



P.O. Box 119

GJOA HAVEN, NT X0E 1J0 kNK5 wmoEp5 vtmpq

TEL: (867) 360-6338

NUNAVUT WATER BOARD

FAX: (867) 360-6369

NUNAVUT IMALIRIYIN KATIMAYINGI

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: Wolfden Resources Inc. License No: _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: John Begeman Tel: (807) 346-1668
Fax: (804) 345-0284 E-mail: john.begeman@wolfdenresources.com
2. Project Manager: Andrew Mitchell Tel: (807) 346-1668 Fax: (804) 345-0284
E-mail: andrew.mitchell@wolfdenresources.com
3. Does the applicant hold the necessary property rights?
Yes. Wolfden holds the mining leases for the High Lake property, and is in the process of obtaining the necessary surface tenure for the proposed activities on both IOL and Crown lands.
4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)?
If so, please provide letter of authorization.
5. Duration of the Project
[] Annual
[X] Multi Year:
If Multi-Year indicate proposed schedule of on site activities
Start: February 1, 2007 Completion: March 1, 2012

CAMP CLASSIFICATION

6. Type of Camp
[] Mobile (self-propelled)
[X] Temporary (Temporary construction camp at Sand Lake)
[X] Seasonally Occupied: Weatherhaven camp- Occupied annually from March - November
[] Permanent
[] Other: _____

7. What are the design populations of the camp and the maximum population expected on site at one time? What will be the fluctuations in personnel?

The scope of this water license application includes construction of two camp facilities:

1. A temporary construction camp at the proposed Sand Lake Airstrip, and
2. A seasonal camp near High Lake.

Temporary camp facilities will be set up at Sand Lake to accommodate approximately 30 employees for construction of the all-weather road and airstrip. A new camp (a Weatherhaven Camp), will be constructed near High Lake to house up to 70 workers.

Sequencing of construction activities has been planned to ensure adequate accommodation for all workers. The maximum population expected at the High Lake site at one time will be approximately 70 personnel.

8. Provide history of the site if it has been used in the past.

The proposed camps will be located on previously undisturbed land.

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphologic features, and water bodies.

The High Lake property is located in the Kitikmeot region of Nunavut, approximately 550 km north-northeast of Yellowknife, NWT. The closest population centre is Kugluktuk, located 175 km west-northwest of the property. The property is approximately 45 km south of the Coronation Gulf, and is bordered on its eastern edge by the Kennarctic River.

The proposed Weatherhaven camp is located approximately 1 km southwest of the existing exploration camp at High Lake. Closest water bodies include Lake L24 to the southwest, and Lake L20 to the northeast. A map illustrating the proposed camp location is provided in the appended Project Description (Figure 1).

A temporary construction camp will be located east of the proposed airstrip at Sand Lake. The closest water body is Sand Lake to the west and northwest and the Kennarctic River to the east. A small, unnamed lake is located south of the proposed construction campsite. A map of the proposed temporary camp location is provided in the appended Project Description (Figure 2).

The surrounding area is characterized by significant topographic relief, including escarpments formed by basaltic cliff forming units, deep valleys and canyons cut into softer meta-sediments, and prominent hills formed by rock unit more resistant erosional forces.

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

The locations of the Weatherhaven camp and temporary Sand Lake construction camp were chosen based on suitable terrain, access via the all season road to the airstrip,

and proximity to operations. During a site visit in 2005, the KIA suggested that the exploration camp be relocated away from the shore of High Lake. The proposed Weatherhaven camp will be located about 1km southwest of High Lake, and is approximately 100m from the nearest water body (L24). Camp locations are shown in Figures 1 & 2 of the appended Project Description.

11. Is the camp or any aspect of the project located on:

☒ Crown Lands
☐ Commissioners Lands
☒ Inuit Owned Lands

Additional permits will be required and are currently in the application phase. Please refer to Table 2 that lists the required regulatory approvals for the proposed Relicensing activities attached to the application form.

12. Closest Communities (distance in km):

Kugluktuk, located 175 km west-northwest of the property.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

The following table summarizes consultation efforts by Wolfden in recent months:

Community	Name	Organization	Date Contacted	Telephone	Fax
Kugluktuk	Jack Kaniak	KIA	Dec. 1, 2005 January 23 2006 Jan 25, 2006 Feb 23 2006	867 982-3310	867 982-3311
Kugluktuk	Geoff Clark	KIA	Oct. 13, 2005	867 982-3310	867 982-3311
Vancouver	Donald Haviyak; Fred Elias; John Stevenson, John Donihee	KIA	January 26 2006	867 983-2458	867 983-2701
Toronto	Geoff Clark Stanley Anablak Bob Aknavigak	KIA	March 7 2006	867 982-3310	867 982-3311
Kugluktuk	Jack Kaniak Geoff Clark	KIA	March 30 2006	867 982-3310	867 982-3311

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?

The proposed activities will not impact traditional water use areas of communities. As mentioned previously, the nearest community is 175 km distant. Impacts to fish will be minimal given the relatively small volumes of water withdrawn from Sand Lake and L22 (the water sources), the treatment of sewage and greywater prior to release, and low/absent fish productivity of the selected effluent discharge locations.

Section 6 of the Project Description summarizes the potential environmental effects of the relicensing activities on wildlife and other aspects of the environment. Proposed mitigation is also described.

PURPOSE OF THE CAMP

15. ☒ Exploration
○ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)
(Omit questions # 16 to 21)
○ Other _____ (Omit questions # 16 to 22)
16.
○ Preliminary site visit
○ Prospecting
☒ Geological mapping
☒ Geophysical survey
☒ Diamond drilling
○ Reverse circulation drilling
○ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
○ Other: _____
17. Type of deposit:
☒ Zinc
○ Diamond
☒ Gold
○ Uranium
☒ Other: Copper, silver

DRILLING INFORMATION

PLEASE NOTE: All drilling activities are currently licensed and permitted under Water License NWB2HIG0506 and KIA land use license # KTL303C006. Information pertaining to exploration drilling is not within the scope of this application as this activity is already licensed as noted.

18. Drilling Activities
○ Land Based drilling
○ Drilling on ice
19. Describe what will be done with drill cuttings?
20. Describe what will be done with drill water?

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

A list a major additives that may be required for drilling are:

22. Will any core testing be done on site? Describe.

SPILL CONTINGENCY PLANNING

23. Does the proponent have a spill contingency plan in place? Please include for review.

Yes, please see the attached [Spill Contingency Plan – High Lake Relicensing Program](#). (There is also a Spill Contingency Plan in place for the existing High Lake exploration camp).

24. How many spill kits will be on site and where will they be located?

Emergency spill containment and recovery materials and supplies are available for immediate mobilization at any time. Mobile spill kits are located in dry shelters at the fuel dispensing/storage locations at the Sand Lake airstrip and Weatherhaven camp. These kits are designed for a spill capacity of 190 litres. Smaller spill kits will also be kept on transport vehicles. Please refer to the Spill Contingency Plan – High Lake Relicensing Program, section 6.1. The contents of the spill kits are described in Appendix 3.2 – 3.5 of the Spill Contingency Plan.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

Type	Quantity	Volume/Amount	Location
Diesel	One (1) double-walled tank (50,000 L/tank)	50,000 L	Weatherhaven
	Ten (10) 50,000 litre double walled tanks	500,000 L	Sand Lake airstrip
Gasoline	Ten (10) drums (205 L/drum)	2050 L	Airstrip/ Weatherhaven
Aviation Fuel Jet B	Twenty (20) drums (205 L/drum)	4100 L	Airstrip
Propane	Twenty (20) bottles (100 lb/bottle)	2000 lbs	Sand Lake & Weatherhaven

The total fuel capacity reflects the maximum amount of fuel that could be stored on site during the Relicensing Program (ie. the construction of road, camp(s), airstrip, etc). Fuel

will be stored in tanks at the Sand Lake airstrip and at the Weatherhaven camp. Fuel storage areas will be lined and bermed, and designed to hold 110% of the total tank capacity. A high-density polyethylene liner will be installed within each tank farm to prevent ground penetration of hydrocarbons in the event of a spill.

Aircraft using the airstrip during operations will not be refueled on site, so there will be no long-term storage of aviation fuel at Sand Lake. Helicopter support during the construction phase may be required, and a small amount of Jet B fuel will be on hand to refuel the helicopter, should it be required from time to time during construction. The helicopter will be at High Lake to support exploration work during this same time period. Propane may be required for spot heating.

Current MSDS sheets for the above-mentioned fuels are included in Appendix 4 of the Spill Contingency Plan.

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

Water source for Weatherhaven camp: Lake L22

Water source for Sand Lake airstrip temporary camp: Sand Lake

27. Estimated demand (in L/day * person):

⊗ Domestic Use: 250 L/day/person = 17.5 m³/day (70-person Weatherhaven camp)
Water Source: Lake L22

⊗ Domestic Use: 250 L/day/person = 7.5 m³/day (30-person Sand Lake camp)
Water Source: Sand Lake

⊗ Drilling Units: N/A (covered under existing WL) Water Source: N/A

⊗ Other: Water will be used for compacting the road/airstrip surfaces and dust suppression for road construction and maintenance –Water use will vary, however, volume withdrawn for both camp use and road maintenance will not exceed 100 m³ per day.

Water Source: Sand Lake

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? Describe:

Submersible pumps will be used for water intake at both L22 and Sand Lake. These pumps are equipped with mesh screens to prevent the entrainment and impingement of fish.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

Water quality will be monitored several times a year and analyzed for metals, pH and fecal content.

30. Will drinking water be treated? How?

Drinking water is treated with a small amount of disinfectant (bleach) in the holding tanks before passing through a filtration system. Approximately 1 cm³ of bleach is used for every 1 m³ of water in the treatment process.

31. Will water be stored on site?

Yes, water will be stored in holding tanks for camp use.

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

- ⊗ Camp Sewage (blackwater)

Camp sewage generated from the Weatherhaven camp will be treated onsite by a Rotary Biological Contactor (RBC) system. Treated effluent from the Weatherhaven camp will be discharged into Lake L20, a small lake located northeast of the Weatherhaven camp. Recent studies indicate that this lake does not support fish, and drains into non-fish bearing waters. The Sand Lake construction camp will be equipped with Pacto toilets. Toilet waste will be incinerated.

- ⊗ Camp Grey water

Grey water from the Weatherhaven camp will be drained along with toilet wastewater and treated using a Rotary Biological Contactor system and discharged as treated effluent to Lake L20. Greywater from the camp showers and kitchen drains for the Sand Lake construction camp will be deposited in a sump located at a distance greater than 30 m from the ordinary high water mark of the surrounding waterbodies.

- ⊗ Solid Waste

Burnable wastes will be incinerated in a high efficiency incinerator. Non-combustible solid waste will be stored temporarily on site, and then flown off site for disposal.

- ⊗ Bulky Items/Scrap Metal

Bulk items and scrap metal will be removed from site for proper disposal or recycling.

- ⊗ Waste Oil/Hazardous Waste

All hazardous waste will be managed in accordance with regulatory requirements and the Nunavut Department of Environment guidelines. Hazardous waste will be removed from site and disposed of at an approved facility. All shipments of hazardous waste will be tracked using the manifest system in compliance with Nunavut guidelines and the federal Interprovincial Movement of Hazardous Waste Regulations (SOR/2002-301). Waste oil will be incinerated onsite.

⊗ Empty Barrels/Fuel Drums

Empty fuel barrels and drums will be collected and transported to Yellowknife for recycling or disposal.

○ Other:

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

An Eco Waste Solutions incinerator has been ordered for the site. This is a modern two-stage incinerator, specifically designed for oxidation of municipal waste in remote applications. Performance literature obtained from the manufacturer as well as two studies published by Environment Canada confirm that the Eco Waste Solutions technology and the specific unit purchased for High Lake will be capable of meeting relevant CCME and Canada Wide Standards for emissions from waste streams similar to the waste stream generated at the camp.

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

Non-combustible solid waste will be stored temporarily on site. At regular intervals of time, waste will be flown off-site for disposal at a registered, licensed landfill facility. The planned destination would be Yellowknife, Northwest Territories.

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for sumps (if applicable).

The sump for greywater disposal at the Sand Lake Camp will be located to the northeast of the camp a minimum of 30 m from the high water level of the surrounding water bodies. The sump will be approximately 5 m x 5 m x 1.5 m deep and will be backfilled at the end of each operating season.

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

N/A

OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

Both the water supply and waste treatment disposal measures have been utilized in similar camp settings, including at Wolfden's Ulu property. Possible problems that may arise due to cold climate conditions include freeze-up of hose lines. Water intake lines will be heat traced and insulated to ensure flow in cold temperatures. Freeze-up of treated effluent water lines is not typical, as demonstrated through the successful

operation of the Rotating Biological Contactor system for the treatment of sewage and greywater in cold climate conditions at the Ulu site.

Contingency plans for line freeze-up include maintaining sufficient hose line onsite for quick replacement of frozen lines.

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

Please refer to the Project Description, section 7.0, for a complete summary of proposed abandonment and restoration activities.

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.
- ☐ Physical Environment (Landscape and Terrain, Air, Water, etc.)
 - ☐ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
 - ☐ Socio-Economic Environment (Archaeology, Land and Resources Use, Demographics, Social and Culture Patterns, etc.)
 - ☐ Other:

A comprehensive biophysical and socioeconomic baseline program was initiated in 2004 to provide background data on existing local conditions in regards to wildlife, vegetation, water, fish and aquatic life, and archaeology. Consultation and traditional knowledge gathering are also key components of this work. This baseline data collection has been undertaken to support the environmental impact assessment for the High Lake mining project, and has contributed to the broader knowledge base of this area. This information and knowledge has been incorporated into the proposed Relicensing Program design, impact assessment and proposed mitigation measures.

REGULATORY INFORMATION

40. Do you have a copy of
- ☐ Article 13 - Nunavut Land Claims Agreement
 - ☐ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
 - ☐ NWB - Interim Rules of Practice and Procedure for Public Hearings
 - ☐ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
 - ☐ NWTWB - Guidelines for Contingency Planning
 - ☐ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
 - ☐ Fisheries Act - s.35
 - ☐ RWED - Environment Protection- Spill Contingency Regulations

- Canadian Drinking Water Quality Guidelines
- Public Health Act Camp Sanitation Regulations
- Public Health Act Water Supply Regulations
- Territorial Land Use Act and Regulations

You should consult the above document, guidelines, and legislation for compliance with existing regulatory requirements.

[Wolfden has reviewed the noted regulations and guidelines](#)