



**SCREENING PART 2 FORM  
PROJECT SPECIFIC INFORMATION REQUIREMENTS (PSIR)**

**Prepared For:**

**GOLDEN BULL RESOURCES CORPORATION**

(A 100% Owned Subsidiary of Golden River Resources Corporation)

**Slave Project, Nunavut**

Prepared: July 18, 2007.

**Amended: January 18, 2010**

**(To allow for the screening of the annexation of the Rockinghorse (CO44-00-01A and B) IOL into the existing project permits.)**

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**MINERAL EXPLORATION**

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**Definition:** A project proposal with the objective of exploring an area to find geological anomalies. It involves site reconnaissance to locate broad and fiscal mineral deposits.

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**1. SUBMISSIONS**

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The Proponent must submit all information pertaining to the Project as a whole. The information requirements below are designed for the purpose of environmental assessment and are not limited to the scope of a single permit or license application.

NIRB does not accept references to an ftp site as a submission.

Provide NIRB with 1 (one) electronic copy and 1 (one) hardcopy of the following information in English.

All maps should be legible, electronic, include grids, be of appropriate scale, indicate the scale, include latitude and longitude references, title, legend and a north arrow. To the extent possible, avoid hand-drawn demarcations.

Please respond to all requests below, indicated by the number. If the request is not applicable to the project proposal, please indicate this in the response. If the request has been answered in a different section or report, please note the section or report where the response can be found.

All information and submissions must be accurate and signed and dated by the Proponent.

**PROJECT PROPOSAL COORDINATES**

The NIRB requires coordinates for the project proposal which reflect the entire project area as defined by:

- the boundaries of the mineral claim block(s) where proposed activities will be undertaken;
- the boundaries of the foreseen land use permit area to be applied for; and
- the location of any proposed infrastructure or activity(s).

The preferred method for submitting this information is through the use of a Geographic Information System (GIS) compatible digital file. Although an ESRI ArcView 3.x shape file (in decimal degrees) is the preferred interchange format, the NIRB has the capacity to receive over 100 GIS and CAD related formats, including MapInfo and AutoCAD, provided proper format and projection metadata is also submitted. **ATTACHED** (NIRB MapInfo Data.zip: in UTM NAD83, Zone 12).

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## 2. PROJECT DESCRIPTION

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### General

1. Name and location of proposed project.

**1a. Project Name** SLAVE PROJECT (Contwoyto Lake - Hood River - Rockinghorse Lake Area)

The SLAVE PROJECT is divided into three distinct geographic areas; the northern HOOD RIVER area the westerly ROCKINGHORSE LAKE and the more southerly CONTWOYTO LAKE area. The three project areas are NOT contiguous.

**1b. Co-ordinates: (HOOD RIVER AREA) (NAD83)**

Min Lat (degree/minute)	<u>66° 50' 00"</u>	Min Long (degree/minute)	<u>110° 47' 00"</u>
Max Lat (degree/minute)	<u>66° 58' 40"</u>	Max Long (degree/minute)	<u>111° 03' 30"</u>

NTS Map Sheet No: 076L/15

**1c. Co-ordinates: (CONTWOYTO LAKE AREA) (NAD83)**

Min Lat (degree/minute)	<u>65° 45' 40"</u>	Min Long (degree/minute)	<u>110° 22' 00"</u>
Max Lat (degree/minute)	<u>65° 56' 45"</u>	Max Long (degree/minute)	<u>110° 53' 30"</u>

NTS Map Sheet No: 076E/15

**1d. Co-ordinates: (ROCKINGHORSE LAKE AREA) (NAD83)**

Min Lat (degree/minute)	<u>66° 32' 30"</u>	Min Long (degree/minute)	<u>112° 16' 30"</u>
Max Lat (degree/minute)	<u>66° 38' 50"</u>	Max Long (degree/minute)	<u>112° 21' 00"</u>

NTS Map Sheet No: 086I/09

2. Contact information for proponent(s) and other project contacts.

**2a. Applicant's full name and mailing address:**

<u>Golden Bull Resources Corporation,</u>	Fax:	<u>61 3 8532 2805</u>
<u>(a 100% owned subsidiary of Golden River</u>		
<u>Resources Corporation)</u>		
<u>Level 8, 580 St Kilda Road, P.O. Box 6315,</u>	Phone:	<u>61 3 8532 2860</u>
<u>St Kilda Road Central Melbourne,</u>		
<u>Victoria 8008 Australia.</u>	Email:	<u>peterl@axisc.com.au</u>

**2b. Primary contact's full name and mailing address:**

<u>Bruce Goad, P. Geo., Consulting Geologist,</u>	Fax:	<u>604-533-2255</u>
<u>Inukshuk Exploration Inc., 21861 44A Avenue,</u>	Phone:	<u>604-533-2255</u>
<u>Langley, British Columbia.</u>	Email:	<u>inukshuk@uniserve.com</u>
<u>CANADA V3A 8E1</u>		

3. List of acts, regulations and guidelines that apply to project activities:
  - Article 13 - Nunavut Land Claims Agreement.
  - Nunavut Water Board (NWB) – Nunavut Water and Nunavut Surface Rights Tribunal Act (for Water Licence) - Interim Procedures and Information Guide for Applicants, Interim Rules of Practice and Procedure for Public Hearings.
  - Fisheries Act – Section 35.
  - RWED - Environment Protection - Spill Contingency Regulations.
  - Department of Justice (GN) - Labour Standards Act and Fairness Practices Act.
  - Department of Health and Social Services (GN) - Public Health Act - Camp Sanitation Regulations, Water Supply Regulations.
  - Department of Environment (GN) – Spill Contingency Planning and Reporting Regulations.
  - Indian and Northern Affairs Canada - Territorial Land Use Act - Territorial Land Use Regulations (for Land Use Permit), Canada Mining Regulations.
  - Environment Canada – Canadian Environmental Protection Act.
  - Transport Canada and Department of Community and Government Services (GN) - Transportation of Dangerous Goods Act - Transportation of Dangerous Goods Regulations.
  - Canadian Drinking Water Quality Guidelines.
4. List of approvals, permits and licenses required including the authorizing agency, activity to which the authorization applies, and dates.
  - KIA Application for access to IOL; Requested duration of licence: to December 31, 2013: Application submitted and received: KTL307C014.
  - NIRB Project Proposal - To grant project approval between July 01 2007 and December 31, 2013: Current document; Requested duration of licence: to December 31, 2013: Application submitted and received: 07EN067.
  - Nunavut Water Board; water use licence; Requested duration of licence: to December 31, 2013: Application submitted and received: 2BE-SLA0814.

### **Project Information**

5. History of the site if it has been used in the past.

#### **HOOD RIVER SITE:**

The Hood River area has been explored in the past by several exploration companies; however, no signs of old camps remain. Literature indicates old camp sites were located on the Hood River and on Esker (Reno) Lake. There is a large amount of stored core in core racks at the west end of Penthouse which suggests that there may have been a camp located at this site in the past. Golden River Resources undertook a limited (3-4 week), three person reconnaissance-style prospecting program of the IOL during 2004 and 2006.

#### **CONTWOYTO LAKE SITE:**

The Contwoyto Lake area has also been explored in the past by several exploration companies. Only the remains of one old camp (the Hecla Camp) are visible. This camp site is on a large esker and will be considered as an alternate camp site for the Golden Bull Resources 2011 base camp. Golden River Resources undertook a limited (3-4 week), three person reconnaissance-style prospecting program of the IOL during 2004 and 2006. The

Contwoyto area consists of five distinct, non contiguous IOL areas: CO08-001A, B, C, D and E.

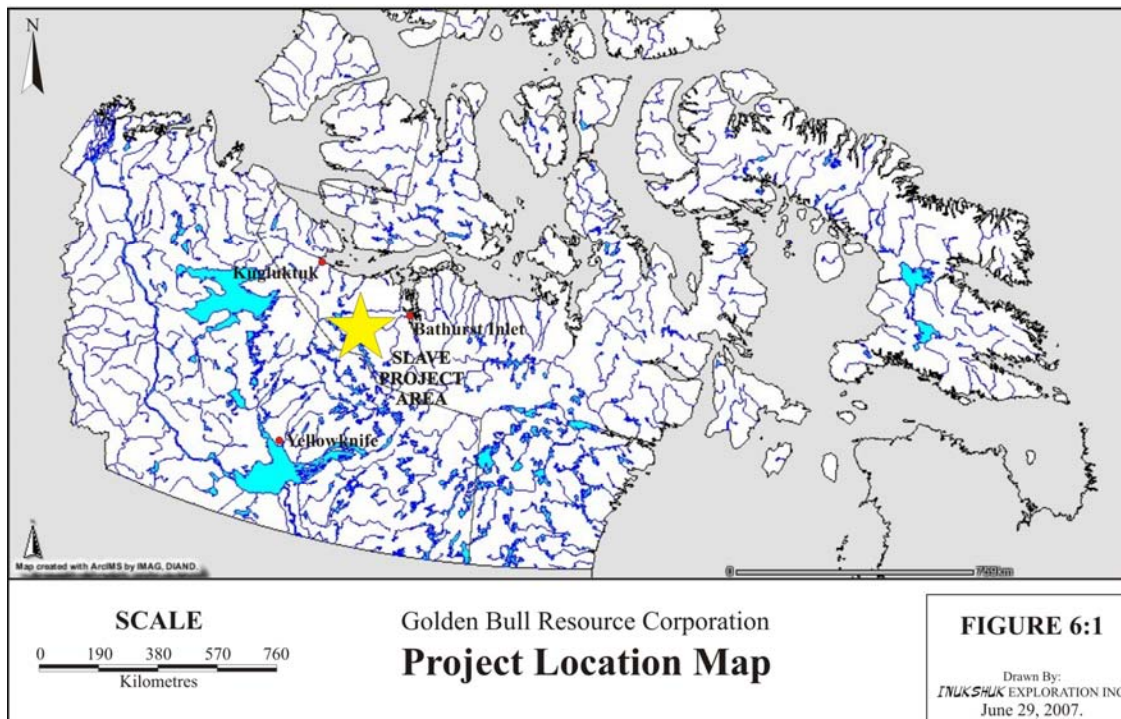
#### ROCKINGHORSE LAKE SITE:

The Rockinghorse Lake area has also been explored in the past by several diamond exploration companies. Golden Bull Resources has not undertaken any work in this area. This area consists of 2 distinct, non-contiguous IOL areas; CO44-00-01A and CO44-00-01B.

6. Map of the project site within a regional context indicating the distance to the closest communities.

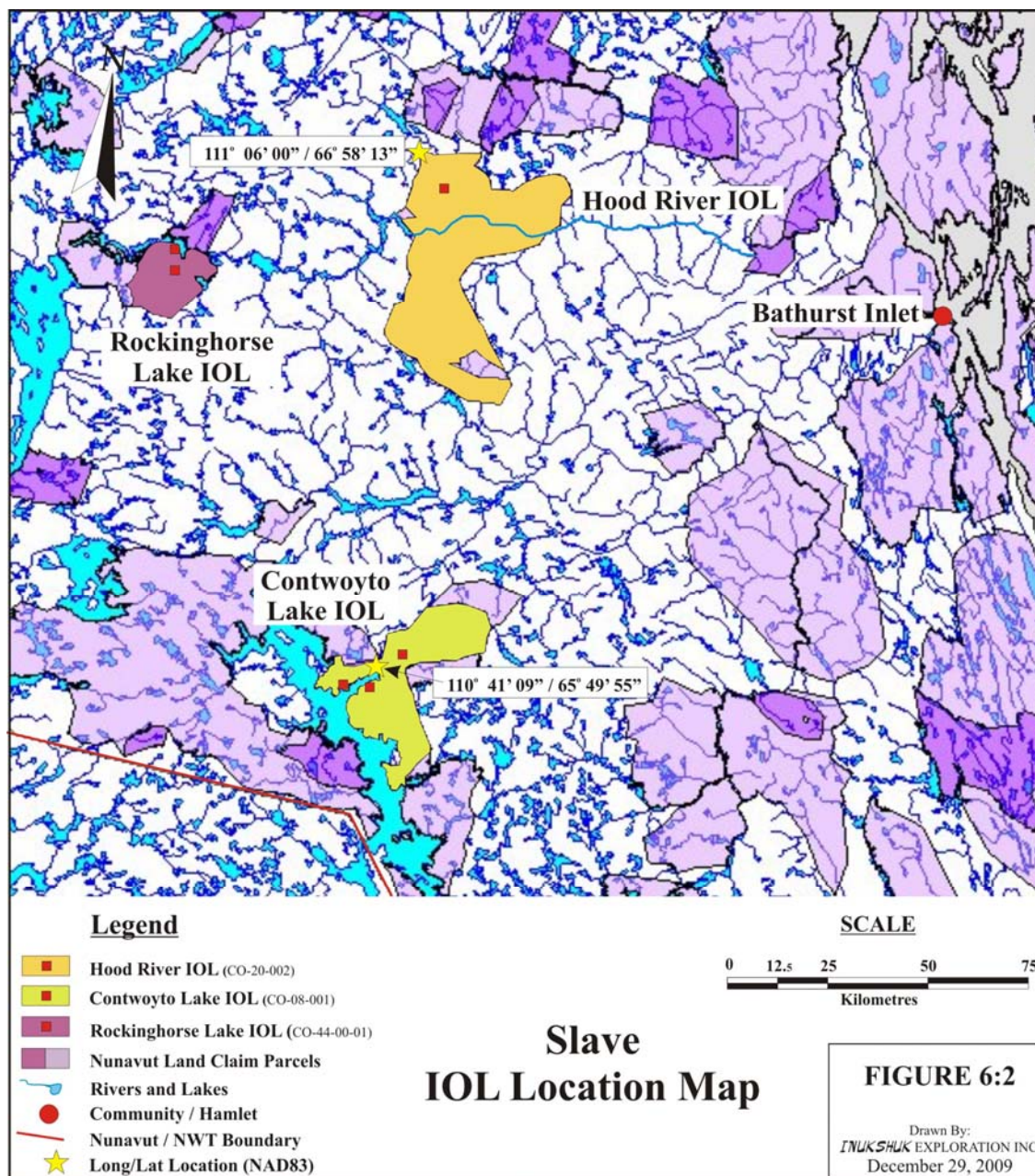
The closest community with regularly scheduled air service is Kugluktuk (formerly Coppermine) which is located approximately 350 kilometres northwest of the Contwoyto Lake Concessions. First Air has scheduled flights everyday from Yellowknife to Kugluktuk. The main centre for all supplies, expediting services and transportation to the land holdings is through Yellowknife, situated approximately 410 kilometres southwest of the Contwoyto Concessions (Figure 6-1).

Figure 6-1 shows the location of the SLAVE PROJECT in relation to communities. Figure 6-2 shows the location of the CO-08, CO-20 and CO-44 IOL boundaries. Figure 6-3 (Hood (CO-20-002) IOL), Figure 6:4 (Contwoyto (CO-08-001) IOL) and Figure 6:5 (Rockinghorse (CO-44-00-01A and B) IOL) shows the outline of the Golden Bull Resources' IOL leases in relation to the encompassing Inuit Owned Land package.

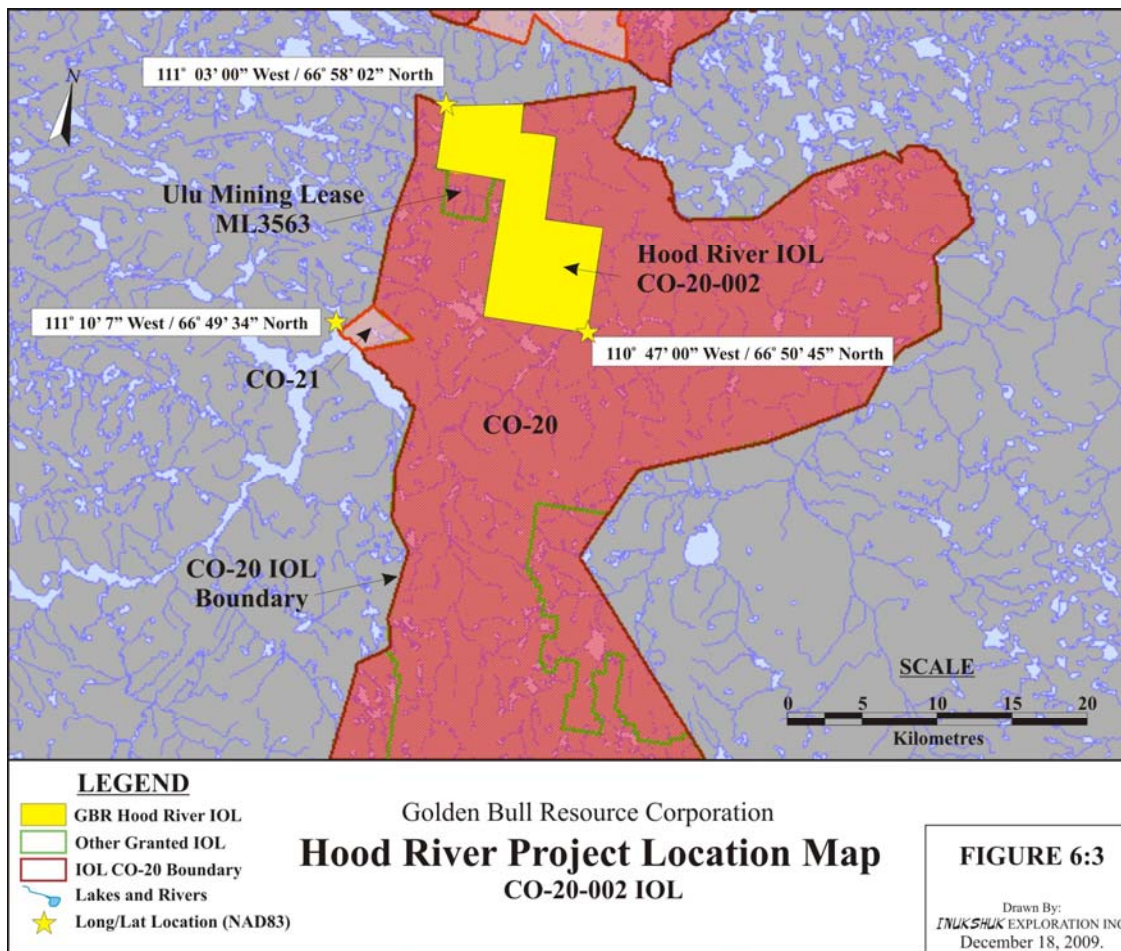


**FIGURE 6-1** Location of the Slave Project Area within Nunavut, Canada.



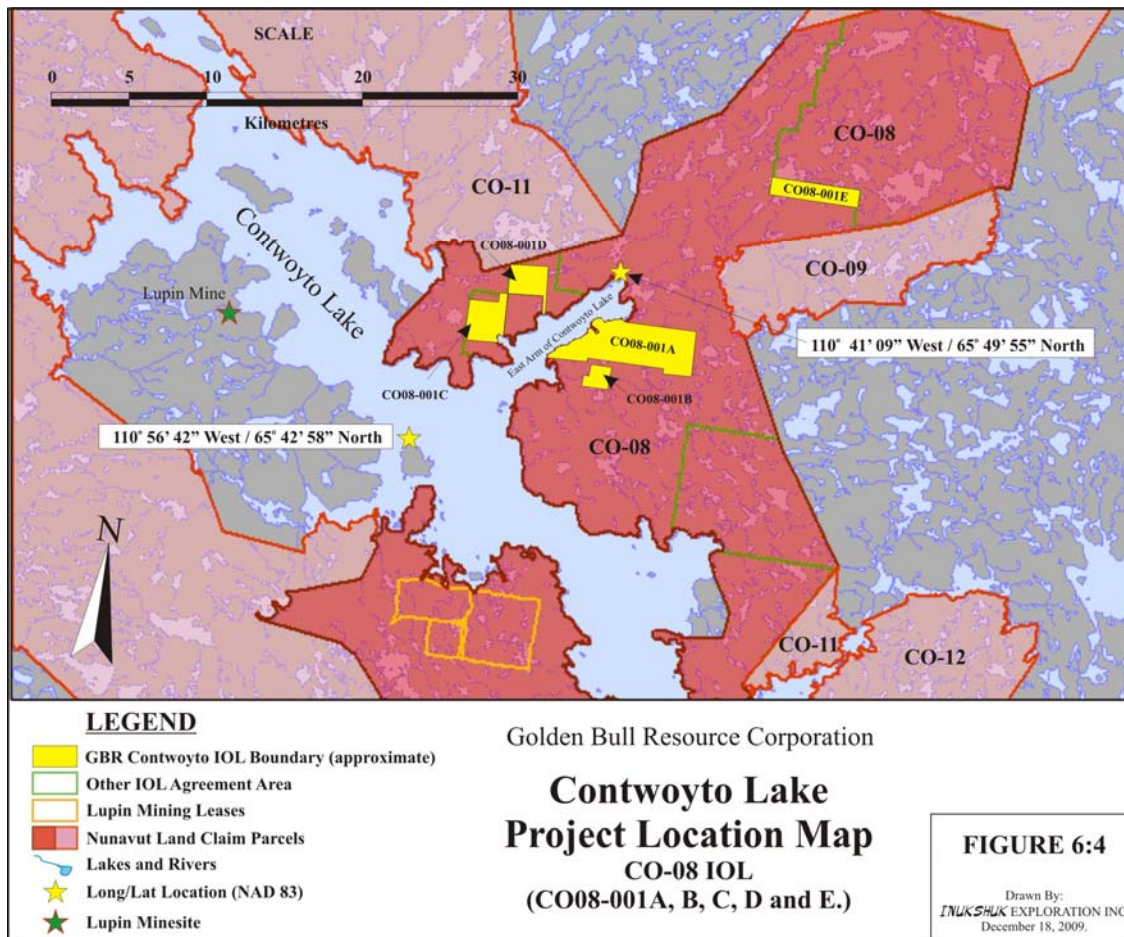


**FIGURE 6-2** Location of the Slave Project Hood, Contwoyto and Rockinghorse IOLs, Nunavut.

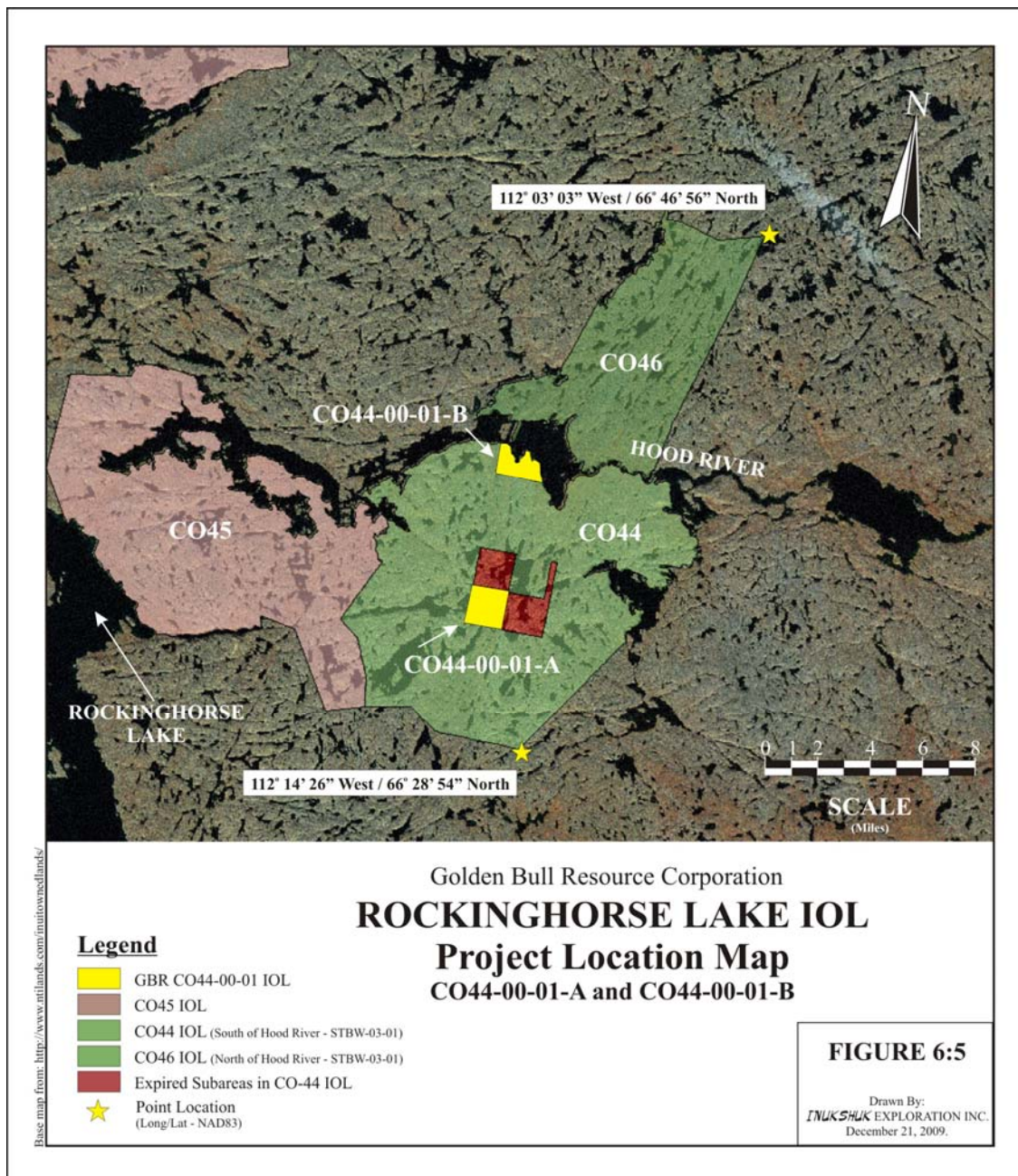


**FIGURE 6-3** The Hood River Project Location Map (NTS: 076L/15).





**FIGURE 6-4** The Contwoyto Lake Project Location Map (NTS: 076E/15).



**FIGURE 6-5** The Rockinghorse Lake Project Location Map (NTS: 086I/09).

- Map of any camp site including locations of camp facilities.

There is currently no camp established on site at the Hood River, Contwoyto Lake or Rockinghorse Lake project properties. A base camp will be established on the Hood River IOL (CO-20-002) during 2010 which (during that year) will service both the Rockinghorse and Contwoyto IOLs.

- Map of the project site indicating existing and/or proposed infrastructure, proximity to water bodies and proximity to wildlife.

SEE: Figures 17-1, 17-2, 36-1 and 36-2 below in sections 17 and 36 respectively.



9. Describe the type of mineral resource under exploration. Indicate if the mineral of interest is any of the following:

- Base metals - YES
- Diamonds - NO
- Uranium - NO
- Other - Precious metals; gold and silver

The current project will have a focus on gold (and base metals) exploration.

10. Discuss the project need and purpose.

The main objectives of the proposed field program for 2010, 2011, 2012 and 2013 are:

- i) To gather additional information about the known mineral deposits and their setting to determine if these deposits can be safely and economically extracted while protecting the environment.
- ii) To further explore the area for potential for additional resources.
- iii) To learn more about the environment, the land and its people so that the project can be designed to protect the environment and people and to bring meaningful benefit to the people.

In order for Golden Bull Resources to achieve these goals, a program of prospecting, geologic mapping, geophysical exploration, diamond drilling, and the initiating of environmental baseline work will be required.

This proposed multi-year program will ideally commence early Spring 2010 and continue through (contingent upon ongoing positive exploration results) to 2013 to terminate at a decision point in late summer 2013. The program will run through the summer months (June-September) each year with camp de-mobilization planned at the end of the field season each year. To support the program, two temporary base camps are being proposed, one in the northern Hood River Area (primary location is at Penthouse Lake and potential secondary locations are at Esker Lake and on the Hood River: Figure 17:1) which will be active during 2010 and one in the southern Contwoyto Lake Area (either on the south shore of the East arm of Contwoyto Lake or as a backup, secondary location, at the old Helca Camp shown of Figure 17:2). The Contwoyto Camp would be active during the 2011 field season. The location of the camp in the final years (2012, 2013) will depend on which area produces the better exploration results from the previous field exploration programs.

#### HOOD RIVER AREA:

Gold mineralization similar to that found in the adjacent ULU Property has been identified on surface in numerous areas within the CO-20-002 IOL Hood Project area. The company proposes to explore the property to identify the extent of the mineralization. A program of ground geologic mapping and sampling, geophysical surveying (Magnetics, IP and EM) will be undertaken. If time permits, a limited program of diamond drilling is proposed for late 2010 - otherwise all drilling will be deferred to 2011. Additional prospecting, mapping, geophysical surveying and drilling programs are planned for the 2011-13 field seasons if exploration results are positive.

#### CONTWOYTO LAKE AREA:

Gold mineralization similar to that found in the adjacent LUPIN Property has been identified on surface in banded iron formation units in numerous areas within the CO-08-001 IOL. The company proposes to explore the property to define the extent of the mineralization. A program of geologic mapping and sampling, ground geophysical surveying (Magnetics and EM) and diamond drilling is proposed. This program is expected commence in the spring of the 2010 field season.

#### ROCKINGHORSE LAKE AREA:

This property has yet to be evaluated by GBR personnel. A program of geologic mapping, prospecting and sampling is proposed. This program is expected commence in the spring of the 2010 field season and be based out of the Hood Camp.

#### 11. Discuss alternatives to the project and alternatives to project components.

The timing of the proposed exploration program currently is proposed to be initiated in the Spring of 2010 and (assuming ongoing positive exploration results) it is expected to be completed by 2013. This schedule will allow for a full evaluation on each of the IOL areas (Hood River, Contwoyto Lake and Rockinghorse) with the subsequent exploration seasons being used to focus the program on exploring and further drilling of mineralization / structures identified in the previous years.

#### 12. Indicate the type of exploration activity:

- Geophysical work (indicate ground and/or air)

Ground geophysical (MAG, EM,  $\pm$ IP) surveys are planned on grid areas yet to be established.

- Exploration drilling

Exploration drilling is planned to test known surface showings and any geophysical anomalies identified by the proposed surveys. The maximum hole depth is estimated to be approximately 300m.

- Exploration stripping and or trenching (mining shallow bedded mineral deposits in which the overlying material is stripped off, the mineral removed and the overburden replaced) (if stripping/ trenching applies, please see NIRB's Advanced Exploration PSIR)

Limited exploration stripping, trenching or overburden removal may be planned during the program. Old trenches on the CO-20-002 IOL and CO-08-001 IOL may be cleaned out and extended if required. If blasting is required, wildlife activities will be monitored and blasting will not be undertaken if any wildlife is observed in the regional area.

- Deposit drilling/ Preliminary Delineation drilling

Strictly exploration drilling is planned. At this point in the exploration program, no deposit drilling or delineation drilling will be required or undertaken.

- Bulk Extraction/ Detailed Delineation drilling (if bulk extraction applies, please see NIRB's Advanced Exploration PSIR)

No Bulk Extraction or Detailed Delineation drilling will be undertaken.

- Other

Soil sampling may be undertaken on the grid areas. Samples will be taken at 25m intervals. Samples will be ideally obtained from areas of frost boil; however, if this structure is not locally available and the overlying layer of top soil has to be disturbed at the sample site, it will be replaced after the sample has been obtained.

#### 13. Describe **all** activities included in this project.

- Satellite remote sensing

There will be no satellite remote sensing undertaken.

- Aircraft remote sensing

There will be no aircraft remote sensing undertaken.

- Soil sampling

Minor area within the grids yet to be established on the properties may be sampled. If top soil is removed during soil sampling it will be replaced after the sample has been obtained.

- Sediment sampling

There will be no stream/lake sediment sampling undertaken.

- On land drilling (indicate drill type)

A 2000 to 3000m diamond drill program is proposed depending upon initial geological and geophysical results. This will be split approximately 50/50 between the Hood River and Contwoyto IOL concessions with potentially subsequent drilling being undertaken on the Rockinghorse IOL in upcoming years (2011-13: contingent upon positive initial 2010 evaluation of the property).

- On ice drilling (indicate drill type)

No "On Ice" drilling is planned.

- Overburden removal

Trenching may be required to expose areas of mineralized structures. All trenches will be remediated upon completion. No stripping or road building is planned so there should be no overburden removal. Any topsoil removed during the construction of the camp will be saved and replaced during the remediation process. If top soil is removed during soil sampling it will be replaced after the sample has been obtained.

- Road use and/or construction (please see NIRB's Winter Road PSIR or All-weather Road PSIR)

No road use or construction is planned.

- Airstrip use and/or construction

During subsequent (2011, 2012 or 2013) years of the proposed program, access to the Lupin, Jericho or Ulu strip may be negotiated; however, no construction of airstrips is planned. The larger lakes in the area (Penthouse and Contwoyto) and adjacent to the proposed camp sites will be used as landing strips for float equipped aircraft.

- Camp use and/or construction

It is proposed that Golden Bull Resources (a 100% owned subsidiary of Golden River Resources Corporation) establish an exploration camp at the west end of Penthouse Lake during early 2010. An alternate location for this site would be on the esker at Esker Lake located immediately SE of the C0-20-002 IOL or on the Hood River (Figure 17-1). During 2011, this camp may be relocated to the proposed site indicated on the East Arm of Contwoyto Lake (Figure 17-2). When being utilized to the maximum, these camps could potentially host up to approximately 20-25 people (8 man geological crew, cook, cook's helper/first aid attendant, pilot, engineer, camp manager plus 2 helpers and a 5 person drill crew). This camp will be de-mobilized back to Yellowknife after each season, leaving only the tent floors in place. At the end of the program (2013) the camp will be entirely removed and the location(s) completely remediated.



### Fuel transportation and storage

During the 2010 program, fuel will also be flown directly to camp in via float equipped twin otter aircraft capable of landing on Penthouse Lake. In subsequent years of the proposed program, access to the local airstrips may be negotiated and all fuel required by the project will be flown from Yellowknife to one of the existing local airstrips (Jericho, Lupin or Ulu) in the project area. From here it will be ferried via charter helicopter directly to the fuel containment berm at the base camp. Although both Tahera and Oz Minerals (Zinifex/Wolfden) have been approached and are amenable to Golden Bull Resources using the airstrip; landing rights have yet to be negotiated/confirmed. In the subsequent years, again, small amounts of fuel may also be flown directly to camp via float equipped twin otter aircraft capable of landing on either Penthouse Lake or Contwoyto Lake.

Fuel will be locally moved using the charter helicopter that will be based at the base camp. Regardless of where the fuel arrives (airstrip or lake) it will be repositioned to the main base camp area (either Hood or Contwoyto Camp) and stored in a portable berm area capable of holding 110% of the contained fuel.

- Explosives transportation and storage

At this point the use of explosives is not envisaged; consequently no explosives are currently planned be transported or stored; HOWEVER, I would like to have the option of using explosives for a trenching program if, on evaluation of mineral structures, it becomes necessary to trench to gain a good representative sample of mineralization. Explosives will obviously be under the care of a trained, licenced blaster with all explosives transported and stored, as required by law, in a locked magazine.

- Chemical transportation and storage

The chemicals to be used on site will be limited to household-strength cleaning supplies such as Javex, ammonia-based window/countertop sprays, wash soaps, degreasers, etc. In addition, limited miscellaneous items such as antifreeze, insect repellent and aerosols will be available. All items will be stored in their original containers in their respective storage / use areas, and removed off-site with routine garbage backhauls. When drilling is under way, the contractor responsible will store the required drilling muds, additives, oils and lubricants in a temporary shed at drill site or camp; upon annual termination of the project, these materials would be removed via back haul to Yellowknife to be properly disposed of in a landfill. All hazardous materials, cleaners, lubricants and drill additives will be stored in a wooden walled and floored tent at the base camp.

- Pit and/or quarry (see NIRB's Pits and Quarries PSIR)

No pits or quarries will be established other than small holes dug for the sump and ash (burnt garbage/sewage). The sumps/pits will be remediated at the end of each field season. Any trenches blasted will be back filled as best as possible with available excavated material.

- Work within navigable waters

No boats will be used onsite and no work will be undertaken within navigable waters.

- Other

Geological mapping, prospecting and geophysical surveys will be conducted on foot and supported by helicopter with little to no disturbance to the environment. Secondary geophysical surveys may include the use of snowmobiles early in 2010, 2011 and possibly 2012.

14. Indicate whether any of the following Department of Fisheries and Oceans (DFO) Operational Statement (OS) activities apply to the project proposal:

- Bridge Maintenance

No bridges will be established or maintained during the duration of the proposed program.

- Clear Span Bridge

No clear span bridges will be established or maintained during the duration of the proposed program.

- Culvert Maintenance

No culverts will be established or maintained during the duration of the proposed program.

- Ice Bridge

No ice bridges will be established or maintained during the duration of the proposed program.

- Routine Maintenance Dredging

No routine maintenance dredging will be undertaken during the duration of the proposed program.

- Installation of Moorings

No moorings will be installed or maintained during the duration of the proposed program. A small shoreline dock may be required to ease loading and unloading of the aircraft.

Please see DFO's Operational Statements for specific definitions of these activities available from either NIRB's ftp site at

[http://ftp.nunavut.ca/nirb/NIRB\\_ADMINISTRATION/](http://ftp.nunavut.ca/nirb/NIRB_ADMINISTRATION/) or DFO's ftp site at [http://www.dfo-mpo.gc.ca/canwaters-eauxcan/index\\_e.asp](http://www.dfo-mpo.gc.ca/canwaters-eauxcan/index_e.asp)

15. If any of the DFO OS apply to the project proposal, does the Proponent agree to meet the conditions and incorporate the measures to protect fish and fish habitat as outlined in the applicable OS? If yes, please provide a signed statement of confirmation.

None of DFO – OS appear to apply to this project

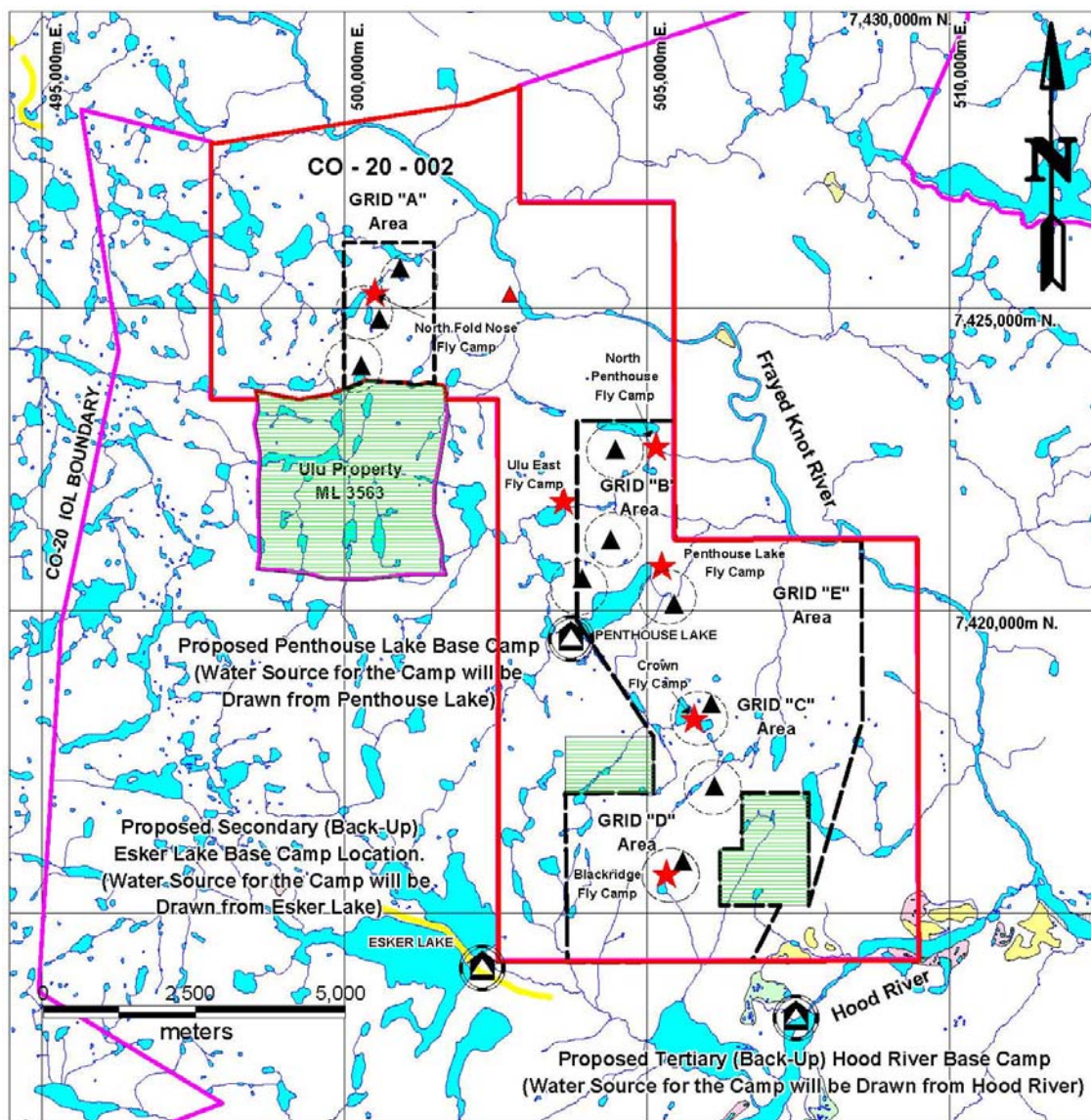
16. Provide a schedule for the above activities

A schedule is not required.

### **Geophysical**

17. Indicate on map the boundary subject to air and/or ground geophysical work.

The location of the grid areas over which the Magnetic, EM and IP geophysical surveys will be performed is shown in Figures 17:1 and 17:2. Currently, no geophysical surveys are planned for the Rockinghorse IOL.



#### LEGEND

- ★ Potential Fly Camp Locations
- ⊙ Proposed (and Back-Up) Base Camp Location
- ▲ Potential Drill Site Locations
- Potential Adjacent Water Source For Drilling
- ▭ Proposed area of Geophysical Surveys
- GBR IOL Boundary
- CO - 20 Boundary
- ▨ Excluded Areas
- ▲ Known Archaeological Site

FIGURE 17-1

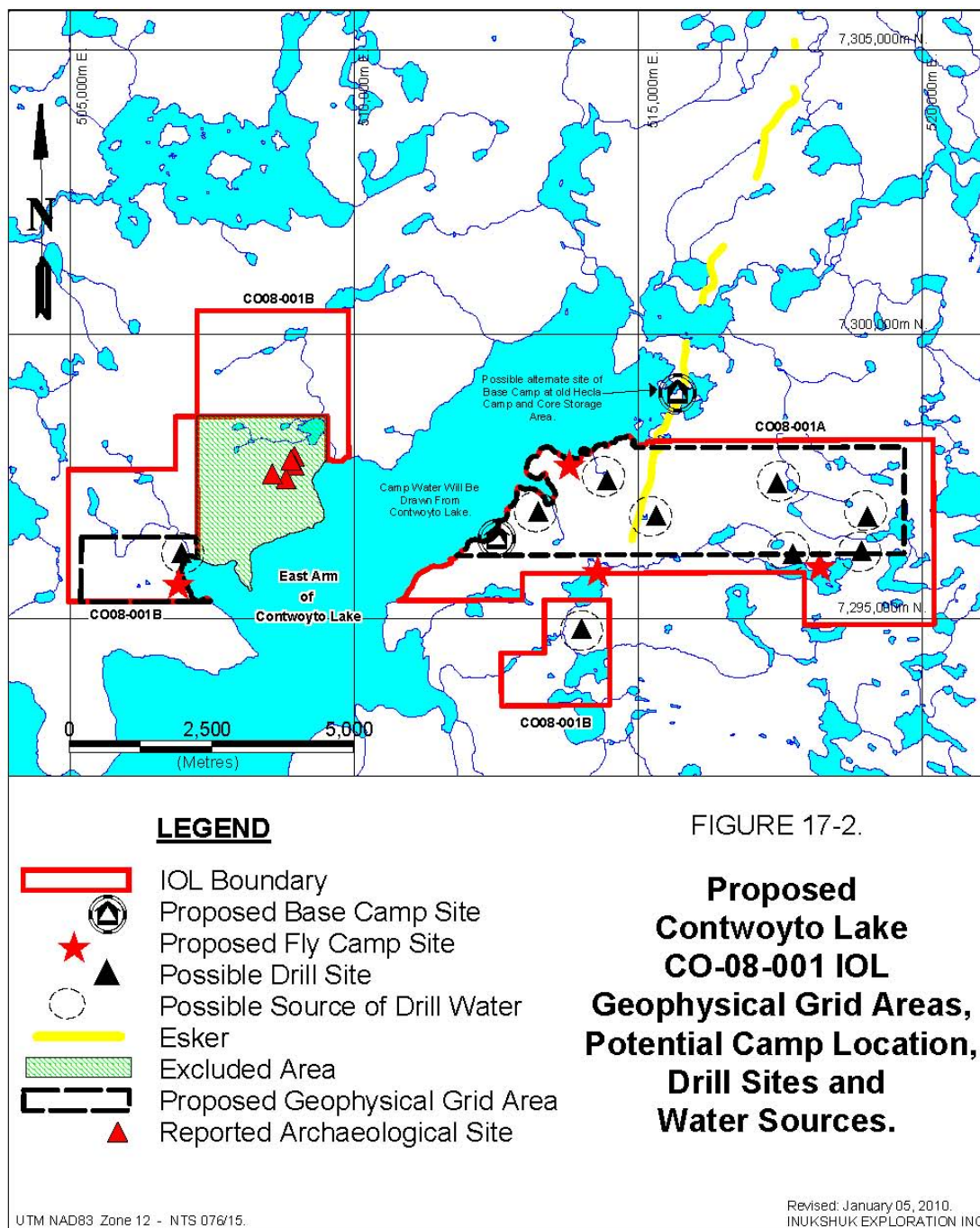
**Proposed Hood River  
(CO - 20 - 002) IOL:  
Geophysical Grid Areas,  
Potential Camp Site  
Locations, Drill Sites  
and Water Sources.**

UTM NAD83 Zone 12 - NTS: 76L/15

UPDATED: January 05, 2010.  
INUKSHUK EXPLORATION INC.

**Figure 17-1** Proposed Hood (CO-20-002) IOL Geophysical Grid Area. (NAD83).





**Figure 17-2** Proposed Contwoyto (CO-08-001) IOL Geophysical Grid Area (NAD83).

18. Provide flight altitudes and locations where flight altitudes are below 300m. At the point of permitting (January 2010) no airborne surveying is planned during the proposed program. If it becomes necessary all altitudes will be maintained above 300m.

## Drilling

19. The number of drill holes and number of meters (provide estimates and maximums where possible).

At the point of permit submission (January 2010), it is estimated that approximately up to 30 short drill holes will be collared. Approximately 2000 to 3000 metres of land based drilling will be planned. This drilling will be undertaken during 2010 and 2011. Obviously, the number and depth of these holes may change contingent upon results achieved.

20. Drill additives used.

The exact drill additives are not known at this time. Golden Bull Resources Corporation will ensure that drilling contractor maximize the use of non-toxic and biodegradable additives. The Spill Contingency Plan will be updated with appropriate MSDS sheets once the additives have been determined.

However, until confirmed, it is assumed that the following materials may potentially be present at the drill site:

- drill fluid additive “550X polymer” (consists of copolyacrylamide / sodium acrylate and does not have any hazardous ingredients)
- tube grease - Beacon 2, Beacon 3, threokote 706, Z-50 pipe dope
- calcium chloride flake
- circulation polymer – G-stop
- antifreeze – Esso HD antifreeze
- rod grease – Big Bear diamond drill rod grease
- drill fluid additive – 550X polymer
- motor oil – super plus SAE 10W30 and 15W-40
- hydraulic oil – Harmony AW 22, 32, 46, 68

21. Describe method for dealing with drill cuttings.

Drill cuttings will be pumped/directed to a sump (natural depression or temporary dike) located a minimum of 30 metres from any surface water body where the water will then infiltrate back into ground and the cuttings will settle out; direct flow of the drill water back into a water body will not be permitted or possible; consequently, no additional impacts are created. On completion of the drill hole, the cuttings will be allowed to dry out and subsequently buried. If overburden has to be disturbed, it will be removed and stockpiled so that it can be replaced on top during backfilling. All sumps shall be backfilled with native surficial material upon completion of drilling and contoured to match the existing landscape.

If drilling on ice is absolutely required, drilling fluids and cuttings will be contained to prevent contact with the ice surface or water. A method to clean up an accidental spill of this material will be devised and the required equipment made available prior to the commencement of operations. Fluids and/or cuttings will be disposed of on land in a natural depression or excavated sump or otherwise in accordance with the land use permit.

22. Describe method for dealing with drill water.

DIAMOND DRILL: Bio-degradable drilling fluids will be used at all times where ever possible. Drilling fluids will be directed into a sump or (a series of) settling tanks.

Cuttings will be settled out and the water filtered back into the environment or re-circulated for drilling. Drill cuttings once settled will be allowed to dry and subsequently will be buried.

CORE SAW: Wastewater from core sawing will be controlled to prevent erosion of the ground surface and the silting of watercourses. Where practicable, it should be contained and recycled through the core saw. Cuttings from sulphide-rich core have the potential to acidify any soils with which they contact. All cuttings and unwanted core off-cuts or pieces will be contained and disposed of by burial or otherwise disposed of according to regulations.

**23. Describe how drill equipment will be mobilized.**

The drill, drilling equipment and drill accessories (pumps, hose, tanks, etc.) will be mobilized to the site via aircraft. Permission to utilize one of the three local runways has been requested, but nothing as yet has been formalized. Once at the airstrip, the drill and ancillary equipment will be transported to and from the drill sites via contract helicopter based at the base camp. No roads or skid tracks will be utilized.

**24. Describe how drill holes will be abandoned.**

All holes will be temporarily plugged immediately upon completion of the drilling, using whatever safe means available (e.g. rocks), to eliminate any hazard to wildlife. Prior to, or on completion of, the program, all open holes will be plugged with a proper down hole plug and the area above the plug filled in. If later relocation of the hole is not required, casing will be removed whenever possible. Remaining casing will be cut off to ground level or below and capped. Any excess drill chips will be poured back down the hole. Any holes with flowing water will be permanently sealed unless written instruction from the relevant authority indicates otherwise.

**25. If project proposal involves uranium exploration drilling, consider the potential for radiation exposure and radiation protection measures. Please refer to the *Canadian Guidelines for Naturally Occurring Radioactive Materials* for more information.**

Uranium is not a concern with this project.

**Transportation**

**26. Describe how the site will be accessed and how supplies will be brought to site. (show route on map)**

The site will be accessed via air transport; supplies and materials required by the project will be flown from Yellowknife to one of the existing local airstrips (Jericho, Lupin or Ulu) in the project area. Although both Tahera and Zinifex (Wolfdon) have been approached and are amenable to Golden Bull Resources / Golden River Resources using the airstrips; landing rights have yet to be negotiated/confirmed. Weekly supply flights will be flown directly into the active camp via float equipped (twin) otter aircraft capable of landing on either Penthouse Lake or Contwoyto Lake. Supplies/materials flown from Yellowknife to one of the local airstrips will be moved locally using the charter helicopter that will be based at the base camp. .

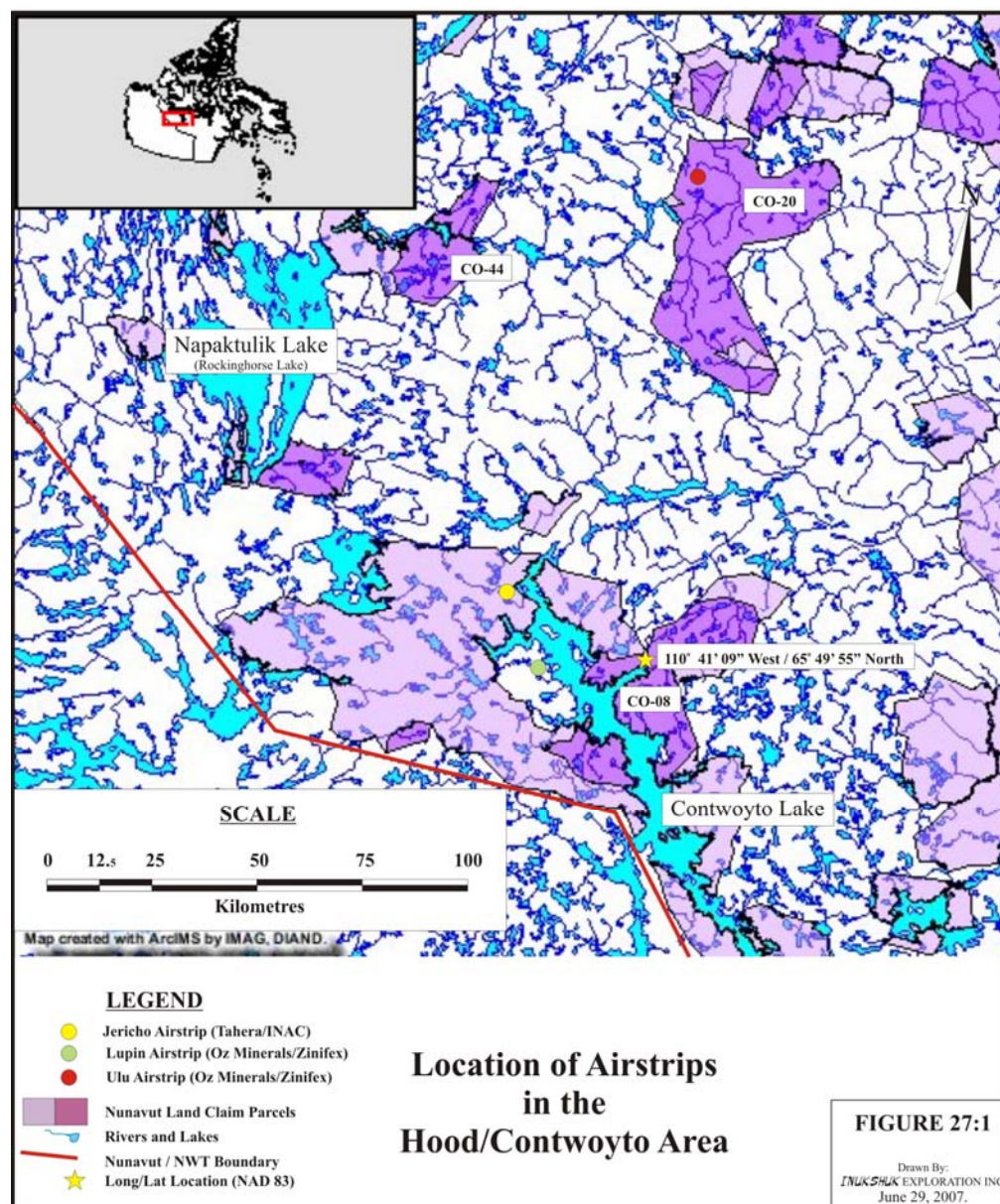


If an airstrip is being used or constructed provide a description and its location. (show location on map)

There are three active airstrips in or adjacent to the project area (Figure 27:1):

Name	Length	Type	Owner	Northing	Easting
Lupin	1951m	gravel strip	Zinifex (Wolfdon)	65° 45' 33" N	111° 15' 00" W
Jericho	1050m	gravel airstrip	Tahera	7,322,100m N	479,000m E
Ulu	1350m	gravel airstrip	Zinifex (Wolfdon)	66° 52' 57" N	111° 00' 20" W

It is possible that the airstrip at Lupin, Jericho or Ulu sites will be utilized. Otherwise, float equipped aircraft will be utilized to transfer material/fuel directly from Yellowknife to the camp on either Penthouse Lake or Contwoyto Lake.



27. Describe expected flight altitudes.

Flight altitudes of aircraft servicing the camp are expected to be above 600m; however, ceilings for VFR flights will obviously be affected by the current weather conditions. Helicopter crew setout flights will be at times below 600 m; however, in **ALL** cases, low flights over wildlife will be prohibited.

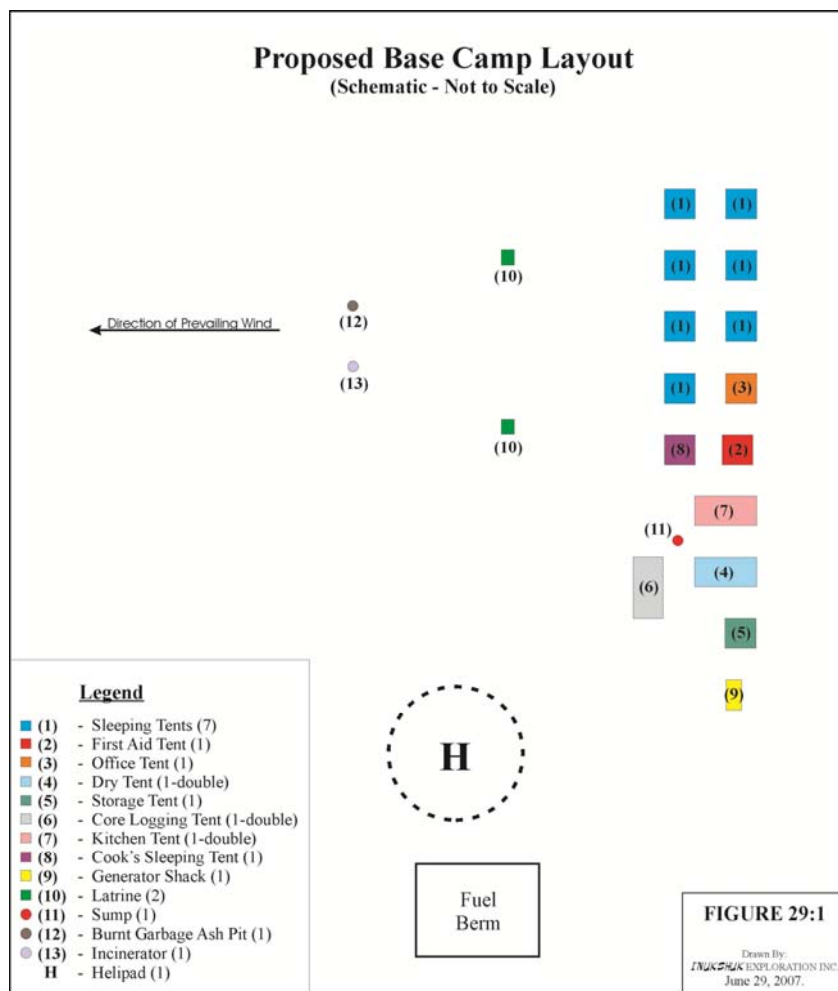
**Camp Site**

28. A list of existing and proposed camp structures and infrastructure.

There currently are no existing structures onsite. It is proposed that the (potentially two) Base Camp facilities consist of insulated canvas tents covering wooden or metal frames (Weatherhaven-type). All structures would have wooden (plywood) floors, doors and walls. It is anticipated that the base camps would consist of the following structures:

- 7 Sleeping tents
- 1 First Aid tent
- 1 Cook's tent
- 1 Large Core logging tent
- 1 Large Dry tent
- 1 Storage tent
- 1 Large Kitchen tent
- 1 Office tent.
- 1 Incinerator
- 1 Grey water sump
- 1 Garbage Pit (to bury incinerated garbage/sewage)
- 1 Helicopter Pad
- 1 Fuel containment berm
- 2 Latrines
- 1 Generator Shack

All tents will have oil stove heater installed. In addition, a small plywood structure would be constructed to house the generator and two latrine facilities would be required. The fuel containment berm when erected will also have a negative effect on underlying vegetation. Figure 29:1 illustrates the expected camp layout. No structures will be erected within 30 metres of any body of water.



**Figure 29:1** Proposed Layout of Base Camp.

29. Describe the type of camp:

a. Mobile

No Mobile structures will be moved onsite or established.

b. Temporary

No temporary structures will be established.

c. Seasonal

Several small, mobile ("fly-camp"- type) camps will be utilized during the geophysical surveys. These 2-4 man camps will be only in service for a short period of time (estimated 1 week) during which time the geophysical crews will establish the grid and undertake the geophysical surveys. Once the survey has been completed, the camp will be moved to the next grid area. At the end of the geophysical surveys the camp will be removed.

One seasonal temporary base camp (at Penthouse Lake - or one of the proposed alternate sites - in the Hood River area) will be erected during 2010. This will service exploration in the Hood River IOL. Set outs from this camp to the Contwoyto and Rockinghorse IOL will be undertaken. Subsequently, in 2011, if initial results of the 2010 exploration program merit, exploration will shift to the southern Contwoyto Area and the base camp will possibly be re-located to a second campsite on the East Arm of Contwoyto Lake. When being utilized to the



maximum, these camps could potentially host up to 20-25 people (8 man geological crew, cook, cook's helper/first aid attendant, pilot, engineer, camp manager plus 2 helpers and a 5 person drill crew). The Hood camp will be used for the 2010, season and possibly on into 2011 and 2012 summer field programs depending on exploration results. The proposed Contwoyto camp will be erected possibly in 2011 and only pending positive 2010 exploration results. The Base Camp(s) will be prepared for wintering at the end of each season. The camp will be demobilized back to Yellowknife after each season, leaving only the tent floors in place over the winter. At the end of the program (in 2013) the camp(s) will be entirely removed and the location(s) completely remediated. If a winter drill program were initiated, the base camp would have to be upgraded.

d. Permanent

No permanent structures will be established.

e. Other

No other structures will be established.

30. Maximum number of people expected on site.

The camp will be constructed to accommodate a maximum of 20 (with an additional 5 short term/visiting accommodations) people when fully utilized;

31. Describe the source of power for the camp.

Power will be supplied by a diesel generator. It is estimated that a 20 to 25 kW generator will be sufficient to power the camp. In addition, a small, portable (5kW) gas/diesel generator will be used for localized or backup power.

## Equipment

32. A list of equipment indicating uses and approximate dimensions.

Equipment	Type	Size
Generator	20 to 25 kW; diesel	2m by 2m: Yet to be specified.
Generator	5 kW, gas or diesel	1m by 1m: Yet to be specified.
Diamond Drill	LongYear 44/ Boyles 25A	3m by 3 m: Yet to be specified.
Helicopter	A-Star, Bell 206	Yet to be specified.
Water Pump (2)	for drill and camp	Yet to be specified.

33. If possible, provide digital photos of equipment.

No photos are available.

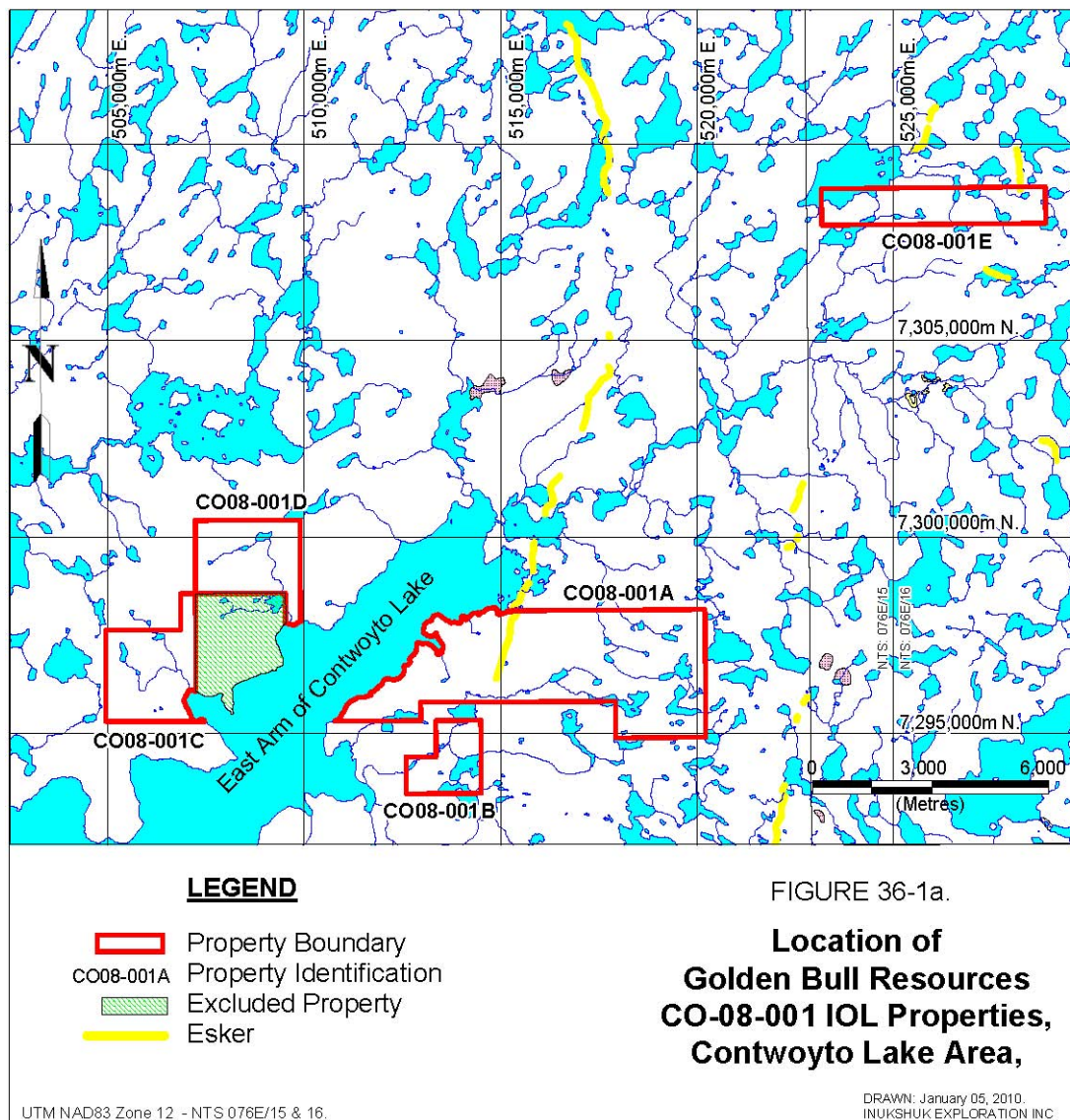
34. Method of moving equipment within the project site.

All heavy equipment will be moved via helicopter to and within the project site.

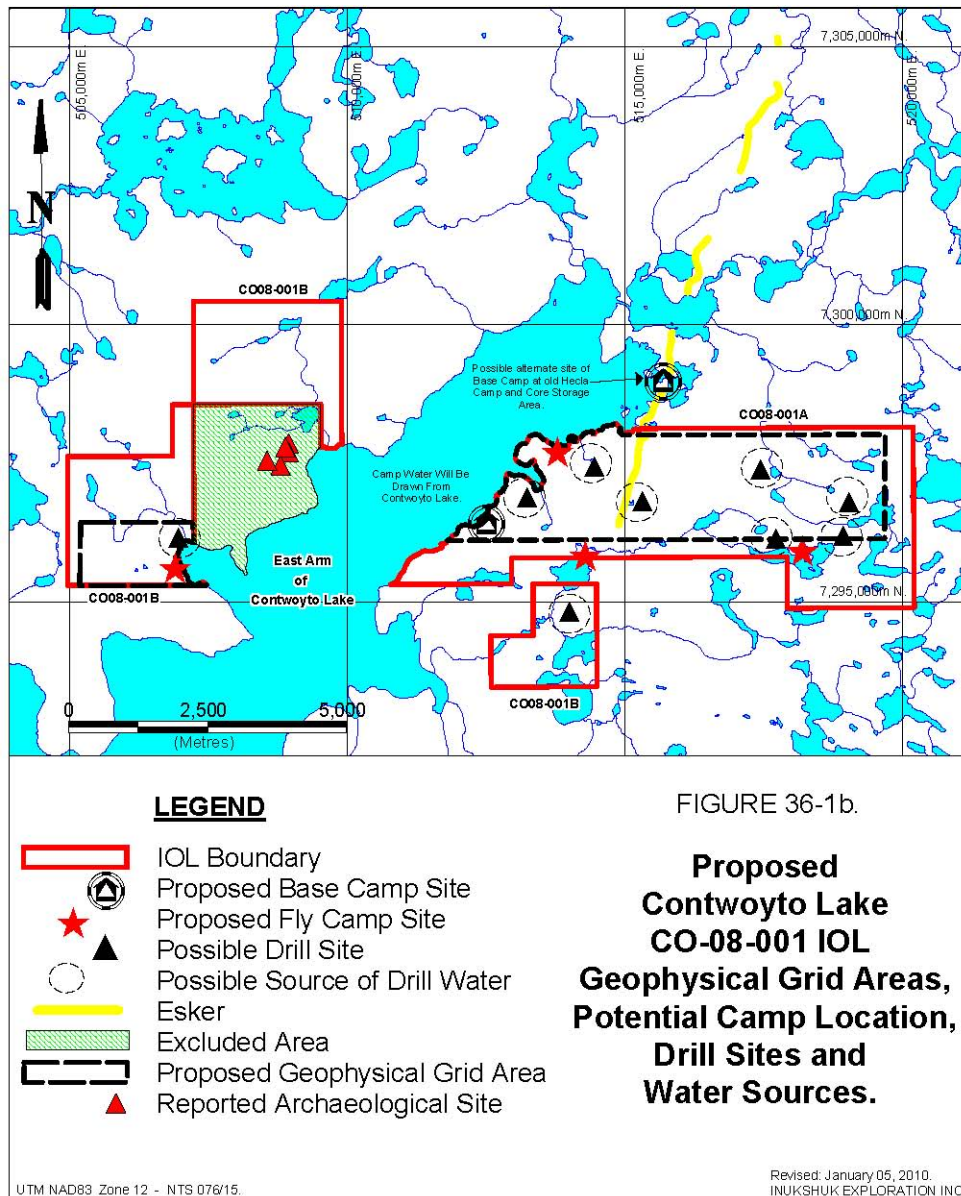
## Water

35. Location of water source(s) (show on map).

Potable water for the camp will be drawn from either Penthouse Lake (Esker Lake/Hood River) or Contwoyto Lake. Drill water will be drawn from small lakes adjacent to the drill sites as shown in Figures 36-1a, b (Contwoyto), 36-2 (Hood) and 36-3 (Rockinghorse).

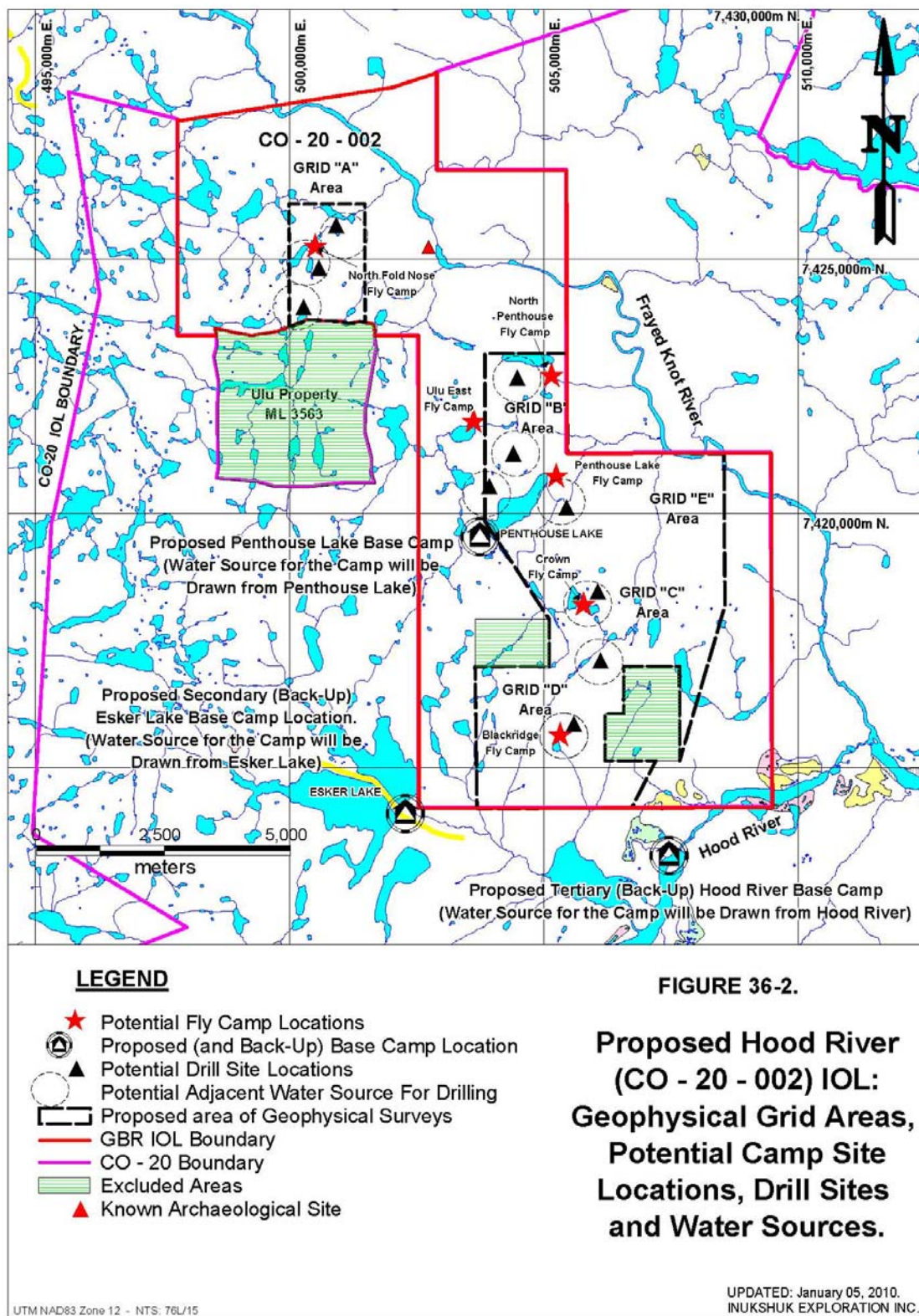


**FIGURE 36-1a. Location of the CO-08-001A, B, C, D and E areas of the Contwoyto IOL.**

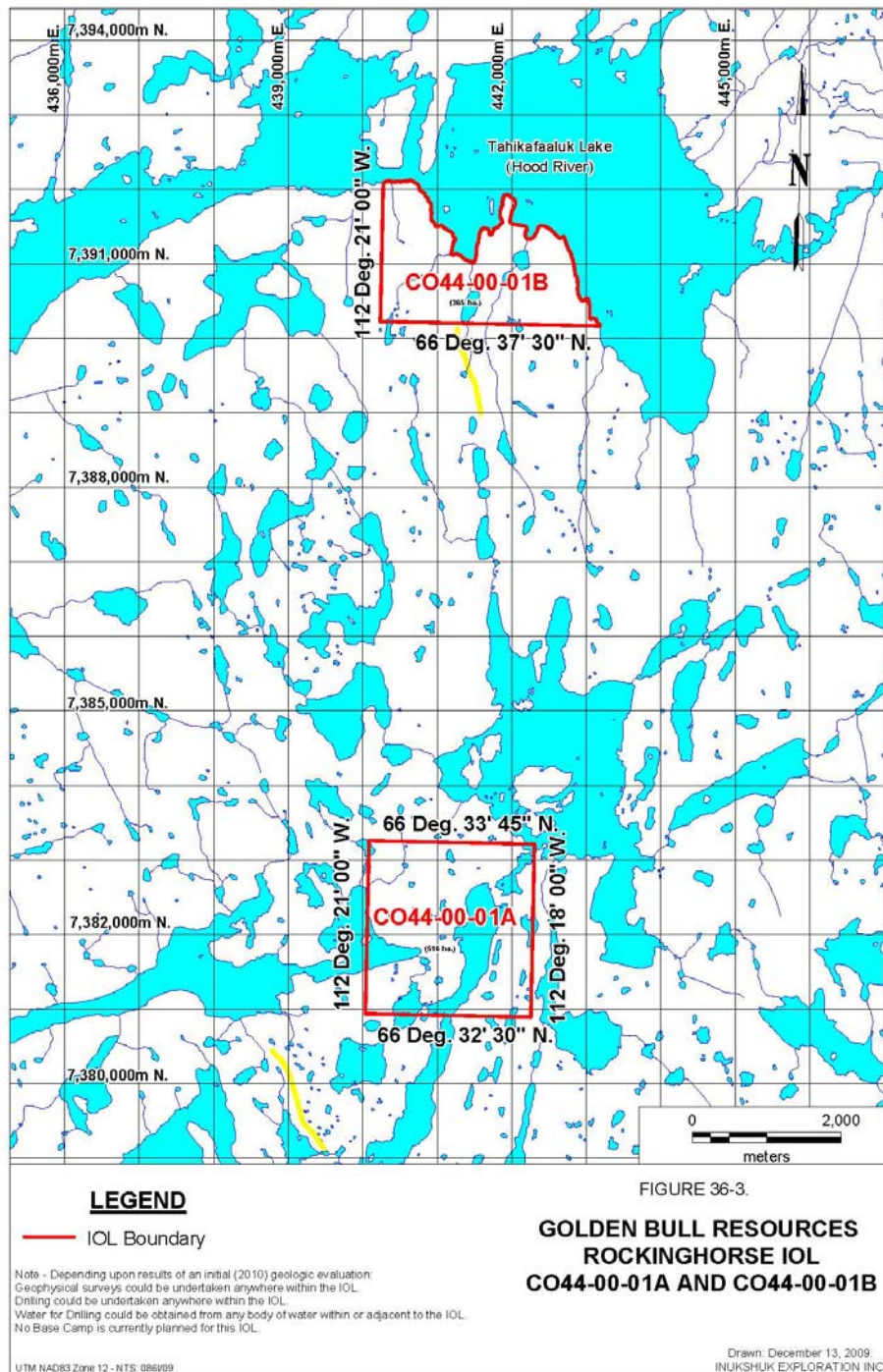


**Figure 36-1b** Proposed Contwoyto Lake IOL Geophysical Grid Areas, and Potential Camp Locations, Drill Sites and Water Sources (NAD83).





**Figure 36:2** Proposed Hood River IOL Geophysical Grid Areas, Potential Camp Locations, Drill Sites and Water Sources. Drilling will not take place within 30 metres of a body of water.



**Figure 36:3** Rockinghorse Lake IOL. Drilling will not take place within 30 metres of a body of water.

36. The estimated rate of water consumption (L/d).

It is estimated that the rate of water consumption would be 1,500 to 2,000 L/day for a camp containing 15 to 25 people. It is estimated that the rate of water consumption for the drill program could be up to 45,800 L/day when the drill is in use.

37. Describe water intakes. Describe methods for the prevention of fish entrapment.

Camp water intake will be via a land based pump and the intake hose will include a mesh screen to prevent entrapment of fish. Screening will meet the DFO end-of-pipe fish screen guidelines. Pumping rates will be sufficiently low so as to prevent the impingement of fish on the pump intake screen.

### **Waste (Grey water, Sewage, Other)**

38. Describe the characteristics, quantities, treatment, storage, transportation, and disposal methods for the following:

a. Sewage;

“Pacto-type” toilets will be utilized and it is estimated that about 0.02 m<sup>3</sup>/day per person of camp sewage will be generated, which will be incinerated onsite and/or placed in latrine sumps. Latrine sumps will be treated daily with lime and/or as advised by the Water Resource Officer and back-filled for closure. All ash from incinerated sewage will be buried.

b. Camp grey water;

Camp grey water will be discharged to a sump established in pervious material a minimum of 30.1 metres from the high water edge of Penthouse / Contwoyto Lake (or any watercourse).

c. Combustible solid waste;

Combustible solid waste will be incinerated and the ash buried. Suppliers will be requested to use minimal packaging to reduce generation of solid waste.

d. Non-combustible solid waste;

Non-combustible solid waste (eg. cans) will be incinerated, collected, crushed and back-hauled to Yellowknife for disposal or recycling. Authorization for disposal will be requested.

e. Bulky items/ scrap metal;

All bulky, non-combustible items (e.g. scrap metal) will be back-hauled from site and disposed of or recycled at an approved disposal site in Yellowknife. Authorization for disposal will be requested.

f. Waste oil/ hazardous waste;

As waste oil can be incinerated, it will be used as incineration fuel. Any hazardous waste will be removed from site and disposed of at an approved site in Yellowknife. Again, authorization for disposal will be requested.

g. Empty barrels/ fuel drums; and

Empty barrels / fuel drums will be back hauled to Yellowknife for cleaning and reuse.

h. Other.

N/A

### **Fuel**

39. The types, quantities (number of containers, type of containers and capacity of containers), method of storage, method of containment, location of storage (show on map) and uses.

Fuel required during the program will be moved onsite via aircraft. All fuel (except propane) will be stored in 205 litre (45 gallon) drums. Propane will be stored in regulation 100 pound



cylinders. All fuel drums, bungs and seals will be in good condition to prevent leakage. The fuel drums will be stored within a temporary berm that is capable of holding 110% of the volume of the fuel stored within. Where fuel is not within the berm, the tanks will be stored on their side, positioned so that a line drawn between the two bung openings is horizontal.

It is estimated that the following quantities of fuel will be required:

Product	Amount	Container	Use
Diesel (P50)	200 drums	45 gallon containers	Drill and heat, power
Jet B fuel	230 drums	45 gallon containers	Helicopter fuel
Propane	20 bottles	100 lb tanks	cooking and hot water
Gasoline	2 drums	45 gallon containers	rock saw, pumps.

Total propane stored onsite at the base camp will be approximately 5-7 canisters (100 lb) that will be re-supplied as required during food re-supply flights. It is estimated that 20 bottles will be required in total during one field season. In addition, not all diesel and Jet B fuel will be stored on site at one time. It is likely that the fuel supply will be replenished on an “as required” basis. All fuel containers will be properly labeled and sealed with GBR’s name, fuel product type, and year purchased or filled. Proposed fuel storage location at the base camp is shown in Figure 29:1

40. Describe secondary containment measures including the type of material or system used. If no secondary containment is required, please provide justification.

The fuel drums will be stored within a temporary berm that is capable of holding 110% of the volume of the fuel stored within. Where fuel is not within the berm, the tanks will be stored on their side positioned so that a line drawn between the two bung openings is horizontal. This storage method prevents contact of surface water with the bungs and possible contamination of the fuel and keeps the bung seals submerged in fuel, which prevents the seals from drying out and subsequently leaking.

41. Describe the method of fuel transfer and the method of refueling.

Fuel will be transported to the base camp (or adjacent runway) via fixed wing aircraft. It will be immediately moved from the initial off-loading site to the storage berm at the base camp via helicopter. Diesel fuel will also be slung to the active drill site on an “as required” basis. Fuel transfer will be via either a hand wobble pump or an electric fuel pump from the 45 gallon drums into the helicopter, fixed wing (Twin Otter) and diamond drill. Fuel transfer operations will be carried out by trained personnel. Smoking, sparks, or open flame will be prohibited in fuel storage and fuelling areas at all times.

#### **Chemicals and Hazardous Materials (i.e. oils, greases, drill mud, antifreeze, calcium or sodium chloride salt, lead acid batteries, cleaners)**

42. The types, quantities (number of containers, the type of container and capacity of containers), method of storage, method of containment, location of storage (show on map), and uses.

The exact type of Chemicals and Hazardous Materials that will be onsite is not known at this time. Golden Bull Resources Corporation will ensure that they and the drilling contractor maximize the use of non-toxic and biodegradable additives and environmentally “friendly” cleaning products. The Spill Contingency Plan will be updated with appropriate MSDS sheets once the drilling additives and cleaning products have been determined. However, until



confirmed, it could be assumed that the following materials may potentially be present; stored in their original container in the storage facility or when in use, at the drill site:

Item:	Use:
• tube grease - Beacon 2, Beacon 3, threokote 706, Z-50 pipe dope	Drilling Lubricant
• calcium chloride flake	Drilling anti freeze
• circulation polymer – G-stop	Drilling additive
• antifreeze – Esso HD antifreeze	Anti freeze
• rod grease – Big Bear diamond drill rod grease	Drilling Lubricant
• drill fluid additive – 550X polymer	Drilling additive
• motor oil – super plus SAE 10W30 and 15W-40	Drilling Lubricant
• hydraulic oil – Harmony AW 22, 32, 46, 68	Hydraulic systems
• Household chemicals Javex, soaps, detergents, degreasers	Cleaner
• Insect repellent	Repellent
• Lead batteries at generator, drill.	Starting Power

The required amounts of these materials have yet to be decided. They will be stored in their original box/container in the drilling supply or camp supply shack when not in use.

43. Describe any secondary containment measures including the type of material or system used.

At the base camp, all fuel will be stored within a secondary containment berm yet to be purchased.

44. Describe the method of chemical transfer.

All chemicals and hazardous materials will be brought to the camp site in their original container via fixed wing; either during the initial camp set up or through weekly re-supply flights. The drill additives will be transferred according to the manufacturer's guidelines and the operating procedures of the drill contractor.

### Explosives

45. Describe the explosive type(s), hazard class, volumes, uses, location of storage (show on map), method of storage.

At this point the use of explosives is not envisaged; **HOWEVER**, I would like to have the option of using explosives for a trenching program if, on evaluation of mineral structures, it becomes necessary to trench to gain a good representative sample of mineralization. Explosives will obviously be under the care of a trained, licenced blaster with minimal amounts of all explosives transported and stored, as required by law, in a locked magazine.

### Public Involvement/ Traditional Knowledge

46. Describe the level of public involvement, a summary of public involvement measures, a summary of concerns expressed, and methods of addressing the concerns.

As this is only an initial, grassroots-type exploration program, no public involvement is planned and the company is not aware of any public concerns.

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### 3. DESCRIPTION OF THE EXISTING ENVIRONMENT

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1. Describe the existing environment, including physical, biological and socioeconomic aspects. For guidance see Appendix A.

Note: The detailed provided in the description of the existing environment should be appropriate for the type of project proposal and its scope.

The Contwoyto, Hood and Rockinghorse IOL Properties are owned by Golden Bull Resources Corporation and the company plans to explore within the property boundaries, for gold and base metals are located in the treeless Arctic within the zone of permafrost. Vegetation consists primarily of lichen and moss. The weather in the property areas is typical of the continental barrenlands which experience cool summers and extremely cold winters. Winter temperatures can reach  $-45^{\circ}$  Celsius occasionally accompanied by high winds which create extreme wind chill conditions and extensive drifting snow. Summer temperatures are generally in the  $5^{\circ}$  to  $10^{\circ}$  Celsius range but can reach the upper  $20^{\circ}$  Celsius range. Minimum and maximum temperatures recorded at the nearest permanent weather stations are  $-53^{\circ}$  C at the Lupin Minesite and  $+32^{\circ}$  C at Kugluktuk (formerly Coppermine). The ground remains snow covered for more than 250 days a year. Snow accumulation begins in September and remains into June. Average annual snowfall rarely exceeds 1 metre, most of which falls during autumn and spring storms. Small lakes are clear of ice usually by the third week in June (though ice on the larger lakes can persist into the middle of July) and start freezing over again in late September.

The closest community with regularly scheduled air service is Kugluktuk which is approximately 200 kilometres northwest of the Hood River Concession. First Air has scheduled flights everyday from Yellowknife to Kugluktuk. The main centre for all supplies, expediting services and transportation to the land holdings is through Yellowknife, situated 530 kilometres southwest of the Hood River Concessions, and 410 kilometres southwest of the Contwoyto Concessions. Tahera's Carat Lake Camp (the Jericho Minesite), located approximately 105 kilometres to the south-southwest of the CO-20-00-03R IOL concession is the closest infrastructure, available year around, to the Hood Concession. Wolfden's Lupin Minesite and seasonally, the Wolfden Exploration Camp on the Ulu Claim adjacent to the CO-20-00-03R concession are also available infrastructure sites located in the area.

#### Physical Environment

- Proximity to designated environmental areas, including parks, heritage sites, sensitive areas and other protected areas.

There are no designated environmental areas within or adjacent to the permit areas.

- Eskers and other unique landscapes (e.g. sandhills, marshes, wetlands, floodplains).

**The Hood Property:** A large esker is located immediately south of the Hood Property. The Hood Property covers an area of topographic high. There are no sandhills, marshes, wetlands or floodplains on the Hood Property.

**The Contwoyto Property:** An esker is located on the Contwoyto Property. There is minor flooding adjacent to the edge of Contwoyto Lake due to the relatively subdued topography in

the area. There are no sandhills, marshes, wetlands or large floodplains on the Contwoyto Property.

**The Rockinghorse Properties:** These two non-contiguous IOL parcels are small (365 and 516 ha) and covered by many lakes. No eskers occur on the properties; however, a small esker lies adjacent to and immediately south of the CO-44-00-01B IOL.

- Evidence of ground, slope or rock instability, seismicity.

There is no evidence of ground slope, rock instability or seismicity on the Hood or Contwoyto Properties. The Rockinghorse IOL has yet to be evaluated.

- Evidence of thermokarsts

There is no evidence of the presence of thermokarsts on the Hood or Contwoyto Properties. The Rockinghorse IOL has yet to be evaluated.

- Evidence of ice lenses

There is no evidence of the presence of ice lenses on the Hood or Contwoyto Properties. The Rockinghorse IOL has yet to be evaluated.

- Surface and bedrock geology.

**The Hood Property:** Golden Bull Resources' Hood River (CO-20-002) Concession protects the central portion of the Archean-aged High Lake Volcanic Belt (HLVB) in the northern Slave Structural Province. The property has been subjected to greenschist to amphibolite grade regional metamorphism. The northerly-trending supracrustal mafic volcanic and sedimentary rocks in the HLVB are surrounded by granitic plutons and batholiths to the east and west of the property. The sediment and volcanic stratigraphy has been folded as is evident at the adjacent Ulu Deposit and in the northern part of the Hood Property where a south plunging synform has been recognized at the North Fold Nose Area. Within and west of the Hood Property boundary, this sequence has been intruded by the Ulu Leucogranite. The Tenacity Kimberlite Pipe, the only kimberlite known to occur within the High Lake Belt, is located on the Hood River (CO-20-00-03R) Concession which occurs completely within the larger CO-20-002 Concession. The surface expression of the pipe is approximately 80 metres by 100 metres. Gold, arsenopyrite mineralization, similar to that reported at the adjacent Ulu Project, has been identified on the Hood Property.

**The Contwoyto Properties:** The Golden Bull Resources CO-08-001 IOL Contwoyto Lake Properties are underlain by the Contwoyto Formation meta-sediments consisting chiefly of meta-turbidites that have been affected by multiple phases of deformation, plutonism and regional metamorphism. Generally the Contwoyto Formation underlying the property exhibits quartz-chlorite-muscovite ( $\pm$ biotite) mineralization, an assemblage consistent with greenschist facies metamorphism. Also present is lower amphibolite grade facies mineralogy; cordierite-quartz-muscovite-biotite ( $\pm$ garnet,  $\pm$ staurolite) which occurs in the schist. Cordierite porphyroblasts commonly produce a "knotty" appearance to the schists. Where the metamorphic grade rises to middle amphibolite facies, the mineral assemblage consists of sillimanite-cordierite-muscovite-almandine. Numerous occurrences of gold-bearing BIF (Banded Iron Formation) units have been recognized within the property. A major structure crosscutting the concession is the northeast trending Norma Fault. The iron formations are generally northeast-trending on the west side of the fault system and are generally observed to be east-trending on the eastern side. Minor synvolcanic intrusions have been mapped underlying the concession group and consist of hornblende gabbros and diorites. Weakly

foliated, syn to post D<sub>3</sub> granodiorite to monzogranitic intrusions have been observed largely to the northwest of the Contwoyto Concessions. Parallel Proterozoic-age diabase dikes can be observed trending northwest on the northwest shore of the Northeast Arm of Contwoyto Lake. One kimberlite pipe (Contwoyto-1) is known to occur on the CO-08-00-01 Concession on the north shore of the Northeast Arm of Contwoyto Lake.

**The Rockinghorse Properties:** To date, the Rockinghorse properties have yet to be evaluated by Golden Bull Resources. Regional mapping suggests that they are underlain by a NE-trending sequence of mafic volcanic rocks.

- Topography.

**The Hood Property:** On the CO-20-002 Hood River Concession, there is about 115 metres of relief in the form of deeply incised linear valleys bounded by steep bluffs. The basalt units form topographic plateaus, elevated over the sediments and granitic rocks. Outcrop density here is typically 50-60%, with the cover consisting of north-trending lakes, grassy swamps, and boulder-strewn glacial drift. Regional drainage is easterly into Bathurst Inlet. Major rivers include James River to the north and the Hood River which is located adjacent to the southern boundary of the concession. Locally, the concession is located within the Rio Fido watershed that includes Penthouse Lake that drains eastward into Frayed Knots River, a tributary of the Hood River. The Hood River valley is incised over 100 metres below the surrounding upland plateau.

**The Contwoyto Property:** The topography of the southern Contwoyto IOL (CO-08-001A, B, C, D and E Concessions) consists of low rolling hills with areas of low-lying grassy fields adjacent to the shore of Contwoyto Lake. Local relief is subdued, rarely exceeding 100 metres above the level of Contwoyto Lake. Outcrop density estimated to be significantly less than 15%.

**The Rockinghorse Properties:** To date (January 2010) this property has not been evaluated. It is covered by many small lakes and ponds.

- Permafrost (e.g. stability, depth, thickness, continuity, taliks).

The Rockinghorse, Hood and Contwoyto Properties are located in areas of continuous permafrost.

- Sediment and soil quality.

Soil development is poor on the Rockinghorse, Hood and Contwoyto Properties. Where bedrock is not exposed the properties are covered by glacial till and debris.

- Hydrology/ limnology (e.g. watershed boundaries, lakes, streams, sediment geochemistry, surface water flow, groundwater flow, flood zones).

The Hood Property is drained by Rio Fido which drains into the Frayed Knots River, and into the Hood River which flows east into Bathurst Inlet. The Contwoyto Property drains into Contwoyto Lake through the Burnside River into Bathurst Inlet. The Rockinghorse Properties drain north to the Hood River then again easterly into Bathurst Inlet.

- Tidal processes and bathymetry in the project area.

All IOL properties within the Slave Project are in non-tidal areas.

- Water quality and quantity.

On all IOL properties within the Slave Project water is abundant and pristine.



- Air quality.

There are no air quality problems/issues on the Rockinghorse, Hood or Contwoyto Properties.

- Climate conditions and predicted future climate trends.

The Rockinghorse, Hood and Contwoyto Properties are located in the treeless Arctic within the zone of permafrost. The weather in the property areas is typical of the continental barrenlands which experience cool summers and extremely cold winters.

- Noise levels.

Noise levels on the Rockinghorse, Hood or Contwoyto Properties are low.

- Other physical Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

N/A

## Biological Environment

- Vegetation.

Vegetation on the Rockinghorse, Hood and Contwoyto Properties consists primarily of sedges, lichen and moss.

- Wildlife, including habitat and migration patterns.

Caribou, arctic wolf, arctic hare, tern, arctic fox and grizzly bear have been observed on the Hood Property. Caribou, arctic wolf, arctic hare, tern, arctic fox have been observed on the Contwoyto Property. Muskoxen were not observed on either property. The Rockinghorse property has yet to be visited.

- Birds, including habitat and migration patterns.

Terns have been the only birds observed on either the Hood or the Contwoyto Property.

- Species of concern as identified by federal or territorial agencies, including any wildlife species listed under the Species at Risk Act (SARA), its critical habitat or the residences of individuals of the species.

According to the government website, there are no species at risk within the project area.

- Aquatic (freshwater and marine) species, including habitat and migration/spawning patterns.

Fish species in the project area include lake trout, arctic char and arctic grayling.

- Other biological Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

N/A

## Socioeconomic Environment

- Archaeological and culturally significant sites (e.g. pingos, soap stone quarries) in the project and adjacent areas.

There are no known archaeological and/or culturally sites known to exist within the updated Contwoyto property. There are known archaeological sites on the adjacent Tahera IOL property that has been calved off the previous O-08-00-01 IOL. These sites and the known archaeological site located on the Hood River Property are shown on Figures 36-1b and 36-2 of this document. The report received from the Chief Archaeologist (Nunavut) is attached to the original filing of this document in June 2007. None of the sites is in the area of planned exploration work.

No sites were reported on the Rockinghorse Properties. The e-mail reports received (March 2009; January 2010) from the Chief Archaeologist (Nunavut) for this IOL are attached.

- Palaeontological component of surface and bedrock geology.

No fossils have been observed/reported in the surface bedrock at the Rockinghorse, Hood or Contwoyto Properties.

- Land and resource use in the area, including subsistence harvesting, tourism, trapping and guiding operations.

The land encompassing the Rockinghorse, Hood and Contwoyto project area is undeveloped.

- Local and regional traffic patterns.

The project area is uninhabited. There is no traffic.

- Human Health, broadly defined as a complete state of wellbeing (including physical, social, psychological, and spiritual aspects).

The project area is uninhabited.

- Other Valued Socioeconomic Components (VSEC) as determined through community consultation and/or literature review.

N/A

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#### 4. IDENTIFICATION OF IMPACTS

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1. Please complete the attached Table 1 – Identification of Environmental Impacts, taking into consideration the components in Appendix A. Identify impacts in Table 1 as either positive (P), negative and mitigable (M), negative and non-mitigable (N), or unknown (U).

TABLE 1 ATTACHED – (060804-ScreeningPart2-Tables-FTAE.pdf)

2. Discuss the impacts identified in the above table.

##### Potential Impacts and Mitigation:

The attached potential project / environment interactions matrix (Table 1) outlines activities associated with the project and where they may interact with existing biophysical and social conditions. The project / environmental interactions matrix outlines works related to the camp, exploratory drilling and prospecting and general environmental, social, economic and health components. It is noted where the potential for interaction exists, which subsequently, can be used to determine potential impacts.

**Biophysical** - Impacts on **air quality** can result from discharge of exhaust from airplanes, helicopters, drilling operations and diesel generator power supply at camp as well as emissions from incineration. Given the remote location and lack of air quality issues that currently exist within the project location, these short duration and small scope activities are not expected to result in any measurable air quality impacts at either the local or regional scale. An Environment Canada approved incinerator will be selected to burn combustible waste. **Noise** can result from the use of planes, helicopters and drills and to a lesser degree from activities within the camp and at the airstrip that can disturb wildlife. Mitigation is noted in the **Vegetation Communities And Wildlife Habitat** section, below.

**Soil And Permafrost Quality** – Soil and permafrost quality can be impacted from spills of fuel and other materials, waste discharge and drilling. Preventative measures including storage in Environment Canada approved containers with approved containment requirements in areas where spill clean-up is easy (i.e. on flat areas at runway / camp or on the claim near drill site – at all times, at least 30 metres away from watercourses) and fueling in these areas with

diligence will be taken. Drip pans, or other such preventative measures, should be used when refuelling equipment on site.

Materials storage will meet the requirements of the federal *Environmental Protection Act*. Environment Canada recommends secondary containment, such as self-supporting insta-berms, also be used when storing barrelled fuel on location. Drums and hoses will be inspected regularly for leaks and pans or absorbent pads will be placed below fuel transfer areas and stationary machinery. A Spill Response Plan (clean-up, removal and reporting) is attached. The discharge of grey water to a sump meets acceptable standards and would be covered with 40 centimetres of native material following abandonment.

The following additional mitigation should be followed during drilling:

- Drilling will be undertaken a minimum of 30.1 metres from any water body.
- Absorbent pads will be placed under areas where fuel, lubricants and other toxic materials could potentially leak. This will greatly assist in localized spill clean up that may have occurred during or following drill operations.
- Drill cuttings will be pumped to a sump (natural depression or temporary dike) a minimum of 30 m from any surface water body from which the water can be allowed to infiltrate to ground; by using a sump, direct flow into a water body is not possible and no additional impacts are created.
- Any fuel or hazardous material will be located a minimum of 30 m distance from any surficial water body.
- All sumps will be backfilled with native surficial material upon completion of drilling and will be contoured to match the existing landscape.
- If artesian flow is encountered, drill holes will be plugged and permanently sealed upon drill hole termination.

**Surface water hydrology** - Surface water hydrology can be disrupted from removal of water for camp use and drilling while surface water quality may be affected by fuel and toxic material spills (including drill slurry), grey and black water disposal. Physical fish habitat (stream beds) could be impacted from nearby drill activity or access (crossings). Water extraction at the camp and drill site and water quality impacts (resulting from fuel or other toxic materials such as drill slurry) can ultimately affect fish populations.

The measures noted under the **Soil And Permafrost Quality** section above will mitigate for surface water quality impacts from spills. Sediment and drill fluids are also issues for surface water. Activities that may result in sedimentation should be avoided or sediment control measures put in place to mitigate downstream impacts. Any grey water discharge into a sump will be located a minimum distance of 30 metres from all bodies of water.

Water use at the camp will be taken from the larger lakes (e.g. Penthouse or Contwoyto Lakes). Extraction volumes to sustain 15 to 25 people will be approximately 1 to 1.5 m<sup>3</sup> per day, which will not impact aquatic habitat in the large lake. Drilling could use up to 45.8 m<sup>3</sup> per day and will be drawn from and returned to one of the lakes marked in Section 36. The water intakes will be screened as per DFO requirements to prevent fish kill at the pumps. Disturbance to the

lake (or any adjacent stream) bed or banks should be minimized by placing temporary pump placement platforms for clean, easy; in addition a sump – of sufficient volume to contain the runoff drill water will be excavated. These measures will ultimately mitigate for impacts on fish.

**Vegetation communities and wildlife habitat** - Vegetation communities and wildlife habitat can be disturbed by clearing/grading at the camp and drill sites. During drilling, any soil removed will be side-cast and the disturbed area recovered at the completion of the drill hole. Any topsoil (if present) will also be stored and covered at the camp site for reuse later during reclamation at abandonment.

Wildlife can be displaced through loss of habitat, disturbed by noise (helicopter, plane, generators, drilling) or human interaction. Habitat loss can result in displacement of animals. Disturbance can cause stress-induced health problems and mortality. A secure bear fence around the main camp will assist to minimize human-wildlife interactions. Other mitigation procedures will include the following:

- disturbance of any raptor nests (particularly late May to mid-Aug when active) will be avoided so that the animals are not stressed to abandon the nest. This also would apply to bear dens and wolf dens.
- helicopter over flights will be limited to a minimum altitude of 300 metres, whenever possible;
- helicopter flights over areas of known raptor nests will be avoided, especially during active reproductive periods. This will also apply to waterfowl and shorebird staging areas during critical seasons and near large mammals;
- drill activities and associated work will cease if caribou cows appear nearby;
- wildlife sightings will be recorded and this information will be passed on to the rest of the crews;
- proper storage of hazardous materials will be ensured to avoid exposure to wildlife;
- all personnel will be aware of and will follow wildlife deterrence techniques (including proper storage and disposal of food) to reduce the possibility of attracting wildlife to the camp and drill areas;
- all personnel will have bear safety training and although not normally spotted as far south as the project area, will be aware of the penalties for shooting polar bears, even in self defense.

### 3. Discuss potential socioeconomic impacts, including human health.

**Socio-economics** – The use of local services for transportation and camp will provide economic benefits. Access to, and re-supply of, the site will be via Yellowknife. Notable risks to **human health and safety** exist from numerous sources while working in remote areas, the least of which might include:

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| • accidents during helicopter use | • slipping on lichen-covered rocks, |
| • interactions with wildlife      | • falls in general                  |
| • injury while working with power | • drowning                          |
| • machinery (the drill rig)       | • rock chip injuries                |
| • hazardous materials,            | • food poisoning                    |



- hypothermia
- disorientation (lost)
- water-borne illness
- infection (to poorly treated wounds)

The site safety program, including emergency response, will aim to minimize accidents and injuries. Water supply will meet the requirements of the Public Health Act Water Supply Regulations. The kitchen facilities will be the domain of the cook and will be kept clean and sanitary at all times. Food storage and preparation techniques will be to acceptable standards.

With proper mitigation, the project should not affect land and water use, traditional use or cultural resources. All measures should be taken to avoid defense kills of bears. A clean, cordoned off camp site and awareness during traverses will minimize human-wildlife interactions. Two way radios and/or satellite phones will be carried on traverse.

4. Discuss potential for transboundary effects related to the project.

To the best of my knowledge, there are no trans-boundary effects related to this project as the project area is located entirely within Nunavut and is some distance from any boundary.

5. Identify any potentially adverse effects of the project proposal on species listed under the Species at Risk Act (SARA) and their critical habitats or residences, what measures will be taken to avoid or lessen those effects and how the effects will be monitored.

According the government website ([http://www.sis.ec.gc.ca/ec\\_species/ec\\_species\\_e.phtml](http://www.sis.ec.gc.ca/ec_species/ec_species_e.phtml)) there are no reported species at risk within the project area.

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## 5. MITIGATION OF IMPACTS

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1. Describe measures to mitigate impacts to the physical, biological and socioeconomic environment as identified in Section 4.

In addition to the mitigation of impacts discussed in Section 4, all mitigation of impact will be accomplished by the following approaches: avoidance, minimization, barriers, procedures, and rehabilitation. Possible mitigation procedures are listed below:

- Disturbances to permafrost will be mitigated by raising the floors of the tents off the ground, and keeping the sump area and incinerator area small and raising the incinerator above the ground.
- Disturbance to soil and vegetation will be minimized by using walkways / pathways between the tents in the camp.
- The impact of helicopter and airplane noise and presence on wildlife and people will be mitigated by avoiding wildlife during flights and avoiding low flying.
- The presence of wildlife will be carefully monitored to ensure minimal disturbance.
- Water quality will be protected from spills and drilling by use of protective procedures and containments.
- Grey water will be treated through sumps and monitored to ensure containment.
- Sewage will preferable be incinerated otherwise treated daily with lime and subsequently buried.
- Water, air and animals will be protected as no garbage will remain onsite.
- The camp will be demobilized and the land remediated when no longer used.
- No fuel, drill cuttings, chemicals, wastes or sediment will be deposited into any water body as per the *Fisheries Act*, Section 36(3).

- Sumps, including those created for the disposal of drill cuttings will be located above the high water mark of any water body in such a manner as to prevent the contents from entering any water body frequented by fish.
- Drilling additives or mud will not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water or are demonstrated to be non-toxic.
- Land based drilling will not occur within 30.1 m of the high water mark of any water body.
- In winter, materials will not be stored on the surface ice of lakes or streams. Materials on the ice surface must be for immediate use.
- If an artesian flow is encountered during drilling, the drill hole will be immediately plugged and permanently sealed.

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## **6. CUMULATIVE EFFECTS**

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1. Discuss how the effects of this project interact with the effects of relevant past, present and reasonably foreseeable projects in a regional context.

Mineral exploration programs have been undertaken within the area for many years. The Lupin gold mine and the Jericho diamond mine have provided socio-economic benefits in the Contwoyto Lake area. In the Hood Project area, the adjacent Ulu Gold Property has outlined significant gold reserves and continues toward a production decision which will greatly add to the local infrastructure and have a positive effect on production of additional local jobs. Already, during the exploration phase the Yellowknife to Jericho ice road has in past years been extended to Ulu (currently no longer in use). When this winter road was previously in use, although an intrusion, it was used solely in the winter, prior to most animals and birds becoming active in the area. Along with progress come the negative effects of man's intrusion into the local environment. In the summer, noise, pollution, human interaction potentially all could have negative effects on the total environment. Normal patterns of birds and wildlife will have to be monitored so that they are not negatively influenced.

Each drill site will be restored following drilling. This will include clean up of any fuel/oil spills, removal of all garbage, equipment and restoration of the sump area (any temporary dikes/dams/barriers will be removed and the sump will be covered with native soil).

At the end of each field season, the camp site will be secured and all waste material will be incinerated / removed. When the camp is dismantled at the end of the proposed exploration program (2013), all materials will be removed from site and backhauled to Yellowknife (for re-use or appropriate disposal). All disturbed areas (including grey water sump) will be covered and graded on a yearly basis, after use.

If the proposed exploration program is terminated after 2013, there will be no evidence that either of the proposed camps existed. Conversely, if the program is ultimately successful and a viable mine is identified and continues to be developed, this asset will generate taxes and employment for the people of Nunavut.

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## 7. SUPPORTING DOCUMENTS

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1. The following supporting documents have been provided :
- Part 2 Form (English): Project Specific Information Requirements – NIRB  
**ATTACHED:** [\*2010-NIRB-PSIR-Pt\\_2-Exploration-ENGLISH\\_OTAE.pdf\*](#)
  - Table 1 - Identification of Environmental Impacts.  
**ATTACHED:** [\*060804-ScreeningPart2-Tables-FTAE.pdf\*](#)
  - Abandonment and Decommissioning Plan.  
**ATTACHED:** [\*2010-Abandonment and Decommissioning Plan.pdf\*](#)
  - Emergency Response and Spill Contingency Plan.  
**ATTACHED:** [\*2010-Fuel Spill Contingency Plan.pdf\*](#)
  - Data Base Search Results from Chief Archaeologist, Nunavut.  
**ATTACHED:** [\*Chief Archaeologist Email Response.pdf\*](#)
  - Metadata Files: MapInfo (NAD83).  
**ATTACHED:** [\*MapInfo data \(NIRB MapInfo Data.zip\)\*](#)
  - Part 1 Form (English): Project Proposal Information Requirements – NIRB  
**ATTACHED:** [\*2010-NIRB-AppP1-ENGLISH Summary-OT4E.pdf\*](#)
  - Part 1 Form (Inuinnaqtun): Project Proposal Information Requirements – NIRB  
**ATTACHED:** [\*2010-NIRB\\_PPIR\\_Part 1 \(Inuinnaqtun\).pdf\*](#)
  - Non-Technical Project Summary (English)  
**ATTACHED:** [\*2010-Summary of Operations ENGLISH.pdf\*](#)
  - Non-Technical Project Summary (Inuinaktun)  
**ATTACHED:** [\*2010- Summary of Operations INUINNAQTUN.pdf\*](#)
  - Maps of the Project Areas.  
**ATTACHED** [\*\(MapINFO Generated: FIGURES A, B and C\).\*](#)
  - Maps of the Permit Areas.  
**ATTACHED** [\*\(MapINFO Generated: FIGURES A-1, B-1 and C-1\).\*](#)
  - Existing site photos with descriptions.  
**NONE IS AVAILABLE.**

Respectfully submitted, on the 18<sup>th</sup> day of January, 2010.



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Bruce Goad, P. Geo.

**INUKSHUK** Exploration Incorporated,

Consultant to:

**Golden Bull Resources Corporation,**

(A 100% owned subsidiary of Golden River Resources Corporation.)

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## APPENDIX A

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### Physical Environment

- Proximity to designated environmental areas, including parks, heritage sites, sensitive areas and other protected areas.
- Eskers and other unique landscapes (e.g. sandhills, marshes, wetlands, floodplains).
- Evidence of ground, slope or rock instability, seismicity.
- Evidence of thermokarsts
- Evidence of ice lenses
- Surface and bedrock geology.
- Topography.
- Permafrost (e.g. stability, depth, thickness, continuity, taliks).
- Sediment and soil quality.
- Hydrology/ limnology (e.g. watershed boundaries, lakes, streams, sediment geochemistry, surface water flow, groundwater flow, flood zones).
- Tidal processes and bathymetry in the project area.
- Water quality and quantity.
- Air quality.
- Climate conditions and predicted future climate trends.
- Noise levels.
- Other physical Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

### Biological Environment

- Vegetation.
- Wildlife, including habitat and migration patterns.
- Birds, including habitat and migration patterns.
- Species of concern as identified by federal or territorial agencies, including any wildlife species listed under the *Species at Risk Act (SARA)*, its critical habitat or the residences of individuals of the species.
- Aquatic (freshwater and marine) species, including habitat and migration/spawning patterns.
- Other biological Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

### Socioeconomic Environment

- Archaeological and culturally significant sites (e.g. pingos, soap stone quarries) in the project and adjacent areas.
- Palaeontological component of surface and bedrock geology.
- Land and resource use in the area, including subsistence harvesting, tourism, trapping and guiding operations.
- Local and regional traffic patterns.
- Human Health, broadly defined as a complete state of wellbeing (including physical, social, psychological, and spiritual aspects).
- Other Valued Socioeconomic Components (VSEC) as determined through community consultation and/or literature review.