



Nunavut Water Board
APR 13 2005
Public Registry

(a) the activity falls within Schedule 12-1; or
(b) the activity can, in the judgement of NIRB, proceed without such a review.”

It is important to note that the Board is issuing this proposal with the assumption that its advice does not preclude the Nunavut Planning Commission's (NPC's) Conformity Determination for this application and is therefore copying the NPC with this letter and will await further direction from the NPC as to whether or not NIRB's environment assessment proceedings should stop.

Additionally, by way of copy of this letter to Parties on the Meadowbank distribution list, NIRB is requesting comment from all Parties and provision of a rationale for their support or rejection of this proposed exemption under 12.10.2 (b) of the NLCA. Written comments are due on or before April 13, 2005.

Sincerely,

(Original Signed by)

Karlette Tunaley, Technical Advisor
Nunavut Impact Review Board

Attachment

cc Honourable Andy Scott, Minister of Indian and Northern Affairs Canada
Distribution List
Nunavut Planning Commission

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PROJECT PROPOSAL

TEHEK LAKE ACCESS ROAD

Cumberland Resources Ltd. proposes to conduct a geotechnical investigation of soil conditions and areas of snow pack along a preliminary road alignment from Baker Lake to the Meadowbank property at Tehck Lake in Nunavut.

The construction of a permanent access road to the property would reduce the freight cost of fuel and materials substantially and provide enhanced access to the Tehek and Whitehills Lake areas and provide a defined access route thereby minimizing the random route selection by ATV's currently in practice which has resulted in noticeable degradation of the tundra.

Route selection

Cumberland Resources Ltd. investigated three routes using aerial photographs and topographic maps. The routes selected attempted to locate the roadway on the windward side of hills or crests of hills to minimize snow accumulation and also minimize the number of water crossings. The selected routes are illustrated in figure 1 Access Road Options.

An assessment of the water crossings has been made and measurements of stream flow have been recorded at the spring high flow period and the fall low flow period. Option "C" the most easterly route was abandoned due to the number of water crossings and the depth encountered at some of the streams.

Option "A" which follows the height of land between the watersheds has a total of 4 water crossings and option "B" has a total of 23 water crossings. None of the crossings have a water depth greater than 1 meter.

The next step in route selection and design of the roadway is to conduct a detailed snow pack investigation and a comprehensive soils investigation in order to avoid areas of heavy snow accumulation by drifting and determine the soil classifications of the ground to be traversed. The soils investigation would also identify granular and till borrow areas and quantify the borrow sources. Following completion of the investigations, final route selection would be made and design of the road profile and section would be completed.

Road Design Parameters

Conceptual design for the roadway has a travel surface of 10 meters and an average height above the existing ground of 0.8 meters with gentle side slopes to not impede the migration of caribou. Road surface would be 3" minus material either pit run or quarried and crushed product. The roadway would accommodate mine production size equipment as well as conventional tractor trailer haul units on a single lane basis. Commercial equipment would require to be radio controlled and passing would be at the established pullout locations.

Construction of the proposed 102 kilometer road would be performed in four stages or zones. Zone 1A would be from Baker Lake to the north hamlet boundary a distance of approximately 18 kilometers. Zone 1B would be from the north hamlet boundary to the north Inuit owned lands boundary (BL 18/66 A) a distance of approximately 19

kilometers. Zone 2A extends from the north Inuit owned lands boundary to the south Inuit owned lands boundary at Tehek Lake a distance of 43 kilometers. Zone 2A is on lands under DIAND control. The final zone 2B would be from the south Inuit owned lands boundary (BL-14/56 D E) at Tehek Lake to Meadowbank a distance of 22 kilometers. The distances quoted are approximate and will vary depending on the final route determination.



PROJECT DESCRIPTION

SCOPE OF WORK

TEHEK LAKE ACCESS ROAD

1.0 INTRODUCTION

The following presents proposed engineering field investigations for the Baker Lake – Tehek Lake all season access route. The purpose of the proposed studies is to carry out field investigations to collect geotechnical and hydrological data to be used for the design of the proposed access road.

2.0 BACKGROUND

A preliminary route selection has been completed by Cumberland Resources Ltd. and has identified a route for access to the Meadowbank Gold Project near Tehek Lake (see figure 1.0). In addition to the initial route selection study, an assessment of the water crossings at peak spring high flow period, as well as during the fall low flow period was made by Amec Earth and Environmental. Finally, the proposed route alignment was flown by helicopter during a site visit in July of 2004.

The proposed route is approximately 102 kilometers in length and has approximately 23 water crossings all with a water depth of less than 1 meter based on stream depths recorded in June and September of 2004.

3.0 PROPOSED INVESTIGATIONS

A multiple phased approach will be used for the work. This will involve further refinement of the initial office route selection studies based on the available air photographs, on site photographs and video records of the proposed route, and on the recorded stream measurements. This initial work would be carried out during January and February of 2005, and will likely result in revision to the route selected to take advantage of the physical terrain and of the availability of materials. Following the preliminary studies, a program of geotechnical and geophysical engineering field investigations will be developed based on the revised route and would be implemented in late winter to early spring. The results of the field investigations would be used to develop appropriate design and construction criteria for critical aspects of the proposed road.

4.0 SCOPE OF WORK

Field Investigations

- Carry out a snow pack survey to identify areas of deep drifting to be avoided during final alignment selection. This task will be completed first so that any subsequent proposed geotechnical investigations can be modified to incorporate information obtained from this survey.
- Conduct field investigations and site reconnaissance to confirm the mapped soil types based on air photo interpretation, with a focus on identifying and sampling suitable sources of aggregate material for road construction and surfacing.
- Investigate and evaluate general foundation conditions along the route and at potential bridge abutment areas by test pitting, drilling, or other methods such as engineering geophysics.
- Assess water crossings for the purpose of obtaining data for culverts, bridge abutments, and bridge requirements.
- Carry out ground ice surveys using geophysics in selected areas that may be susceptible to the presence of massive ground ice, and as a consequence potentially susceptible to settlement and therefore ongoing road maintenance.

5.0 FIELD INVESTIGATIONS

The objectives of the field investigations are to verify the foundation conditions interpreted during the terrain assessment component along the selected route, to obtain geotechnical information that will be required for use in the engineering design of bridge abutments, culverts, road profile, and road sections, and to assess the availability and suitability of materials for use in constructing the road.

5.1 SNOW PACK SURVEY

A snow pack survey will be conducted to assess the route alignment with respect to the terrain physiography as this will influence the accumulation and drifting of snow along the route. This survey will be carried out before any melt starts to occur. The main factors affecting snow distribution are wind erosion and deposition because of the sparse vegetation in the arctic. Topographic features govern snow redistribution by wind. For reasons of safety, a team of two persons will be required for the survey. The snow survey will be carried out by a senior engineering geophysicist using a Ground Penetrating Radar (GPR) pulled behind a snowmobile. A video recorder will be attached to the front of the snowmobile so that actual conditions along the route can be recorded. A GPS unit will then be used to geo-reference the video records of the survey.

It is proposed to begin the snow pack survey during the last week of March, or first week of May.

5.2 EM31 and GROUND PENETRATING RADAR

It is the intent to carry out an EM31 survey along segments of the route alignment to assess the presence of ground ice. The segments to be surveyed will be based on the results of the air photo study. Identifying the presence or absence of ground ice along the alignment will be important in developing appropriate road cross sections for the expected soil types and soil ice conditions. The presence of ground ice within overburden materials may also impact the road construction methodology that is used over certain segments of the route. Furthermore, the identification of the presence or absence of ground ice at abutment areas for bridge crossings will be essential for the appropriate design of these structures.

The EM31 may also be used to assess the presence or absence of ground ice within granular resource areas identified during the air photo interpretation. The presence of ground ice will influence the ease with which granular resource materials can be excavated. In addition to the EM31 survey, it is proposed to use Ground Penetrating Radar (GPR) at these sites to investigate depth to bedrock. GPR will also be used to provide additional information at the proposed bridge crossings.

5.3 GEOTECHNICAL DRILLING

In the event that overburden depths dictate that additional data should be procured at the abutment areas of the 5 proposed bridges, geotechnical drilling may be required. Drilling methods would be a combination of standard triple tube overburden and bedrock coring methods, combined with the use of a refrigeration plant for the retrieval of samples of frozen overburden core from specific boreholes. This phase of the program would be conducted subject to drill availability.

5.4 OVERBURDEN SAMPLING AND TESTING

Once potential sources of till and aggregate materials have been identified from the air photo interpretation, a selected number of sites will be investigated further by sampling of materials. The purpose of the sampling and testing is to confirm the results of the air photo interpretation, to obtain samples for index testing, and to provide additional information relating to the suitability of the materials for road sub-base or general fill purposes. Test pitting would be performed by one of the following pieces of equipment: John Deere 410 loader / backhoe (rubber tired), or an air transportable mini excavator.

6.0 PROGRAM IMPLEMENTATION AND LOGISTICS

All of the above listed activities will be conducted by crews operating out of the current Meadowbank camp site, located approximately 70 km north of the Hamlet of Baker Lake. The proposed work program will be helicopter supported. Crew movements and required fuel transportation will utilize the helicopter in order to reduce the amount of ground disturbance and to negate the need for fuel caches in the project area. All garbage generated by the program will be returned to the Meadowbank camp or Baker Lake for disposal.

Fuel required for the program will be transported by helicopter utilizing 205 litre drums sourced from the Meadowbank camp site. Fuel will be transferred from the drums using hand pumps, and absorbent matting will be used during fuel transfer operations to prevent spillage. Empty fuel containers will be returned to the Meadowbank camp for re-filling. All fuel related activities will follow the guidelines set out in Cumberland's Fuel transportation and storage Management Plan which has been used successfully since 1999 (an excerpt from the plan is attached).

7.0 ENVIRONMENTAL (this section refers to specific questions set out in Appendix A of the application form)

Question 10: Indicate the components of the environment that are near the project area, as applicable. Include the type of species, the important habitat area (calving, staging, denning, migratory pathways, spawning, nesting, etc.) and the critical time periods (calving, post-calving, spawning, nesting, breeding etc.). Also include information on eskers, communities and historical/ archaeological sites.

- Wintering area for caribou; migration corridors for caribou
- Breeding and living areas for numerous common species such as larkspurs, larks, pipits, sik siks, voles and lemmings
- Low suitability raptor nesting area because of low availability of suitable rock faces and cliffs
- Limited waterfowl nesting areas in wetlands
- No eskers identified on topographic maps

Question 11: Summary of potential environmental, wildlife and resource impacts and mitigation measures to be used. Describe the effects of the proposed program on lands, water, flora and fauna.

Impacts

- Sensory disturbance (due to vehicle and drilling activities) to wintering wildlife, particularly caribou, which are known to occur along the proposed access route in moderate numbers during winter,

- Sensory disturbance to breeding birds and denning mammals during summer (June to July) due to vehicle and drilling activities. Sensory disturbance to caribou in summer is considered to be low because of very low caribou numbers in the region during the summer months
- Direct disturbance of nesting songbirds (e.g., Lapland Longspur), waterfowl (e.g., Canada Goose), and possibly ground-nesting raptors (e.g., Snowy Owl)
- Direct disturbance of denning mammals (e.g., Sik Sik) and other small mammals (e.g., lemmings)
- Degradation of vegetation communities, many of which are established on areas of very shallow soils, and are extremely sensitive to disturbance
- Sedimentation and in-stream substrate disturbance of small creeks in summer due to vehicles tracking through waterways
- Direct disturbance of in-stream spawning habitat
- Fuel spills related to vehicle use
- Garbage and other wastes will attract scavengers such as Grizzly Bear, Wolverine and Arctic Fox, leading to possible "problem" animals

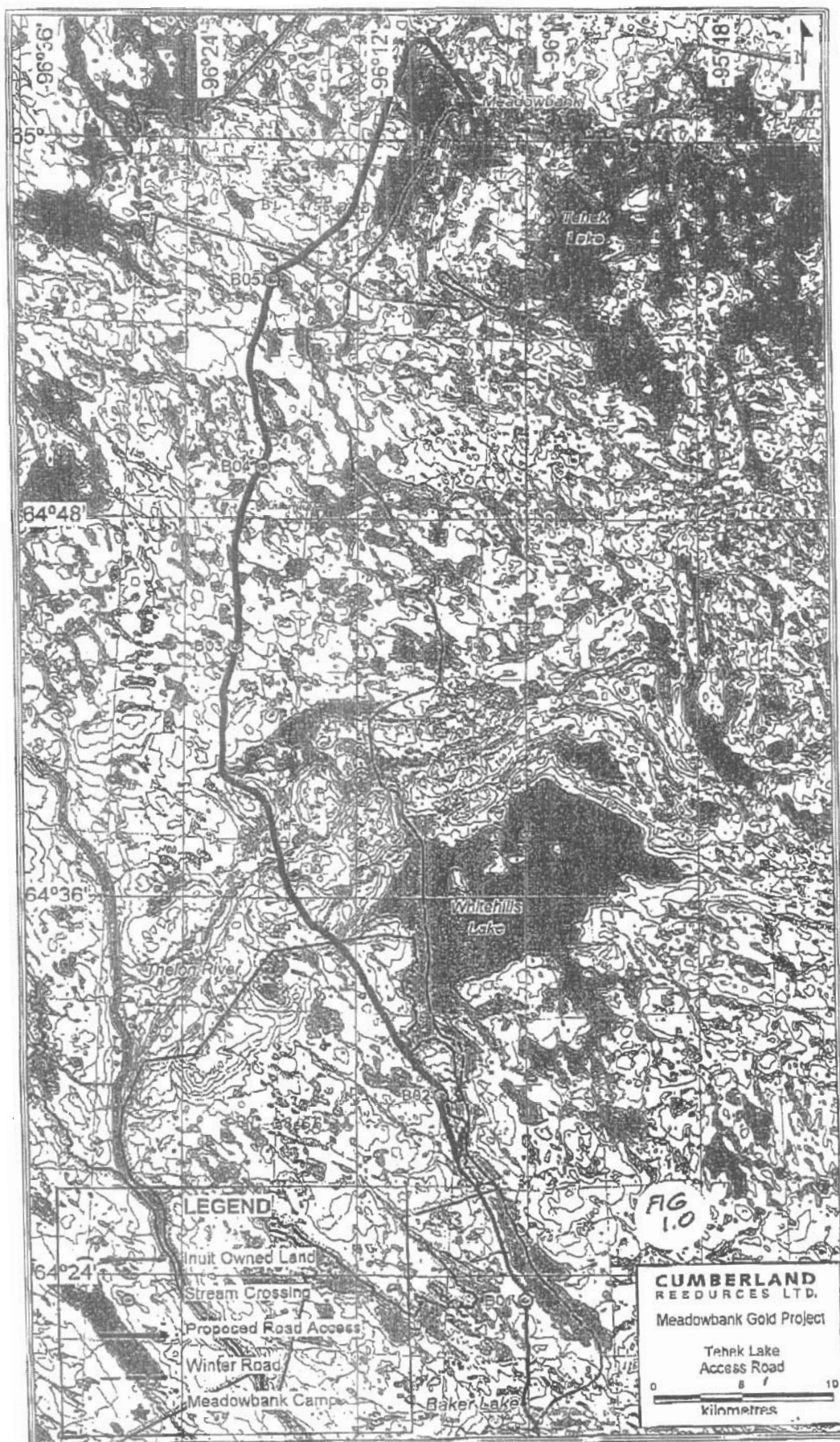
Mitigation Measures

- Vehicles used in summer will have large rubber tires, which will minimize disruption of vegetation communities. No track-outfitted equipment will be used
- To avoid inadvertent disturbance in summer, environmental monitors will walk in front of the equipment to look for nesting birds and wildlife denning sites. If nesting birds or other valued ecosystem components are located, vehicle operators will be directed around the site, and monitors will take appropriate actions to ensure that impacts (sensory or otherwise) are minimized.
- To reduce potential for fuel spills, vehicles and equipment will be maintained in excellent running condition. Environmental monitors will ensure that all vehicles are adequately maintained, will report any fuel spills, and will have clean-up kits on site in case fuel spills do occur.
- To reduce noise associated with equipment operation, vehicles will have be equipped with mufflers that meet current standards

All garbage, sewage, packaging materials and other introduced materials will be bagged and transported by helicopter to Meadowbank Camp or Baker Lake for incineration and/or disposal

8.0 RESTORATION PLANS

- Test pits will be excavated in a way to minimize impact to surrounding land.
- At test pit sites, surface vegetation and organic soils will be removed and deposited in a temporary storage area. After test pit completion, the pit will be backfilled in the reverse order of removal with organic soils and vegetation being replaced last.
- Site-specific replanting or reseedling will be conducted on an as-needed basis.
- Any field spills will be cleaned up immediately



FUEL TRANSPORT AND STORAGE MANAGEMENT PLAN

CUMBERLAND RESOURCES LTD.
MEADOWBANK GOLD PROJECT, NUNAVUT

Cumberland Resources Ltd.
950-505 Burrard Street
Vancouver, British Columbia
V7X 1M4

II. SPILL RESPONSE ACTION PLAN

SPILL RESPONSE SEQUENCE

1. REPORT ALL SPILLS TO:

Spill Site Coordinators, Peter's Expediting
 Exploration Project Manager or
 Senior project geologist on site
 Camp Manager

Phone: (604) 608-2557

Phone: (604) 608-2557

Phone:

The reporting requirement applies to all spills: on land, on water and on ice.

The reporting requirement applies equally to all substances covered by this contingency plan; fuels, hydraulic oil, lubricants, and waste oil.

All reports by telephone must be followed with a fax of the completed report form (see Appendix D for copies) to the number indicated on the reporting form.

Reporting and notification described below must be made by the first observer of the spill to the observer's superior immediately upon the spill being under control, or on failure to gain control of the situation.

2. ALERT Cumberland Personnel:

SPILL OBSERVER

IMMEDIATE SUPERVISOR or Meadowbank Camp manager

- Meadowbank Project Manager
- Contractors (clean up)

3. NOTIFY AGENCIES:

24 HOUR NWT SPILL REPORT LINE	PHONE (867) 920-8130
	FAX (867) 873-6924
KIVALLIQ INUIT ASSOCIATION	(867) 645-2810
DIAND – Rankin Inlet	(867) 645-2831
Iqaluit	(867) 979-4405
Environment Canada – Yellowknife	(867) 920-6060
Fisheries and Oceans Canada	(867) 645-2871
GNWT DRWED – Rankin Inlet	(867) 645-5067

4. RECORD THE FACTS Use Spill Report Form from Appendix D

NOTE: If the On-Scene Coordinator is not available when a spill is detected then the spill must be Reported directly to NWT 24-hour spill report line without delay.

III. SPILL RESPONSE - FUEL TYPE

The procedure of dealing with a spill is dependent on the type of material spilled. The following sheets summarize the correct procedures for dealing with spills of the materials transported and stored at the Meadowbank project site - gasoline, Jet A and Jet B aviation fuel, P-50 diesel (stove oil), propane and acetylene. Other petroleum products such as lube oil and waste oil will only be present in small amounts, but product information sheets are also included for all these products.

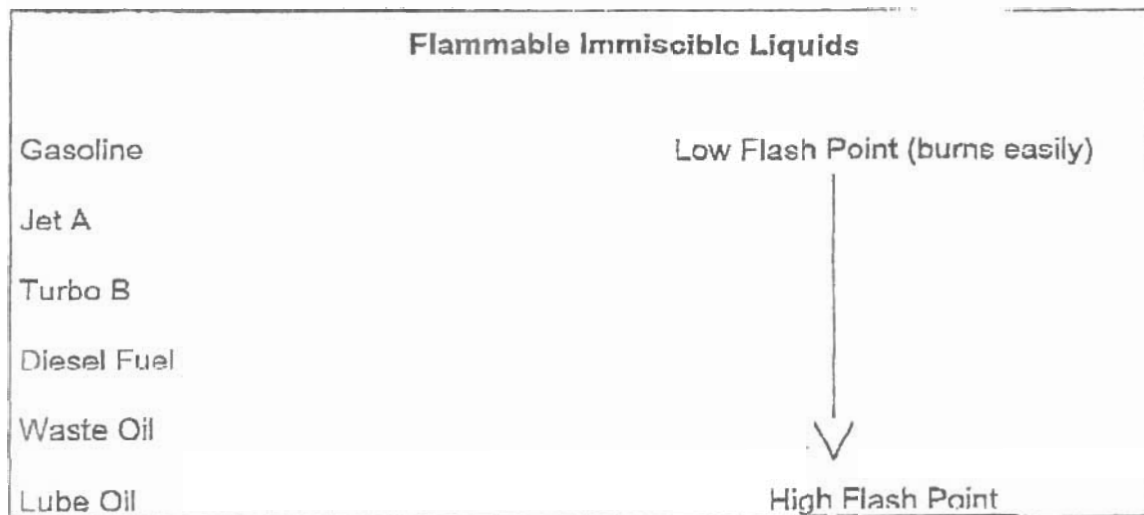
PRODUCT GUIDES

The materials included in this Plan can generally be divided into two categories:

- Flammable immiscible liquids
- Flammable compressed gases

A-1. Flammable Immiscible Liquids

These substances are all hydrocarbon-based and will ignite under certain conditions. Gasoline and aviation fuel pose the greatest fire (and safety) hazard and usually cannot be recovered when spilled on water. The remaining materials generally do not pose a hazard at ambient temperatures. They are all insoluble, float unless mixed into the water column and can be recovered when safety allows.



GASOLINE SPILL RESPONSE ACTIONS**CONSIDER ACTION ONLY IF SAFETY PERMITS****GASOLINE FORMS VAPOURS THAT CAN IGNITE AND EXPLODE****NO SMOKING**

Refer to Product Guide in Appendix A for:
Physical/Chemical Properties
Response to Fires
First Aid

- ELIMINATE IGNITION SOURCES
- STOP SOURCE OF GASOLINE IF SAFE TO DO SO

ON LAND

- Block entry into waterways by diking with earth, snow or other barrier(s).
- Do not contain spill if there is any chance of igniting vapours.
- On shop floors and in work/depot yards, apply particulate sorbents.
- On tundra use peat moss and leave to degrade if feasible to do so.

ON SNOW & ICE

- Block entry into waterways by diking with snow or other barrier.
- Do not contain spill if there is any chance of igniting vapours..
- In work/depot yards, apply particulate sorbents.

ON MUSKEG

- Remove pooled gasoline with pumps, if safe to do so.
- Do not deploy personnel and equipment on marsh or vegetation.
- Low pressure flushing can be tried to disperse small spills.
- Burn CAREFULLY only in localized areas, e.g., trenches, piles or windrows.
- Do not burn if root systems can be damaged (low water table).
- Minimize damage caused by equipment and digging.

ON WATER

- Contain or remove spills ONLY AFTER VAPOURS DISSIPATE.
- Use booms to protect water intakes.
- Skimming can be tried once light ends evaporate.

STORAGE/TRANSFER

- Store closed, labeled containers in cool, ventilated areas away from incompatible materials.
- Electrically ground containers and vehicles during transfer.

DISPOSAL

- Segregate waste types, if necessary.
- Place contaminated materials into marked containers.
- Consult camp manager on transportation and disposal requirements.

GASOLINE

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Colourless liquid (can be dyed)	FLASH POINT:	-50° C
ODOUR:	Gasoline / Petroleum	FREEZING PT:	-60° C
SOLUBILITY:	Insoluble	VISCOSITY:	Not viscous (< 1 cSt)
VAPOUR			
DENSITY:	Will sink to ground levels	SPECIFIC GRAVITY:	Floats on water (0.7 - 0.8)

SAFETY MEASURES

WARNINGS

- Vapours form instantaneously, and are heavier than air.
- Empty containers can contain explosive vapours.
- Vapours can travel to distant sources of ignition and flash back.
- Eye contact causes irritation.
- Material can accumulate static charges.
- Inhalation of vapours can cause irritation of the respiratory tract, headache, vomiting, and unconsciousness.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile and Viton are suitable protective materials (DO NOT USE NATURAL RUBBER, NEOPRENE, OR PVC).
- Wear full-face organic vapour cartridge respirator where oxygen is adequate; otherwise wear positive pressure SCBA.

PRECAUTIONS

- Monitor for explosive atmosphere.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA in confined areas.
- Shut off fuel supply.
- Extinguish fire with CO₂, dry chemical, alcohol foam or water fog.
- Use water to cool containers exposed to fire.

PROPANE RESPONSE ACTIONS

GAS STORED IN CYLINDERS THAT EXPLODE WHEN IGNITED!

CONSIDER ACTION ONLY IF SAFETY PERMITS

KEEP ALL VEHICLES INCLUDING SNOWMOBILES AWAY FROM ACCIDENT AREA

Refer to Product Guide in Appendix A for:
Physical/Chemical Properties
Response to Fires
First Aid

- Vapours cannot be contained when released.
- Water spray can be used to knock down vapours if there is NO chance of ignition.
- Small fires can be extinguished with dry chemical or CO.
- Personnel should withdraw immediately from area unless a small leak is stopped immediately after it has been detected.
- If tanks are damaged, gas should be allowed to disperse and no attempt at recovery should be made.
- Personnel should avoid touching release point on containers since frost quickly forms.
- Stay clear of tank ends.

PROPANE TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Colourless Gas	FLASH POINT:	-104° C
ODOUR:	Natural Gas odour	FREEZING PT:	-190° C
SOLUBILITY:	Insoluble	VISCOSITY:	n/a
VAPOUR		SPECIFIC	
DENSITY:	Will sink to ground levels	GRAVITY:	Liquid floats on water

SAFETY MEASURES

WARNINGS

- Vapours form instantaneously, and are heavier than air.
- Vapours can travel to distant sources of ignition and flash back.
- Eye contact causes irritation.
- Material can accumulate static charges.
- Inhalation of vapours can cause irritation of the respiratory tract, headache, vomiting, and unconsciousness.

PERSONAL PROTECTION

- Always wear impervious, chemical-resistant clothing, gloves, footwear, and goggles; nitrile and Viton are suitable protective materials (DO NOT USE NATURAL RUBBER, NEOPRENE, OR PVC).
- Avoid frostbite burn to skin and eyes from contact with propane.
- Wear full-face organic vapour cartridge respirator where oxygen is adequate; otherwise wear positive pressure SCBA.

PRECAUTIONS

- Monitor for explosive atmosphere.
- Avoid contact with strong oxidizers, such as nitric acid, sulphuric acid, chlorine, ozones, peroxides.
- Eliminate ignition sources.
- Restrict access and work upwind of spill.

RESPONSE TO FIRES CONSIDER ACTION ONLY IF SAFETY PERMITS!

- Wear SCBA in confined areas.
- Shut off fuel supply.
- Extinguish fire with CO₂, dry chemical, alcohol foam or water fog.
- Use water to cool containers exposed to fire.

IV. SPILL RESPONSE CONTACTS

Cumberland Resources Ltd., Meadowbank Project

TITLE	NAME	OFFICE	FAX
On-Scene Coordinators			
Camp Manager	Ewald Gossner	(604) 608-2557	(604) 608-2559
Project Manager	Brian Alexander	(604) 608-2557	(604) 608-2559
Project Geologist	Roger March	(604) 608-2557	(604) 608-2559
Contractors			
Fuel Transportation Manager	Peter Tapatai	(867) 793-2703	(867) 793-2988

V. LOCAL TRANSPORTATION

Air Lines - Scheduled

Calm Air (867) 793-2873

Skyward Aviation (867) 793-2703

Helicopters

Custom Helicopters (Rankin Inlet)

Staff House (867) 645-3885

Hanger (867) 645-3939

Overland Transportation - Delta Foremost

Peter's Expediting (867) 793-2703

VI. EQUIPMENT SUPPLIERS

Frontier Mining - Yellowknife (867) 920-7617 spill kits & various sorbents

Acklands - Yellowknife (867) 873-4100 spill kits & various sorbents

VII. INTERNAL RESOURCES - CUMBERLAND RESOURCES LTD.**Senior Management - President, Senior Vice President**

- Responsible for all communication with the media
- Ensures that all press releases are accurate and in accordance with company policy
- Coordinates and exercises overall direction to Spill Response Team in the case of a major spill

Project Manager, Project Geologist

- Project Manager, or in his or her absence, the Project Geologist is responsible for the in-field operation of the Spill Response Team.
- Assists senior management in the preparation of news releases
- Updates and distributes Contingency Plan
- Ensures that there are follow up reports prepared on the spill event, clean-up and environmental impacts

Camp Manager

- Develops safe and effective spill management and prevention practices
- Responsible for management and regular inspection of fuel storage facilities at Meadowbank camp

Environmental Consultant

- Provides advisory services to the Spill Response Team as well as management

Legal Counsel

- Advises senior management and the project manager as requested on issues related to:
 - Legislative authority of various government agencies
 - Questions of due diligence
 - Costs/fines and liabilities, regulations including penalties associated with regulations
 - Consults with the corporate insurance coordinator and advises senior management on matters related to insurance

Board of Directors

- Establishes corporate environmental policy based on the recommendations of senior management

VIII. EXTERNAL RESOURCES – GOVERNMENT

Department of Indian and Northern Affairs (DIAND)

The Northern Affairs program of DIAND administers the Territorial Lands Act and Regulations. Through this legislation land use permits are issued. One of the conditions of land use permits is the requirement to report all spills to a 24 hour government run report line (867-920-8130). Land Use Permits may also address matters of environmental conservation and protection including waste disposal, sources of borrow materials, open pit mining, road alignments, land reclamation and closure requirements. Enforcement of the provisions of the land use permits is carried out by the Operations Division of DIAND through Resource Management Officers located at the District Offices.

Inspection of Cumberland project activities located on Crown Land by Resource Management Officers is conducted periodically.

Environment Canada (EC)

The Environmental Protection and Conservation Service of Environment Canada administers the Canadian Environmental Protection Act (CEPA) and Section 36 of the Fisheries Act. For the latter this specifies that unless authorized by regulation, any effluents discharged into fish bearing water must be non-toxic. Environment Canada officials have in the past laid charges in the NWT under the Fisheries Act for spills of oil and other hazardous material.

EC is responsible for providing environmental advice to federal and territorial government agencies and for the preservation and enhancement of environmental quality.

Department of Fisheries and Oceans (DFO)

The Department of Fisheries and Oceans (DFO) administers the habitat protection provisions of the Fisheries Act. This includes provisions for prohibiting the blocking of fish passageways and the destruction of fish habitat. DFO operates under a Habitat Management Policy whereby the objective is to achieve a net gain of fish habitat within the NWT. On occasion DFO Inspectors visit spill sites to investigate possible impacts to fish habitat.

IX. REFERENCES

WMC International Limited Transportation Spill Contingency Plan - Meliadine West Project. August, 1998.

BHP Diamonds Inc. Transportation Spill Contingency Plan. January 1997.

Department of Transportation. Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories. Prepared by Stanley Associates Engineering Ltd. 1993.

Northwest Territories Water Board. Guidelines for Contingency Planning. 1987.

ACKNOWLEDGMENTS

Cumberland Resources Ltd. gratefully acknowledges the use of the Transportation Spill Contingency Plans developed initially by BHP Diamonds Inc. and subsequently by WMC International which was used as the model and template in developing this plan for the Meadowbank Gold Project. The generosity of WMC International in providing their document is greatly appreciated.

APPENDIX A - INVENTORY OF SPILL RESPONSE KITS

Cumberland Resources uses "Sphag Sorb" for spill response kits. This product is composed of dried and filtered sphagnum moss which has the ability to absorb oils without absorbing water. Once used, Sphag Sorb can be safely disposed of in conventional land fill facilities since all oils will continue to be held within the capillaries of the peat moss until they naturally decompose. In addition, this product will not leach contaminants in land fill sites. For disposal of material from smaller spills, Sphag Sorb is ideal for incineration.

The Spill Response Kit at the Meadowbank Project consist of:

- 1 Case containing 30 Sphag Sorb pads (SS-PAD). Each pad can absorb approximately 5 - 7 litres of contaminant. These pads are to be used for cleaning up minor spills.
- 1 ECP Emergency Spill Response Kit containing the following:
 - 1 - 72"X36"X33" safety yellow polyethylene containment kit with decals
 - 1 - 40 cu. ft. activated Sphag Sorb
 - 1 - 22 SS 14 Sphag Sorb pillow
 - 1 - 4 litres Plug It emergency seal
 - 2 - pairs rubber gloves
 - 1 - pair chemical goggles
 - 5 - disposal bags
 - 1 - waterproof flashlight
- 2 shovels
- 2 rakes
- 2 waterproof flashlights

This material is located near the fuel storage vaults as indicated on the attached figure.



N.W.T. SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24-Hour Report Line

Phone/D'beD' (408) 920-8130

Fax/D'beD' (408) 873-6924

A Report date and time D'beD' (408) 920-8130		B Date and time of spill (if known) D'beD' (408) 920-8130		C <input type="checkbox"/> Original report <input type="checkbox"/> Update no. _____ D'beD' (408) 920-8130		Spill number D'beD' (408) 920-8130	
D Location and map coordinates (if known) and direction (if moving) D'beD' (408) 920-8130							
E Party responsible for spill D'beD' (408) 920-8130							
F Product(s) spilled and estimated quantities (provide metric volume/weights if possible) D'beD' (408) 920-8130							
G Cause of spill D'beD' (408) 920-8130							
H Is spill terminated? <input type="checkbox"/> yes/D'beD' (408) 920-8130 <input type="checkbox"/> no/D'beD' (408) 920-8130		I If spill is continuing, give estimated rate D'beD' (408) 920-8130		J Is further spillage possible? <input type="checkbox"/> yes/D'beD' (408) 920-8130 <input type="checkbox"/> no/D'beD' (408) 920-8130		K Extent of contaminated area (in square metres if possible) D'beD' (408) 920-8130	
L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.) D'beD' (408) 920-8130				M Containment (natural depression, dykes, etc.) D'beD' (408) 920-8130			
N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials D'beD' (408) 920-8130							

O Do you require assistance? <input type="checkbox"/> no/D'beD' (408) 920-8130 <input type="checkbox"/> yes, describe: D'beD' (408) 920-8130		P Possible hazards to persons, property, or environment: eg. fire, drinking water, fish or wildlife D'beD' (408) 920-8130	
Q Comments and/or recommendations: D'beD' (408) 920-8130			
FOR SPILL LINE USE ONLY D'beD' (408) 920-8130			
Lead Agency D'beD' (408) 920-8130			
Spill significance D'beD' (408) 920-8130			
Lead Agency contact and time D'beD' (408) 920-8130			
Is this file now closed? <input type="checkbox"/> yes/D'beD' (408) 920-8130 <input type="checkbox"/> no/D'beD' (408) 920-8130			
Reported by D'beD' (408) 920-8130	Position, Employer, Location D'beD' (408) 920-8130		Telephone D'beD' (408) 920-8130
Reported to D'beD' (408) 920-8130	Position, Employer, Location D'beD' (408) 920-8130		Telephone D'beD' (408) 920-8130



N.W.T. SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24-ᓄ ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ

Phone/ᐃᓈᓐᓄᓐ (403) 920-0130

Fax/ᐃᓈᓐᓄᓐ (403) 873 6924

A Report date and time ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ		B Date and time of spill (if known) ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ		C <input type="checkbox"/> Original report <input type="checkbox"/> Update no. _____ ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ		Spill number ᐃᓈᓐᓄᓐ	
D Location and map coordinates (if known) and direction (if moving) ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ							
E Party responsible for spill ᐃᓈᓐᓄᓐ							
F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible) ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ							
G Cause of spill ᐃᓈᓐᓄᓐ							
H Is spill terminated? <input type="checkbox"/> yes/ᐃ <input type="checkbox"/> no/ᐃᓈᓐᓄᓐ		I If spill is continuing, give estimated rate ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ		J Is further spillage possible? <input type="checkbox"/> yes/ᐃ <input type="checkbox"/> no/ᐃᓈᓐᓄᓐ		K Extent of contaminated area (in square metres if possible) ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ	
L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.) ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ				M Containment (natural depression, dykes, etc.) ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ			
N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ							
O Do you require assistance? <input type="checkbox"/> no/ᐃ <input type="checkbox"/> yes, describe: _____				P Possible hazards to persons, property, or environment; eg: fire, drinking water, fish or wildlife ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ			
Q Comments and/or recommendations ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ						FOR SPILL LINE USE ONLY ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ	
						Lead Agency ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ	
						Spill significance ᐃᓈᓐᓄᓐ	
						Lead Agency contact and time ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ	
						Is this file now closed? <input type="checkbox"/> yes/ᐃ <input type="checkbox"/> no/ᐃᓈᓐᓄᓐ	
Reported by ᐃᓈᓐᓄᓐ		Position, Employer, Location ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ			Telephone ᐃᓈᓐᓄᓐ		
Reported to ᐃᓈᓐᓄᓐ		Position, Employer, Location ᐃᓈᓐᓄᓐ ᐃᓈᓐᓄᓐ			Telephone ᐃᓈᓐᓄᓐ		

PRINT 17521205

KIVALLIQ INUIT ASSOCIATION APPLICATION FOR ACCESS TO INUIT OWNED LAND

Office use only

Category

Application No.

Accepted By:

LUL II

KVL255B10

O. Rattiner



To be completed by all applicants

1. Applicant's name and mailing address (Full name, no initials or abbreviations)

CUMBERLAND RESOURCES LTD.
SUITE 950-505 BARRARD STREET
BOX 72, ONE BENTALL CENTRE
VANCOUVER, B.C. V7X-1M4

Fax no.

604-608-2559

Telephone no.

604-608-2557

2. Head Office address

CUMBERLAND RESOURCES LTD.
SUITE 950-505 BARRARD STREET
BOX 72, ONE BENTALL CENTRE
VANCOUVER, B.C. V7X-1M4

Fax no.

604-608-2559

Telephone no.

604-608-2557

3. Field supervisor and address if different from above

TO BE ADVISED

Telephone no.

4. Other personnel list (Subcontractors or contractors to be used)

GEOTECHNICAL TECHNICIANS 2 GEOTECHNICAL ASSISTANTS 2
EQUIPMENT OPERATOR 1
HELICOPTER PILOT 1

Total no. of personnel: 06

No. of person days:

360

5. Location of activities by map coordinates. Attach ORIGINAL maps and sketches.

MAX Lat Min $\frac{34}{3}$	MIN Lat Deg $\frac{64}{64}$	MIN Lat Min $\frac{26}{56}$	MAX Lat Deg $\frac{64}{65}$
MAX Long Min $\frac{13}{07}$	MIN Long Deg $\frac{96}{96}$	MIN Long Min $\frac{3}{16}$	MAX Long Deg $\frac{96}{96}$

Map Sheet No: 66A8, 66A9, 66A16, 66H1 Inuit Land Parcel No: BL-18/66A & BL-14/56 DE

Coordinate of camp (if applicable) Lat. 65 - 00 - 75 - N Long. 96 - 04 - 39 - W

Please specify projection, datum and digital format. Please provide the data as an Arc/Info cover, Arcview shapefile or an .E00 File.

6. Periods of operation including periods of seasonal shut down and periods for restoration.

APRIL 2005 TO SEPTEMBER 2005

7. Period of access required (up to one or two years for licenses, depending on license level, up to five years for residential/recreational leases and level I and II commercial leases, and up to forty years for level III commercial leases)	Start date	Completion Date
	APRIL 2005	SEPT 2005

8. Other rights, licenses, permits or leases related to this application. Provide proof of rights or indicate if in the process of applying for rights.

- ☐ NTI Subsurface Right
☐ DLAND Subsurface Right
☒ NWB Water License

- ☐ NRI Research License
☐ RWED Tourism License
☐ Explosives Permit

- ☐ CWS Permit
☐ Other - Please Specify

NWB2MEAD204
 (renewal pending)

K1A LAND USE
 KVL 304C05

9. TYPE OF LAND USE ACTIVITY

Check off the appropriate land use activities.

Mining/Oil & Gas

- ☐ staking and prospecting
☒ exploration (geophys-grd/air)
☐ drilling (diamond/ice, etc.)
☐ bulk sampling
☐ mine (open pit, underground, etc.)
☐ bulk fuel storage
☐ other: _____

Construction:

- ☐ camp
☐ building
☐ winter road
☒ all-season road
☐ quarrying
☐ other: _____

Tourism:

- ☐ tourism facility
☐ outfitting
☐ other: _____

Municipality:

- ☐ bulk storage of fuel
☐ residential building
☐ commercial building
☐ other: _____

Research:

- ☐ wildlife/fish/birds/marine
☐ survey (grd/aerial/collars)
☐ collection of species
☐ research station
☐ other: _____

Other:

- ☐ commercial harvest
☐ recreational camp
☐ _____
☐ _____

10. On a separate page, provide a NON-TECHNICAL project summary. This should include a non-technical description of the project proposal, no more than 300 words, in English and Inuktitut (Inninnakut, in the West Kitikmeot). The project description should outline the project activities and their necessity, method of transportation, any structures that will be erected, expected duration of activity and alternatives considered. If the proposed activity fits into any long-term developments, please describe the projected outcome of the development for the area and its timeline.

SEE ATTACHMENT PROJECT PROPOSAL

11. Attach a detailed project description as outlined in APPENDIX A.

SEE ATTACHMENT PROJECT DESCRIPTION

12. Application Fees:

- | | | | |
|---|-------------------|---|--------|
| <input type="checkbox"/> Land use license I | | <input type="checkbox"/> Commercial Lease I | \$1000 |
| Inuit - | \$0 | <input type="checkbox"/> Commercial Lease II | \$2500 |
| Non-Inuit | \$100 | <input type="checkbox"/> Commercial Lease III | \$5000 |
| <input checked="" type="checkbox"/> Land use license II | \$250 | | |
| <input type="checkbox"/> Land use license III | \$500 | | |
| <input type="checkbox"/> Right of Way Agreement | \$500 | | |
| <input type="checkbox"/> Residential/Recreational Lease | Inuit - \$0 | | |
| | Non-Inuit - \$250 | | |
| <input type="checkbox"/> Exemption Certificate | \$0 | | |

Land use fees: # of hectares used @ \$50.00/hectare = \$ _____

Note: The land use fee is for the amount of land used on an annual basis.

13. a) The Applicant requests a Certificate of Exemption ☐

OR

b) The Applicant agrees to be bound by terms and conditions to be attached to the Inuit Land Use License or
License ☐

Sign name in full:

Signature

Brad Thiel

Date

18 March 05



ᐱᐱᐱᐱᐱᐱ ᐃᐃᐃᐃᐃᐃ ᐅᐅᐅᐅᐅᐅᐅᐅ

Kivalliq Inuit Association

ᐱᐱᐱᐱᐱᐱᐱᐱ/P.O. Box 340, ᐅᐅᐅᐅᐅᐅᐅᐅ Rankin Inlet, ᐃᐃᐃᐃᐃ Nunavut X0C 0G0
ᐅᐅᐅᐅᐅ/Tel: (867) 645-2800 ᐅᐅᐅᐅᐅ/Fax: (867) 645-2348 Toll free: 1-800-220-6581

March 23, 2005

Brad Thiel
Cumberland Resources
950-505 Burrard Street
Box 72, One Bentall Centre
Vancouver, B.C.
V7X 1M4

Dear Mr. Thiel:

Re: Application for Land Use License No. KVL205B10

Please consider this an acknowledgment of receipt of your application for a Land Use License dated March 18, 2005. All future correspondence on this application should be addressed to the Land Management Officer and should refer to the above file number. Please also find general receipt # 294 for the fee that you have submitted.

Your application will be reviewed and, if approved, your license will be issued within a reasonable period of time.

Should you have any questions or concerns, you can contact our office at (867) 645-2810 or fax at 645-3855 or email: lmanzo@arctic.ca

Yours truly,

Veronica Tattuinee
Lands Administrator

Enclosure

ᐃᐃᐃᐃᐃᐃᐃᐃ-CHESTERFIELD INLET/ᐅᐅᐅᐅᐅᐅᐅᐅ-DAKER LAKE/ᐅᐅᐅᐅᐅᐅᐅᐅ RANKIN INLET/
ᐱᐱᐱᐱᐱᐱᐱᐱ-WHALE COVE/ᐱᐱᐱᐱᐱᐱᐱ-CORAL HARBOUR/ᐃᐃᐃᐃᐃᐃᐃᐃ-REPULSE BAY/ᐃᐃᐃᐃᐃᐃᐃᐃ-ARVIAT

KIVALLIQ INUIT ASSOCIATION

APPLICATION FOR ACCESS TO INUIT OWNED LAND

Office use only

Category

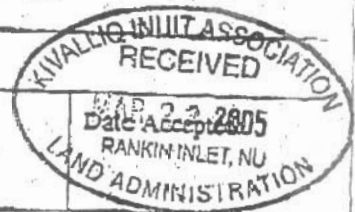
Application No.

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LULTI

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Rattiner



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| <u>NWB2MEAD204</u> | | <u>KVL 304C05</u> |
| <u>(renewal pending)</u> | | |

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☒ exploration (geophys-grd/air)
☐ drilling (diamond/ice, etc.)
☐ bulk sampling
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☐ bulk fuel storage
☐ other: _____

Construction:

- ☐ camp
☐ building
☐ winter road
☒ all-season road
☐ quarrying
☐ other: _____

Tourism:

- ☐ tourism facility
☐ outfitting
☐ other: _____

Municipality:

- ☐ bulk storage of fuel
☐ residential building
☐ commercial building
☐ other: _____

Research:

- ☐ wildlife/fish/birds/marine
☐ survey (grd/aerial/collars)
☐ collection of species
☐ research station
☐ other: _____

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Note: The land use fee is for the amount of land used on an annual basis.

13. a) The Applicant requests a Certificate of Exemption ☐

OR

b) The Applicant agrees to be bound by terms and conditions to be attached to the Inuit Land Use License or Lease. ☐

Sign name in full:

Signature

Brad Thiele

Date

18 March 05