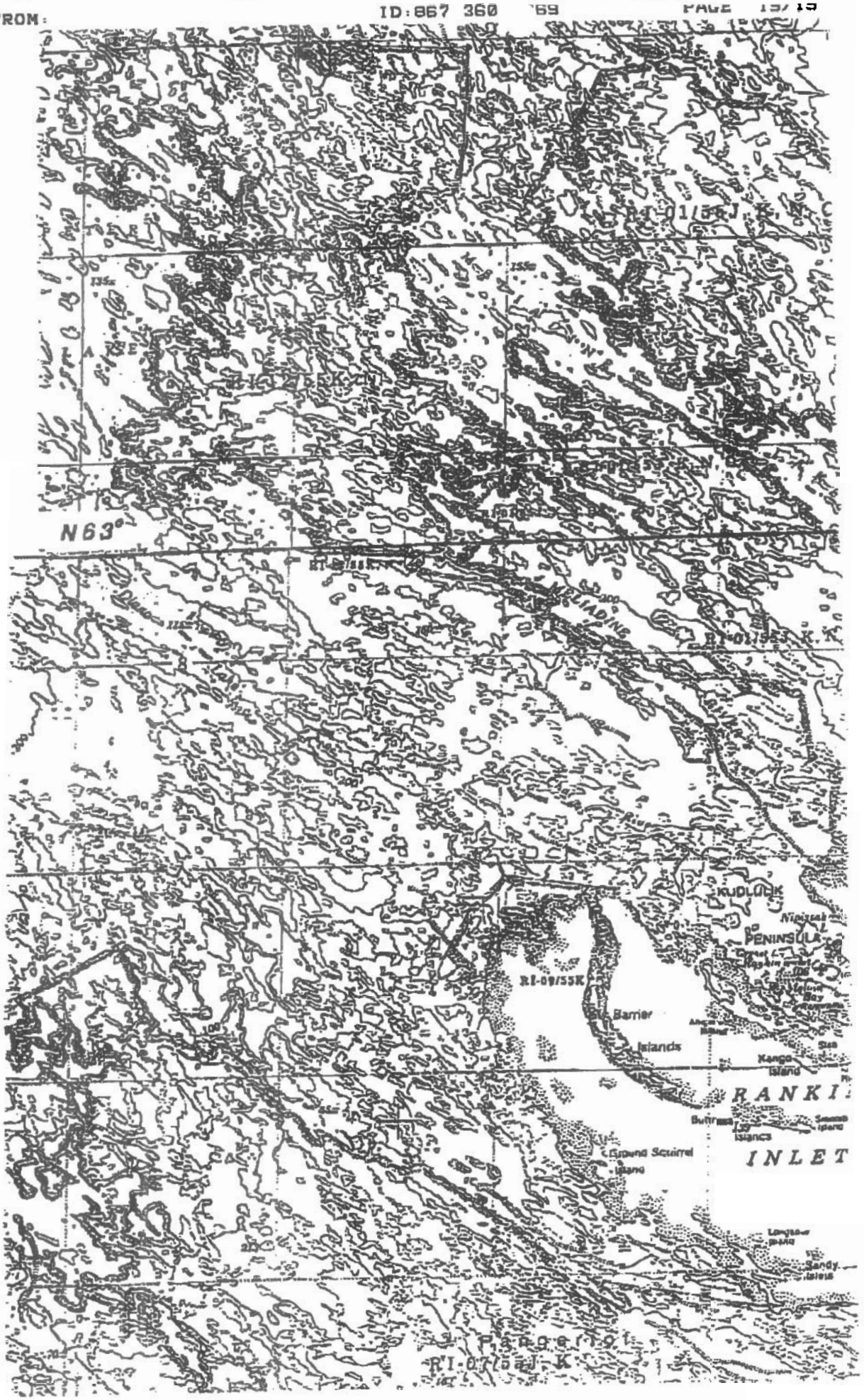

550
FUEL CACHE 1
FUEL CACHE 2
CAMP
55J
15-20 Drillholes along this trend
MELIADINE EAST PROPERTY
RANKIN
INLET
SCALE 1:250,000
ALL ISLANDS WITHIN THE BOUNDED AREA ARE PART OF THE LAND SETTLEMENT PARCEL.
TOUTES LES ÎLES SITUÉES À L'INTÉRIEUR DE LA ZONE DÉLIMITÉE FONT PARTIE DE LA PARCELLE AVANT FAIT L'OBJET D'UNE ENTENTE.
MARBLE


N63°
KUGLUK
PENINSULA
Barrier
Islands
Kanga
Island
RANKI
INLET
Ground Squirrel
Island
Sandy
Islets
RI-09/55K

6. Description of the Environment

Description of Biophysical Environment

Part of larger area which extends westsouth is part of the tundra wintering range for the Kaminuriak caribou herd. Wolves are found in area in close association with caribou. Scattered steep cliffs throughout areas are used by rough legged hawks, peregrine falcons and possibly gyrafalcons for nesting.

Description of Socio-Economic and Cultural Environment

The coastal area is used intensively for hunting and trapping by residents of Rankin, Chesterfield Inlet and Whale Cove. Several camps are located here and are occupied in spring, summer & fall. Geese and ducks are hunted and eggs are collected in spring and summer. In winter the area is used regularly for trapping.

7. NIRB's Consultation Process

Date application referred for comments: February 23, 2000 (yyyy-mm-dd)

Deadline for comments: March 21, 2000 (yyyy-mm-dd)

Distribution List:	Contact Person:	Date comments received
NUNAVUT:		
✓ NTI		
QIA		
✓ Kivalliq I.A.		
Kitikmeot I.A.		
✓ NPC		
NWB		
NWMB		
RWO		
✓ Inuit Heritage Trust		
✓ Community(s)	Rankin Inlet	
Hamlet ✓	Robert Tagnes	
HTO		
Other?		
FEDERAL:		
✓ DIAND		
✓ DFO	Lyndon Kiviaq	March 24, 2000
✓ DOE		
✓ Heritage Can.		
✓ Natural Resources		
CCG Other? (eg. Health DOT, DND)		
GNWT:		
✓ ~~DRWED~~ DSD	Chris Nichols	March 20, 2000
✓ Transport		
✓ MACA		
✓ PWNHC	Charles Arndt	March 3, 2000
✓ Other? (eg. Health, Soc.Serv., ECE)		
TRANSBOUNDARY PARTIES		
BQCMB		
OTHER PARTIES		

Identification of Project Activities and Environmental Effects

Identify all activities of the project under screening and their potential adverse environmental effects.

Project Activities

(√ check all the items appropriate to this project)

__ access road
- __ winter
- __ construction
- __ abandonment/removal
- __ modification e.g., widening

√ automobile, aircraft or vessel movement
__ blasting
__ burning
√ burying
__ channelling
__ construction
- __ building
- __ shed/warehouse
- __ landing strip

__ cut and fill
__ removal of vegetation
__ dams and impoundments
- __ construction
- __ abandonment/removal
- __ modification

__ ditch construction
__ drainage alteration
__ drilling other than geoscientific
√ ecological surveys
__ excavation
__ explosive storage
√ fuel storage
√ garbage
- __ disposal of hazardous waste
- √ disposal of sewage or grey water
- √ disposal of solid waste

√ geoscientific sampling
- __ trenching
- √ diamond drill
- __ borehole core sampling
- __ bulk soil sampling

__ quarry
__ hydrological testing
__ river/stream/lake crossing/bridging
__ site restoration
- __ fertilization
- __ grubbing
- __ planting/seeding
- __ scarification
- __ spraying
- __ recontouring

__ soil testing
__ topsoil, overburden or soil
- __ fill
- __ disposal
- __ removal
- __ storage

__ tunnelling/underground
√ other, explain camp

√ possibility for accidents or malfunctions. Describe. fuel spill

__ effects of environment on project (e.g., flooding). Describe. _____

Project Effects

(√ check all the items appropriate to this project)

Directly-related Socio-Economic & Cultural Effects:

1. √ impact to hunting / trapping / fishing
2. __ impact on __ women, __ men, __ children, __ elders
3. __ impact to traditional use or traditional use area
4. __ impact to outfitters
5. __ impact on recreational use
6. __ impact on family structure
7. __ impact to community health
8. __ change in community economics
9. __ change in community housing or infrastructure
10. __ impact to industry
11. __ change in regional transportation
12. √ impact to archaeological or cultural landmarks
13. __ impact on beauty of the landscape
14. __ other, explain _____

Biophysical Environment Effects

15. __ deposit into surface or ground water
16. __ deposit to marine environment
17. __ change in surface or ground water flow
18. __ change in water temperature
19. __ change in drainage pattern
20. __ change in air quality
21. __ change in air flow
22. __ micro-climate change
23. __ ice fog
24. √ change in ambient noise level
25. √ deposit onto ground surface
26. __ change in slope stability
27. __ change in soil structure
28. __ alteration of permafrost regime
29. __ destabilization/erosion
30. __ soil compaction
31. __ change in access to renewable resources
32. __ depletion of non-renewable resource
33. __ removal of rare/endangered plant species
34. __ introduction of species
35. __ toxin/heavy metal accumulation
36. __ removal of rare/endangered wildlife species
37. __ change in wildlife health
38. √ impact to large mammals
39. √ impact to small mammals
40. √ impact to fish
41. √ impact to birds
42. __ impact to other wildlife
43. __ impact in a calving, nesting, staging or spawning area
44. __ removal of wildlife buffer zone
45. __ change in wildlife habitat/ecosystem
46. __ other, explain _____

Describe biophysical and socio-economic and cultural effects identified from check-list.

Environmental Effect	Describe
#1	area is used by hunters, camps may be located near exploration activities.
#12	Possible area for archaeological sites.
#24	Drilling activities will increase noise level.
#25	Sumps will collect drill cuttings and effluent waters.
#39 / #29	Caribou, other animals may avoid area due to noise from human activities.
#40	accidental deposit of drill cuttings or fuel spillage may be harmful to fish.
#41	Critical cliff habitat for raptors who may be effected by noise from drilling activities.

9. Cumulative Effects: Identification of Other Resources Used in the Area. Identify past, current and future (pending applications) physical works and activities in the area (for the proponent, other proponents and nearby communities) and their potential adverse environmental effects.

Other Resource Uses
(√ check all the items appropriate to this project)

- √ harvesting
  - __ marine mammals
  - √ land mammals
  - √ fur bearers
  - √ birds
  - __ shellfish
  - __ plants
  - __ berries
  - √ fish
- √ mining
  - √ exploration
  - __ open pits
  - __ underground
  - __ off-shore
- __ mineral processing
- __ industry _____ (type)
- __ quarries
  - __ carving stone
  - __ aggregate
- __ transportation/communications
  - __ airport / landing strip
  - __ roads/access routes
  - __ shipping
  - __ channels/canal
  - __ telephone lines, satellite dishes, cables
  - __ beacons
- __ waste disposal (solid, liquid or gas?)
- __ energy project
  - __ hydro
  - __ pipeline
  - __ transmission line
- __ other water licenses, permits, leases
- √ lands
  - √ Inuit owned
    - -surface rights
    - -sub-surface rights
  - __ Crown
  - __ Commissioner's
  - √ Marine Areas
- __ other private lands held under tenure
- √ heritage sites or archaeological sites
- √ recreation (eg. cabins, tent frames)
- __ tourism
- __ municipal (construction)
  - __ commercial
  - __ built structures
  - __ infrastructure
- __ agriculture
- __ forestry
- __ other, explain _____

Effects from Other Resource Uses
(√ check all the items appropriate to the scope of this project)

Directly-related Socio-Economic & Cultural Effects:

1. __ impact to hunting / trapping / fishing
2. __ impact on __ women
   __ men
   __ children
   __ elders
3. __ impact to traditional use or traditional use area
4. __ impact to outfitters
5. __ impact on recreational use
6. __ impact on family structure
7. __ impact to community health
8. __ change in community economics
9. __ change in community housing or infrastructure
10. __ impact to industry
11. __ change in regional transportation
12. __ impact to archaeological or cultural landmarks
13. __ impact on beauty of the landscape
14. __ other, explain _____

Biophysical Environment Effects

15. __ deposit into surface or ground water
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42. __ impact to other wildlife
43. __ impact in a calving, nesting, staging or spawning area
44. __ removal of wildlife buffer zone
45. __ change in wildlife habitat/ecosystem
46. __ other _____

10. Cumulative Environmental Effects

Based on a comparison of effects identified in #8 and #9.

Marching Number(s)	Description of Cumulative Environmental Effects

NO Will the project make large demands on non-renewable energy sources?

___ Will the project encourage further developments within the current project or other developments (other similar projects, energy development, generation, petroleum development and extraction, the building of additional roads)? possibly

NO Will the project encourage a "boom-bust" economy over an economy of permanence?

NO Will the project encourage more wildlife harvesting on account of better access for hunters and fishers?

___ Will the project have an effect on the water quality of the watershed? possibly drill cuttings / fuel spills

NO Will the project have a significant effect on existing land uses?

11. Mitigation Measures

For each environmental effect identified in #8, #9 and #10, describe the required mitigation measures.

Number(s) (as identified in #8, #9 & #10)	Description of Mitigation Measures
	See Screening Decision Report Terms and Conditions

12. Significance

After taking into account the mitigation measures identified in #11, are any of the residual, adverse environmental effects significant?

___ Yes ✓ No

If yes, identify which one(s) and proceed to #13; if no proceed to # 14.

Number(s) ____ ____

____ ____

____ ____

____ ____

13. Likelihood of Occurrence

Of the significant, residual, adverse environmental effects identified in #12, are any likely to occur?

___ Yes ✓ No

Number(s) ____ ____

____ ____

14. Information Sources

What sources of information were used in the screening process?

____ local knowledge
____ traditional ecological knowledge
✓ land use plans (and draft land use plans)
✓ authorizing agencies' data
✓ departmental or agency opinions
✓ maps
____ photos
____ reports (scientific, economic, social, or anthropological, archival or historical information)
____ Nunavut Environmental Database (NED)
____ personal communications
✓ Project Registry ~~(NPC)~~ NIRB
✓ previous similar projects
____ service organizations
____ media monitoring
____ experts
____ other _____

For information sources identified above, provide contact person and/or information location (for future follow-up): _____

15. Staff Recommendations

Staff Recommendations: (include rationale)

Any significant adverse impacts should be mitigated with the terms and conditions in screening decision Report.

Prepared By: Gladys Joudrey (Screener) Date: March 27, 2000 (yyyy-mm-dd)

16. NIRB'S Principles

__ The project has significant adverse effects on the ecosystem, wildlife habitat or Inuit harvesting activities.

__ The project may have significant adverse socio-economic effects on northerners.

__ The project will cause significant public concern.

__ The project involves technological innovations for which the effects are unknown.

✓ The project **does not** have significant effects or concerns.

17. Indication to the Minister (12.4.4)

N.B. Transfer this information to Box 1: "EA Indication" and "Date of Indication".

✓ a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;

__ b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;

__ c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or

__ d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

18. Terms and Conditions

If the determination is 12.4.4 (a), NIRB's terms and conditions include those listed in the **Screening Decision Report.**

Specific Terms and Conditions to note include:

______ ______________________________

______ ______________________________

______ ______________________________

______ ______________________________

19. Authorization

Approved By: [signature] (NIRB Decision Maker) Date: 2000/03/05 (yyyy-mm-dd)

20. Follow-up / Monitoring

Minister's Determination

____ Minister agreed with NIRB's indication.
Action?______________________________

____ Minister varied NIRB's indication.
Action? ______________________________

____ Minister rejected NIRB's indication
Action?______________________________

If applicable,
____ Is a follow-up/monitoring program required? If yes, give details.
____

____ Has screening report information been added to NIRB's GIS/Calyx system?

201 23

February 24, 2000

Carmen Levi, A/Deputy Minister
Department of Culture, Language, Elders and Youth
Government of Nunavut
Bag 800
Iqaluit NT X0A 0H0

Re: Water use application NIRB 00WR084; Atulik Lake Area (Cumberland Resources Ltd.)
Due Date: March 21, 2000

Dear Ms. Levi:

At your request, the Prince of Wales Northern Heritage Centre has reviewed the above-noted application. Our recommendations follow.

We recommend approval of the above-cited application as there are no known archaeological resources in the vicinity of the proponent's proposed camp.

The attached conditions specify plans and methods of site protection and restoration to be followed by the permittee if an archaeological site is encountered or disturbed in the course of the land use activity.

Regards,

Original Signed By
Charles D. Arnold

Charles D. Arnold, Director
Culture and Heritage Division

Prince of Wales Northern Heritage Centre

c. Nunavut Impact Review Board
Douglas Stenton, Chief Archaeologist, CLEY, Government of Nunavut

ARCHAEOLOGICAL RESOURCES: TERMS AND CONDITIONS
BACKGROUND

I. The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical, and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence which shall be expressed in terms of special rights and responsibilities.

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary.

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of Nunavut Land Claim Agreement.

II. "Archaeological site" means a site or work within Nunavut of archaeological, ethnographical or historical importance, interest or significance or a place where an archaeological specimen is found, and includes explorers' cairns. "Archaeological specimen" means an object or specimen found in an archaeological site of archaeological, ethnological or historical importance, interest or significance and includes explorers' documents.

III. Any new Terms and Conditions raising issues found in ss. 10 and 16 of the Territorial Land Use Regulations should duplicate statutory sections, or be stricter, but not more lenient in terms of protection of archaeological resources.

IV. 1. The permittee shall not operate any vehicle over a known or suspected archaeological site.

2. The permittee shall not remove, disturb or displace any archaeological specimen or site.

3. The permittee shall contact the Department of Culture, Language, Elders and Youth, Iqaluit (867-979-4720) and DIAND official should an archaeological site or specimen be encountered or disturbed by any land use activity.

4. The permittee shall immediately cease any activity which disturbs an archaeological or historical site, encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth.

5. The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological sites to an acceptable condition, and according to the respective jurisdictions and authorities.

6. The permittee shall provide information to the Department of Culture, Language, Elders and Youth about each archaeological site or specimen encountered by any land use activity, by completing the attached form.

7. The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and specimens.

ARCHAEOLOGICAL SITE RECORD

FIELD NUMBER:

SITE NAME:

PROJECT:

DESCRIBE LOCATION OF SITE:

TERRITORY: Nunavut
DISTRICT:
MAP REFERENCE:
JURISDICTION:
UTM:
LATITUDE:
LONGITUDE
ELEVATION: SIZE:

CONDITION:

SITE TYPE CLASS:

- ❑ Prehistoric
- ❑ Indigenous historic
- ❑ Historic
- ❑ Natural
- ❑ Undetermined

SITE FEATURES:

CULTURE:

REPORTER'S NAME AND ADDRESS:

YEAR OBSERVED

REMARKS/SKETCH/PHOTOGRAPHS:

[Please attach a copy of the NTS map (1:250,000) with the site location clearly marked.]

Return to: Department of Culture, Language, Elders and Youth, Government of Nunavut, Bag 800, Iqaluit NT X0A 0H0 (867-979-4720)

Fisheries and Oceans | Pêches et Océans

Fish Habitat Management
Suite 101, 5204-50th Avenue
Yellowknife, Northwest
Territories
X1A 1E2

Your file *Votre référence*

Our file *Notre référence*
NU99B026

March 24, 2000

Gladys Joudrey
Environmental Assessment Officer
Nunavut Impact Review Board
P. O. Box 2379
Cambridge Bay, NT
X0A 0C0

RE: Water Licence Application 00WR084, Exploration Meliadine East Project, Rankin Inlet Area.

Dear Ms. Joudrey:

The Department of Fisheries and Oceans, Fish Habitat Management - (DFO-FHM) received the Land Use Application NIRB# 00WR084, Mineral Exploration, Meliadine East Project, Rankin Inlet Area, Nunavut.

Under the *Nunavut Land Claims Agreement*, DFO-FHM is participating in a NIRB screening by providing specialist information and/or advice. DFO-FHM's assessment takes into consideration fish and fish habitat related concerns only.

Any concerns, comments or mitigation measures that DFO-FHM feels are pertinent to the above mentioned project are outlined in the following letter of advice, addressed to the proponent, and should also be considered specialist information and/or advice for the purposes of a NIRB screening.

If you have any questions, feel free to contact me at (867) 669-4916 or Pete Cott 669-4913 or by fax at (867) 669-4941.

Lyndon Kivi
Area Habitat Biologist
Fish Habitat Management
Department of Fisheries and Oceans- NWT Area

Fisheries and Oceans / Pêches et Océans

Fish Habitat Management
Suite 101, 5204-50th Avenue
Yellowknife, Northwest
Territories
X1A 1E2

Your file / Votre référence

Our file / Notre référence
NU99B026

March 24, 2000

Janice Fingler
Cumberland Resources Ltd.
#906 – 595 Howe Street
Vancouver, B. C.
V6C 2T5

RE: Water Licence Application 00WR084, Exploration Meliadine East Project, Rankin Inlet Area.

Dear Ms. Fingler:

This letter is to advise that The Department of Fisheries and Oceans, Fish Habitat Management - NWT Area (DFO-FHM) received your Water Use Application for mineral exploration, for the Meliadine East Project submitted on your behalf by Nunavut Impact Review Board. I have reviewed the plans for the proposed work.

Field operations in or near water may result in the harmful alteration, disruption or destruction of fish habitat, which is prohibited under Section 35 of the *Fisheries Act*. In addition to the measures set out in the project proposal, the following mitigation measures, if incorporated into the project, are intended to prevent any potentially harmful impacts to fish and fish habitat:

- All disturbed areas should be stabilized and re-vegetated as required, upon completion of work, and restored to a pre-disturbed state.
- If artesian flow is encountered, drill holes should be plugged and permanently sealed upon completion of the project.
- When using explosives, please follow the *Guidelines for the Use of Explosives In or Near Water* (DFO, 1998) available on request. If, for any reason these guidelines cannot be followed, please contact DFO, as an Authorization may be required.
- If the drilling requires water in sufficient volume that the source waterbody may be drawn down please submit details (volume required, size of waterbody, etc.) to DFO-FHM for review. DFO-FHM does not recommend the use of streams as a water source.
- All water intakes should be properly screened to prevent the entrainment of fish. Refer to the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO 1995), available on request.

- Winter lake/stream crossings should be located to minimize approach grades. Cutting or filling of crossing approaches below the normal high water mark will require prior review and approval by DFO-FHM.

- The use of material other than ice or snow to construct a temporary crossing over any ice-covered watercourse is prohibited by regulations under *Fisheries Act* unless authorized by a Fishery Officer.

- All winter crossings should be removed prior to spring breakup.

- No material should be left on the ice when there is the potential for that material to enter the water (i.e. spring break-up).

Depositing deleterious substances into fish bearing waters is prohibited as stated under Subsection 36(3) of the *Fisheries Act*. The following are additional measures to mitigate habitat disturbance or loss as well as the deposition of deleterious substances.

- Sediment and erosion control measures should be implemented prior to, and maintained during the work to prevent entry of sand or sediment into the water.

- All activities, including maintenance procedures and vehicular refuelling, should be controlled to prevent the entry of petroleum products, debris, slash, rubble, or other deleterious substances into the water.

- All wastes, drill cuttings, sewage containments and fuel caches should be located a minimum of thirty (30) metres from the normal high water mark of any water body, and be sufficiently bermed or otherwise contained to ensure that these substances do not enter any water body.

- Drill cuttings should be disposed of in a sump such that they do not enter any water body. The use of biodegradable, salt free drill additives is encouraged over non-biodegradable types.

- All spills of oil, fuel, or other deleterious material should be reported immediately to the 24-Hour Spill Line at (867) 920-8130.

If the proposed work is carried out as described in the plans provided to DFO-FHM and if the additional mitigation measures specified above are implemented, the proposed work will not be considered as contravening Subsection 35(1) of the *Fisheries Act* which reads:

> *"No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat."*

Therefore, an authorization under Subsection 35(2) of the *Fisheries Act* will not be necessary. If a harmful alteration, disruption or destruction of fish habitat and/or the deposition of deleterious substances into fish bearing waters occurs as a result of a change in the plans for the proposed works or failure to implement the additional mitigation measures specified above, prosecution under Subsection 35(1) and/or Subsection 36(3) of the *Fisheries Act* may be initiated.

Please note that this letter of advice does not release the proponent of the responsibility for obtaining any other permits that may be required and will apply for the proposed activities for the period of the Land Use Permit.

If you have any questions concerning the mitigation measures or should there be any changes to the proposed work, please contact me at (867) 669-4916 or Pete Cott at 669-4913 or by fax at (867) 669-4941.

Lyndon Kivi
Area Habitat Biologist
Fish Habitat Management
Department of Fisheries and Oceans- NWT Area

c.c. Gladys Joudrey, Nunavut Impact Review Board
Pete Cott – A/Arctic Habitat Co-ordinator, DFO-FHM

COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. In order to assess the environmental and socio-economic impacts of project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Project Title: Exploration Meliadine East Project
Proponent: Cumberland Resources Ltd.
Location: Atulik Lake Area, NIRB#: 00WR084
Comments Due By: March 22, 2000

Indicate your concerns about the project proposal below:

- ☐ no concerns
- ☐ water quality ✔
- ☐ terrain
- ☐ air quality
- ☐ wildlife and their habitat
- ☐ marine mammals and their habitat
- ☐ birds and their habitat
- Other: ✔
- ☐ fish and their habitat
- ☐ heritage resources in area
- ☐ traditional uses of land
- ☐ Inuit harvesting activities
- ☐ community involvement and consultation
- ☐ local development in the area
- ☐ tourism in the area
- ☐ human health issues
- ☐

Please describe the concerns indicated above:

DSD has reviewed the permit application from Cumberland Resources and offers the following comments for your consideration:

- Copies of all environmental reports should be sent to the Regional Wildlife Biologist in Arviat and DSD headquarters in Iqaluit.
- The proponent has indicated that drilling water will be discharged into natural depressions. These depressions should **not** drain in any active aquatic system.
- This project is adjacent to a Territorial Park and (although the mapping does not allow identification of the sites in relation to the park) **no** drill sites, sumps, water access, water disbursement etc. should include lands or water within the park.

Do you have any suggestions or recommendations for this application?

Do you support the project proposal? YES ☐ NO ☐
Any additional comments?

Name of person commenting: Dept. of Sustainable Development

Position:	**Organisation:**
Signature: Chris Nichols	**Date:** March 20, 2000

DEPARTMENT OF SUSTAINABLE DEVELOPMENT

ENVIRONMENTAL PROTECTION SERVICE

STANDARD RECOMMENDATIONS FOR LAND USE APPLICATIONS (AS APPLICABLE)

Spill Contingency Plan

The applicant should have a contingency plan for responding to chemical and petroleum spills which might occur during the proposed activity. The plan should include a list of available spill response equipment and the names of trained personnel who will be on-site and available in the case of a spill.

The proponent is referred to DSD's *Spill Contingency Planning and Reporting Regulations* and *A Guide to the Spill Contingency Planning and Reporting Regulations*.

Fuel Storage

To prevent spreading in the event of a spill, fuel stored in drums should be located, whenever practical, in a natural depression a minimum distance of 90 feet from all streams, preferably in an area of low permeability. All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills. Large fuel caches in excess of 20 drums, should be inspected daily.

Chemical Storage

All chemicals should be stored in a safe and chemically-compatible manner a minimum of 90 feet from all bodies of water. The applicant should be required to remove unused chemicals for reuse or disposal to an approved site using methods approved by the Land Use Inspector. Material safety data sheets (MSDS) should be provided for each chemical and be posted in a central location; accessible by all camp personnel. Camp personnel should be conversant in the handling of these chemicals as well as able to deal with any accidents or spills.

Location of Hazardous Materials

Hazardous materials stored on-site should be marked so they will be visible under all conditions, in all seasons. This recommendation is intended to help prevent possible injuries to camp personnel and/or damage to the containers. Unless otherwise specified by the land use inspector or licence -issuing agency, all hazardous materials should be removed from the site upon completion of the

activity. The proponent is referred to DSD's *Environmental Guideline for the General Management of Hazardous Waste*.

Waste Oil/Waste Fuel Disposal

Waste oil and waste fuel should be removed and returned for recycling when the land use activity is completed. Alternative methods of disposal that provide and equivalent level of environmental protection will be considered on a case by case basis.

Used Drums

Used fuel and oil drums should be removed from the site, returned for deposit, or reused.

Contaminated Soils

Soil contaminated by fuel (e.g., soils under an old storage tank) should be treated on site or removed to an approved disposal site and replaced with new soil. The proponent is referred to DSD's *Environmental Guideline for Site Remediation*.

Winter Roads

Existing winter road routes and trails should be used whenever possible to avoid unnecessary land clearing.

Drill Sumps

The sumps should only be used for inert drilling fluids, not any other materials or substances. All effluent from sample washing site including trenches must not be allowed to flow directly into the lake/river. It should be allowed to go to a depression (sump) that does not drain in any active aquatic system. The sumps should be properly closed out.

Garbage Disposal

Garbage should be removed from the camp periodically; alternatively, all combustible wastes can be incinerated on site and non-combustibles collected and removed upon termination of the activity or periodically.

Incineration

For camps of less than 10 people, it is recommended that a draught barrel be employed to burn wastes. A draught barrel is essentially a 45 gallon drum or equivalent, with a hole in the bottom to facilitate air intake, and is closed at the top with a lid and a chimney for the exhaust. EPS does not consider

burning wastes in a draught barrel to be true incineration, however, for small camps, this is an acceptable means to deal with camp wastes. The draught barrel should be operated so that a high temperature burn is maintained at all times. This will promote complete combustion and eliminate pollutant and odor concerns.

For camps of more than 10 people, it is recommended that a forced air incinerator be used to manage wastes. Once again maintaining a high temperature burn to reduce wastes is imperative.

Kitchen wastes, cardboard, paper products, packaging and untreated wood wastes are suitable for burning in a draught barrel and a forced air incinerator. Industrial wastes and non combustible wastes should be removed from the camp and disposed of at a designated landfill or other approved facility. Under no circumstance should hazardous wastes be managed through burning or incineration.

For camps of greater than 50 people, it is recommended that a municipal waste incinerator, which produces emissions that meet CCME air quality guidelines, be used to dispose of camp wastes. The manufacturer will specify operating conditions and types of wastes that can be disposed of in the incinerator in order to meet the specified CCME standards. It is recommended that municipal waste incinerators be operated to meet manufacturer specifications.

The aforementioned comments are a brief thumbnail sketch of what DSD suggests that a proponent should be implementing to mitigate any damage or alterations to the environment during the course of their proposed activities. The proponent is referred to the Government of Nunavut's acts, regulations and environmental guidelines for a details.

Acts, Regulations and Environmental Guidelines

The Environmental Protection Service, Department of Sustainable Development derives its regulatory authority and operational mandate from the Government of Nunavut's *Environmental Protection Act* (EPA). A number of regulations and guidelines have been developed and adopted under the EPA; some, or all of which might prove to be of assistance to a proponent in planning their activities. The guidelines are listed here for the information of the proponent and are available to the public at any DSD office in Nunavut or from DSD's Headquarters office located at:

Department of Sustainable Development
Environmental Protection Service
Government of Nunavut
Box 1340

Iqaluit, NU
X0A 0H0
(867) 979-5119
e-mail: reno@gov.nu.ca or ebaddaloo@gov.nu.ca

Acts and Regulations

Environmental Protection Act

Environmental Protection Act: Simplified Summary

Environmental Rights Act

Spill Planning and Reporting Regulations

A Guide to Spill Contingency Planning & Reporting

Asphalt Paving Industry Emission Regulations

Pesticide Act

Pesticide Regulations

Used Oil and Waste Fuel Management Regulations (undergoing completion; proposed for June 2000)

Environmental Guidelines

Dust Suppression

General Management of Hazardous Waste

Industrial Projects on Commissioner's Lands

Industrial Waste Discharges

Ozone Depleting Substances

Site Remediation

Sulphur Dioxide & Suspended Particulates

Waste Antifreeze

Waste Asbestos

Waste Batteries

Waste Paint

Waste Solvents

Wildlife

1. Bear-People Conflicts

The operation is in an area where bears may be encountered. Proper food handling and garbage disposal procedures should be followed to reduce the likelihood that bears will be attracted to the operation. Careful planning and attention to details of camp design and maintenance will decrease the attraction of bears to camp.

The applicant should follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional/Area Biologist or the Renewable Resource Officer indicated below for information and advice on measures which should be taken to minimize the possibility of bear-people conflicts.

DSD Contacts

Manager, Wildlife, Fisheries
- Ian Ellsworth, (867) 857-2828

Renewable Resource Officer,
- nearest community to the land use activity

Biologist, Kivalliq Region, Arviat
- Mitch Campbell, (867) 857-2828

2. Caribou Protection Measures

See attached. [Recommendation of these conditions is not restricted to the Kaminuriak and Beverly herds (i.e., they may be applied to other herds as well).]

3. Peary Caribou (for Banks Island and High Arctic islands; not for Victoria Island)

Peary Caribou are a critically endangered subspecies which must not be harassed in any way. The applicant should be instructed not to harass these caribou, and to contact the Regional Biologist or Caribou Biologist in Pond Inlet (819) 979-8819 to obtain information on procedures required to prevent unintentional harassment.

4. Raptor Nesting Areas

The project area includes known raptor nesting sites and other areas where it is likely that raptors nest. To minimize negative impacts of this operation on raptors, the applicant should be advised to:

(a) take care not to disturb nesting raptors from 15 April to 1 September by staying at least 1.5 km away from them when in transit by aircraft, and to avoid approaching them closely while on foot, and

(b) contact the Regional Biologist in Arviat (857-2828) to identify areas which should be avoided.

The following clause could be included in the covering letter: "If raptors are disturbed during the nesting period, they often abandon the eggs or young. Loud, repeated noises and close approach by humans on foot are particularly harmful."

5. Low Level Flights

Aircraft activity with no specific requirements for low level flying should be restricted to a minimum altitude of 300m above ground level.

6. Storage of Chemicals Containing Salts

Chemicals containing salts, which may attract wildlife to the site, should be stored so that they are inaccessible to wildlife.

CARIBOU PROTECTION MEASURES[1]

[1] Based on the **Caribou Protection Measures (Qamanirjuaq and Beverly Herds) 1988**, DIAND

1. (a) The Permittee shall not, without approval, conduct any activity between May 15 and July 15 within the Kitikmeot region.

(b) A Permittee may, upon approval by the Land Use Inspector (DIAND) or Land Manager (KIA), operate within the Kivaliq region beyond the May 15 deadline set out in 1(a), provided that when caribou cows are approaching the area of operation, the Permittee will implement 1 (c).

(c) During the period of May 15 to July 15, the Permittee will suspend all operations, particularly blasting, overflights by aircraft at any altitude of less than 300 metres above ground level, and the use of snowmobiles and ATV's (all-terrain vehicles) outside the immediate vicinity of the camp, and all personnel will remain quietly in camp or, upon advice from the Land Use Inspector (DIAND) or Land Manager (KIA), the Permittee will remove all personnel from the site who are not required for the maintenance and protection of the camp facilities and equipment.

(d) The Permittee may resume activities prior to July 15 if the caribou cows have ceased to use the area for calving or post-calving.

2. (a) During migration of caribou, the Permittee shall not locate an operation so as to block or cause substantial diversion to migrating caribou.

(b) The Permittee shall cease activities that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.

3. The Permittee shall not construct any camp, cache any fuel or conduct blasting within 10 km, or conduct any diamond drilling operation within 5 km, of any "Designated Crossing" as outlined on the map annexed to a Land Use Permit.

4. Concentrations of caribou should be avoided by low-level aircraft at all times.

***Note:* These caribou protection measures are provided as guidance for land users. There are a number of ways that these measures might be used. The following is from a Kitikmeot Inuit Association land use permit and is provided for illustration:**

> **Protection measures would apply to industrial activity, though not necessarily tourism, outfitting or other activities. They could be implemented at least three different ways: as part of a regional land use plan (zoning); through the Nunavut Wildlife Management Board (wildlife regulations); and through terms and conditions attached to land use authorizations (land use regulations). For example, the**

Kitikmeot Inuit Association attaches caribou protection measures to permits it grants to companies seeking to work on its lands.[2]

35. The Permittee is given permission to conduct the approved land use operations between May 15 and July 15, provided that when caribou and muskox cows are approaching the area of operation, the Permittee shall cease blasting, over-flights by aircraft at any altitude less than 300 meters above ground level, and the use of snowmobiles and ATV's (all terrain vehicles) outside the immediate vicinity of the camp. Other activities shall also be suspended if caribou approach the immediate vicinity of the specific operation and the monitoring work described in clause indicates that there is stress on the animals.

36. During the presence of caribou and muskox within sight and sound of a camp, all personnel will remain quietly in camp.

37. The Permittee may resume activities prior to July 15 if the caribou and muskox cows have ceased to use the area for calving and post-calving.

38. Raptor nesting sites and concentrations of nesting or moulting waterfowl should be avoided by aircraft at all times.

39. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.

40. The Permittee shall cease activities that may interfere with migration or calving, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.

41. The Permittee shall not conduct any operation within 5 km of any "Designated Crossing" as outlined on the map annexed to this Land Use Permit.

From KIA Land Use Permit BHP 197C141

[2] **West Kitikmeot Regional Land Use Plan**, Draft produced for Informal Public Hearing, Ikaluktutiak (Cambridge Bay) NT, 10-11 June 1998, pg. 84.

COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. In order to assess the environmental and socio-economic impacts of project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Project Title: Exploration Meliadine East Project
Proponent: Cumberland Resources Ltd.
Location: Atulik Lake Area, **NIRB#:** 00WR084
Comments Due By: Tuesday March 21, 2000

Indicate your concerns about the project proposal below:

- ☐ no concerns
- ☐ water quality
- ☐ terrain
- ☐ air quality
- ☐ wildlife and their habitat
- ☐ marine mammals and their habitat
- ☐ birds and their habitat
- ☐ fish and their habitat
- ☑ heritage resources in area
- ☐ traditional uses of land
- ☐ Inuit harvesting activities
- ☑ community involvement and consultation
- ☐ local development in the area
- ☐ tourism in the area
- ☑ human health issues
- ☐ Other:

Please describe the concerns indicated above:

We believe they are OK.

Do you have any suggestions or recommendations for this application?

NO.

Do you support the project proposal? YES ☑ NO ☐

Any additional comments?

Name of person commenting: Robert Janis **of** Hamlet R.I.
Position: SAO **Organisation:** Hamlet of Rankin Inlet
Signature: [signature] **Date:** Feb 22 / 2000