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July 24, 2002

To: Phyllis Beaulieu
A/Licensing Administrator
Nunavut Water Board
Gjoa Haven, NU

Re: Exploratory Drilling at Heeqou Property
NIRB: 02EN101 NWB: NWB2HEE

Enclosed is the completed NIRB Screening Decision Report on a water use and waste disposal application for Exploration Drilling at Heeqou near the community of Kugluktuk, NU.

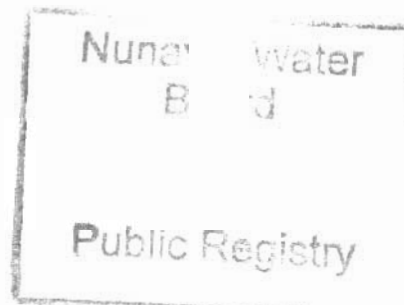
NIRB has screened this application for eco-systemic and socio-economic impacts of the proposal.

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 Decision Report.

Yours truly,

Gladys Joudrey
Environmental Assessment Officer
Nunavut Impact Review Board



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020724HEE NIRB Screening-ILAE



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SCREENING DECISION

Date: July 24, 2002

Mr. Thomas Kudloo
Chairperson, Nunavut Water Board
Gjoa Haven, NT

Dear Mr. Kudloo:

**RE: Screening Decision of the Nunavut Impact Review Board (NIRB) on Application:
NIRB 02EN101 DIAND N2002C0030 NWB NWB2HEE
Exploratory Drilling at Heeqou Property (Diamondex Resources Ltd.)**

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:

- 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;
- the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
- 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 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;

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 and traditional users of the area;
- the impact of campsite 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.

Terms and Conditions:

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

Drill Sites

1. The Licensee shall not conduct any land based drilling within thirty (30) metres of the normal high water mark of a water body.
2. The Licensee shall not use drilling muds or additives in connection with drill holes unless they are re-circulated or contained such that they do not enter the water, or are certified to be non-toxic.
3. The Licensee 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 or removed to appropriate disposal location.
4. The Licensee shall ensure that drilling wastes do not enter any water body. The use of biodegradable, salt free drill additives is encouraged over non-biodegradable types.
5. The Licensee shall ensure that the sump/depression capacity is sufficient to accommodate the volume of waste water and any fines that are produced so that there will be no additional impacts.
6. The Licensee shall not locate any sump within thirty (30) metres of the normal high water mark of any water body.
7. The Licensee shall not deposit nor permit the deposit of slash, debris or sediment into any waterbody. These materials shall be disposed of above the high water mark in such a fashion that they do not enter the water.
8. The Licensee 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.

9. The Licensee 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. The occurrence shall be reported to the Nunavut Water Board and Land Use Inspector within 48 hours.
10. If the drilling requires water in sufficient volume that the source waterbody may be drawn down details must be submitted (volume required, size of waterbody, etc.) to DFO-FHM for review. DFO-FHM does not recommend the use of streams as a water source.

Water

11. The Licensee 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 Licensee 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 Licensee 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. Fuel storage shall either be equipped with secondary containment and other hazardous materials should be located in such a manner as to prevent their release into the environment.
15. The Licensee shall take all reasonable precautions to prevent the possibility of migration of spilled petroleum fuel or chemicals over the ground surface.
16. The Licensee shall examine all fuel and chemical storage containers daily for leaks. All leaks should be prepared immediately.
17. The Licensee shall seal all container outlets except the outlet currently in use.
18. The Licensee shall mark all fuel containers with the Licensee's name.
19. The Licensee shall dispose of all combustible waste petroleum products by incineration and removal from the site.
20. The Licensee shall ensure all activities, including maintenance procedures and refueling, should be controlled to prevent the entry of petroleum products or other deleterious substances into the water.
21. The Licensee shall have an approved emergency response and spill contingency plans in place prior to the commencement of the operation.
22. The Licensee shall immediately report all spills of petroleum and hazardous chemicals to the twenty-four (24) hour spill report line at (867) 920-8130.

Waste Disposal

23. The Licensee 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.
24. The Licensee, prior to the discharge of fluids from any sump, shall carry out an analysis of the fluid in a manner prescribed by the NWB.
25. The Licensee shall treat greywater and sewage according to the terms and conditions outlined in the NWB approval.
26. The Licensee shall backfill and recontour all sumps to match the natural environment prior to the expiry date of the license.
27. The Licensee shall incinerate all combustible and food wastes daily.
28. The Licensee shall keep all garbage and debris in a covered metal container until disposed of.
29. The Licensee shall ensure that all wastes generated through the course of the operation are backhauled and disposed of in an approved dumpsite.
30. The Licensee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.

Wildlife

31. The Licensee shall ensure that there is no damage to wildlife habitat in conducting this operation.
32. The Licensee shall not feed wildlife.
33. The Licensee shall use the latest bear detection and deterrent techniques to minimize man-bear interactions and shall report any Man-Bear Interactions to the nearest Renewable Resource Officer.
34. The Licensee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.
35. The Licensee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
36. The Licensee shall cease activities that may interfere with migration or calving, such as airborne geophysics surveys or movement of equipment, drilling activities until the caribou and their calves have vacated the area.
37. The Licensee shall not conduct any activity associated with the land use operation during critical periods of wildlife cycles (eg. caribou migration, calving, fish spawning or raptor nesting).
38. That the Licensee shall ensure that there is no hunting by employees of the company or any contractors hired.
39. The Licensee shall ensure that aircraft pilots adhere to recommended flight altitudes of greater than 300 m above ground level as to not disturb wildlife. Raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by aircraft at all times.
40. The Licensee 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.

41. 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.

Environmental

42. The Licensee shall ensure that the land use area is kept clean and tidy at all times.
43. The Licensee shall prepare the site in such a manner as to prevent rutting of the ground surface.
44. The Licensee shall not do anything that will cause erosion of the banks of any body of water on or adjacent to the land and shall provide necessary controls to prevent such erosion.
45. The Licensee shall be required to undertake any corrective measures in the event of any damage to the land or water as a result of the Licensee's operation.
46. The Licensee shall not remove any material from below the ordinary high water mark of any waterbody.
47. The Licensee shall adopt such measures as required to control erosion by surface disturbance. Sediment and erosion control measures should be implemented prior to, and maintained during the work to prevent sediment entry into the water during a spring thaw.
48. The Licensee 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.
49. The Licensee shall suspend overland travel of equipment or vehicles if rutting occurs.

Structure & Storage Facilities

50. The Licensee shall not erect structures or store material on the surface ice of lakes or streams.
51. The Licensee shall locate all structures and storage facilities on gravel, sand or other durable land.

Archaeological Sites

52. The Licensee shall follow all terms and conditions for the protection and restoration of archaeological resources as outlined by the Department of Culture, Language, Elders and Youths (CLEY) in attached letter.

Reclamation

53. The Licensee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material upon abandonment.
54. The Licensee shall complete all clean-up and restoration of the lands used prior to the expiry date of the permit.
55. The Licensee shall plug or cap all bore 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 strongly advises proponents to consult with local residents regarding their activities in the region, and do community consultation on the project to keep the communities informed.
3. Any amendment requests deemed by NIRB to be outside the original scope of the project will be considered a new project.
4. The Environmental Protection Branch (DOE), Department of Fisheries and Oceans (DFO), Nunavut Impact Review Board (NIRB), and the Nunavut Water Board (NWB) should be advised of any material changes to plans or operating conditions associated with the project.

Validity of Land Claims Agreement**Section 2.12.2**

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated July 8/02 at Yellowknife, NT


Elizabeth Copland, Chairperson

JUN-18-2002 TUE 11:32 AM DFO IQALUIT NT

FAX NO. 867 979 8039

P. 13

Fisheries
and OceansPêches
et OcéansFish Habitat Management
P.O. Box 308
Iqaluit, Nunavut
X0A 0H0

Your file / Votre référence

02EN101

Our file / Notre référence

NU00599

June 11, 2002

Caroline West
Diamondex Resources Ltd.
1410-650 W. Georgia St.
Vancouver, B.C.
V6B 4N8
Fax: (604) 687-1448**RE: NIRB File # 02EN101, Exploratory Drilling at Heeqou Property, Kugluktuk, NU.**

Dear Ms. West:

This letter is to advise that The Department of Fisheries and Oceans, Fish Habitat Management (DFO-FHM) received the project proposal, submitted by the Nunavut Impact Review Board for exploratory drilling in the Kugluktuk regions. The proposed project length is July 01, 2002 through to 2003. During this time, the collection of 500 regional till samples will be conducted. DFO-FHM's assessment takes into consideration primarily fish and fish habitat related concerns. I have reviewed the plans for the proposed work.

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*. The following mitigation measures, along with mitigation measures indicated in the project proposal, are intended to prevent any potentially harmful impacts to fish and fish habitat:

- If artesian flow is encountered, drill holes should be plugged and permanently sealed upon completion of the project.
- All disturbed areas should be stabilized and re-vegetated as required, upon completion of work, and restored to a pre-disturbed state.
- No material should be left on the ice when there is potential for that material to enter the water (i.e. spring break-up).
- 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.

Canada

JUN-18-2002 TUE 11:32 AM DFO IQALUIT NT

FAX NO. 867 979 8039

P. 14

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 sediment entry into the water during a spring thaw.
- All plans for proposed stream crossings or work conducted below the high water mark adjacent to the banks of streams and lakes require prior approval by DFO-HM.
- 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 activities, including maintenance procedures and refuelling, should be controlled to prevent the entry of petroleum products or other deleterious substances into the water.
- 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.

If you have any questions concerning the mitigation measures or should there be any changes to the proposed work, please contact me at (867) 979-8007 or by fax at (867) 979-8039.

Trudien DesGroot
Area Habitat Biologist

Canada

JUN-18-2002 TUE 11:33 AM DFO IQALUIT NT

FAX NO. 867 979 8038

P. 15

Fish Habitat Management
Department of Fisheries and Oceans- Eastern Arctic Area

c.c. Gladys Joudrey-Nunavut Impact Review Board
Rita Becker-Licensing Administrator, NWB
Ipeelee Horcheak- A/C&P Field Supervisor

Canada



June 18 2002

David Sateana
Environmental Assessment Officer Trainee
NIRB – Cambridge Bay

Diamondex Resources – Exploratory Drilling at Heequo Property

This is actually quite an impressive application, as it seems to fully explain most aspects of environmental impact concern that we try to address.

A couple of comments though. They make reference to flying their geologists and assistants around to carry out the initial till sampling program and then picking up the 500 samples by Helicopter. I would suggest that some reference be provided to the proponent about minimum altitudes required to not distract wildlife and also about any "bans" on flying when there are migrating herds of caribou in the vicinity. Their camp will likely see the passage of some/lots of Bathurst caribou during the summer season they plan their initial activities and they must be aware and ready to comply with any animal interference restrictions.

They also do not reference potentially using any local labour and resources. This might be an oversight of the application given its' thoroughness in dealing with the environmental side; however there seems to be at least a few (4 – 5) positions that could be carried out with local Kugluktuk, Cambridge Bay or Bathurst Inlet/Brown Sound expertise. It is also likely local suppliers could meet many of their ongoing material needs and likely at costs that could compete with elsewhere. The proponent should be made aware of the benefits of utilization of the "Local Resource".

The process could also provide the proponent with an accepted manner of ensuring fuel storage security with a sample spill contingency plan attached. I am assuming they likely have this in hand but did not see reference to same in the application.

Otherwise my support is there. Anyone who is considering aircraft removal of biological wastes to distant locations appears to be serious about maintaining environmental integrity. Don't think I'd want to be on the same plane out though.

Regards:

Doug Crossley
Special Advisor
CG&T – Cambridge Bay

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 the project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Project Title: <u>Exploratory Drilling at Hequon Property.</u>	
Proponent: <u>Diamondex Resources Ltd.</u>	
Location: <u>Kitikmeot Region</u>	
Comments Due By: <u>July 2, 2002</u>	NIRB #: <u>02EN101</u>
Indicate your concerns about the project proposal below:	
<input type="checkbox"/> no concerns	<input type="checkbox"/> traditional uses of land
<input type="checkbox"/> water quality	<input type="checkbox"/> Inuit harvesting activities
<input type="checkbox"/> terrain	<input type="checkbox"/> community involvement and consultation
<input type="checkbox"/> air quality	<input type="checkbox"/> local development in the area
<input checked="" type="checkbox"/> wildlife and their habitat	<input type="checkbox"/> tourism in the area
<input type="checkbox"/> marine mammals and their habitat	<input type="checkbox"/> human health issues
<input type="checkbox"/> birds and their habitat	<input type="checkbox"/> other: _____
<input type="checkbox"/> fish and their habitat	
<input type="checkbox"/> heritage resources in area	
Please describe the concerns indicated above: <u>Aircraft flight must avoid disturbance to migrating animals</u>	
Do you have any suggestions or recommendations for this application? <u>Use of Local Resources + Labour with the project.</u>	
Do you support the project proposal? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Any additional comments? <u>Fuel Storage + Spill Contingency Plan</u>	
Name of person commenting: <u>Doug Tronley</u>	
Position: <u>Special Advisor</u>	Organization: <u>CG + Cambridge Bay</u>
Signature: <u>Doug Tronley</u>	Date: <u>June 18/02</u>

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 the project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Project Title: <u>Exploratory Drilling at Heeqon Property.</u>	
Proponent: <u>Diamondex Resources Ltd.</u>	
Location: <u>Kitikmeot Region</u>	
Comments Due By: <u>July 2, 2002</u>	NIRB #: <u>02EN101</u>

Indicate your concerns about the project proposal below:

<input checked="" type="checkbox"/> no concerns	<input type="checkbox"/> traditional uses of land
<input type="checkbox"/> water quality	<input type="checkbox"/> Inuit harvesting activities
<input type="checkbox"/> terrain	<input type="checkbox"/> community involvement and consultation
<input type="checkbox"/> air quality	<input type="checkbox"/> local development in the area
<input type="checkbox"/> wildlife and their habitat	<input type="checkbox"/> tourism in the area
<input type="checkbox"/> marine mammals and their habitat	<input type="checkbox"/> human health issues
<input type="checkbox"/> birds and their habitat	<input type="checkbox"/> other: _____
<input type="checkbox"/> fish and their habitat	
<input type="checkbox"/> heritage resources in area	

Please describe the concerns indicated above:

Do you have any suggestions or recommendations for this application?

Land Use Permit should address all potential impacts, water related impacts.

Do you support the project proposal? Yes ☒ No ☐ Any additional comments?

Name of person commenting: Paul Smith of _____

Position: Mgr. Water Resources Organization: DIAND

Signature: Paul Smith Date: June 25/02



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Coast Guard

Garde côtière

Central & Arctic Region

Région du Centre et de l'Arctique

201 N. Front Street, Suite 703
Sarnia, Ontario
N7T 8B1

Your file Votre référence

Our file Notre référence
1675-9-9

June 18, 2002

Gladys Joudrey
Nunavut Impact Review Board
PO Box 2379
Cambridge Bay, NT X0E 0C0

Dear Madam:

Thank you for your submission with regard to NIRB # 02EN101, Exploratory Drilling at Heeqou Property, Diamondex Resources Limited, Kitikmeot Region, Nunavut.

The information will be reviewed by this office and our response will be forwarded to DFO Fish Habitat in Iqaluit. They in turn will prepare a Departmental response encompassing both the Navigable Waters Protection Act and the Fisheries Act.

Yours truly,

Barry Putt
A/Inspections Supervisor
Navigable Waters Protection

BP/kab

cc: FHM





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Department of
Culture, Language, Elders & Youth

Pithohilikioni

Ministère du gouvernement
Culture Langues, Aînés et Jeunesse

June 14, 2002

Gladys Joudrey
Environmental Assessment Screener
Nunavut Impact Review Board
Box 2379
Cambridge Bay, NU X0E 0C0

Re: Land Use Application NIRB 02EN101 Exploratory Drilling at Heeqou Property (Diamondex Resources Ltd.)

Due Date: July 8, 2002

Dear Ms. Joudrey:

At your request, the Department of Culture and Heritage, Government of Nunavut, has reviewed the above-noted application. Our recommendations follow.

We recommend approval of the above-cited application, as the proponent's proposed activities do not constitute a threat to known archaeological resources.

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.

Sincerely,


Douglas Stenton
A/Director, Heritage
Department of Culture, Language, Elders and Youth

Attachment 1

Borden Number	LIPc-1
Latitude	65 56 56 N
Longitude	112 43 34 W
UTM	12WVJ E2149 N1506
Map Number	86 H/15
Site Type Class	prehistoric
Site Type	
Site Features	scatter (lithic)
Culture	
Site Condition	stable