



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

**Prepared For:**  
**GOLDEN BULL RESOURCES CORPORATION**  
(A 100% Owned Subsidiary of Golden River Resources Corporation)  
**Committee Bay Greenstone Belt Project, Nunavut**  
Prepared: April 27, 2011.

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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 15*).

## 2. PROJECT DESCRIPTION

### General

1. Name and location of proposed project.

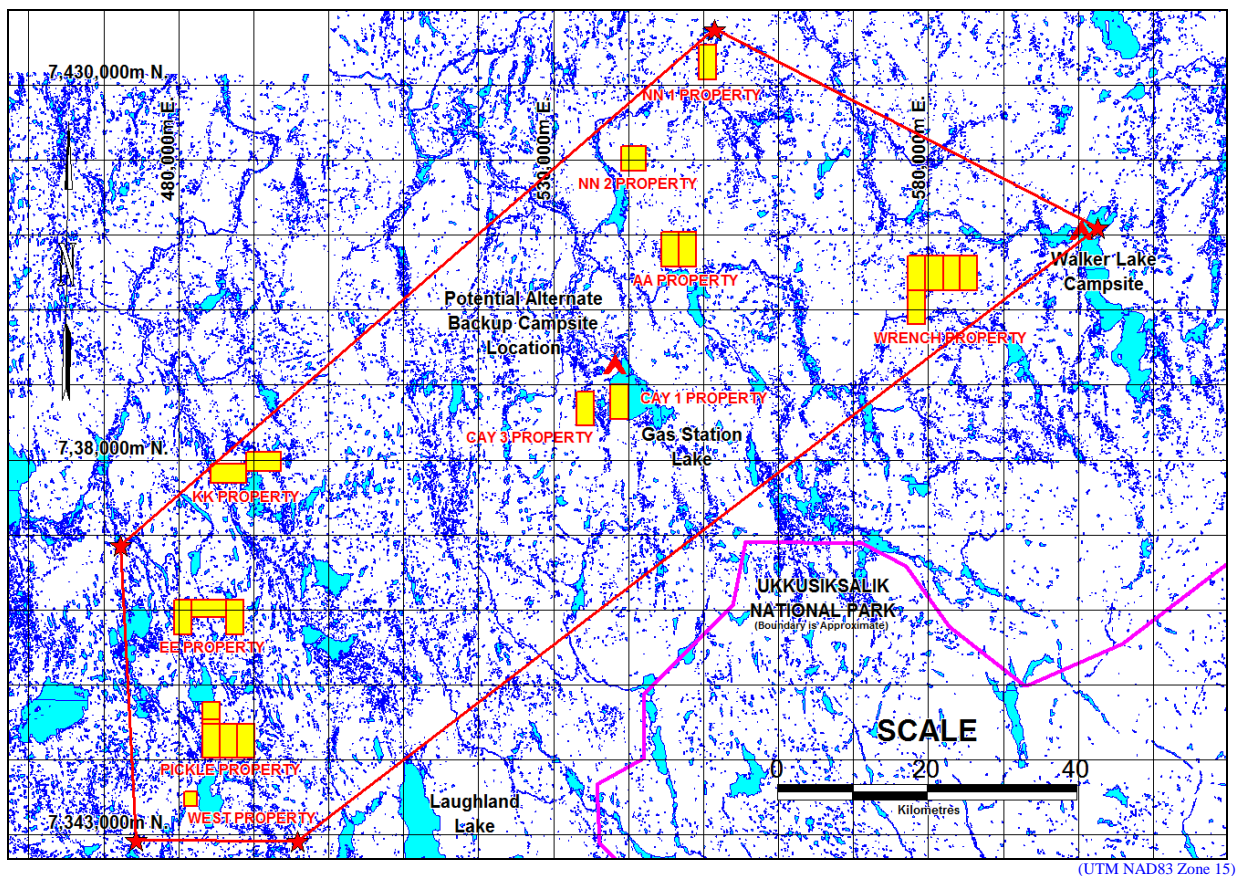
**1a. Project Name** **COMMITTEE BAY GREENSTONE BELT: WALKER LAKE PROJECT (22 Mineral Claims)**

The COMMITTEE BAY GREENSTONE BELT: WALKER LAKE PROJECT to be undertaken by Golden Bull Resources Corporation beginning in 2012 consists of 22 mineral claims in 10 distinct properties. The ten mineral properties are NOT contiguous.

**1. Co-ordinates:** The area encompassing the company's 22 crown mineral claims is bounded by the following coordinates (UTM NAD83 Zone 12):

Lat (degree/minute)	67° 03' 00"	Long (degree/minute)	91° 49' 00"
Lat (degree/minute)	66° 48' 00"	Long (degree/minute)	90° 40' 00"
Lat (degree/minute)	66° 05' 00"	Long (degree/minute)	93° 30' 00"
Lat (degree/minute)	66° 05' 00"	Long (degree/minute)	93° 34' 00"
Lat (degree/minute)	66° 30' 00"	Long (degree/minute)	93° 30' 00"

NTS Map Sheet No: Parts of map sheets 056J/11, 13, 14, 15, 056K/3, 6, 9, 11, 16 and 056O/4



**FIGURE 1-1.** Location of the Project/Permit Area, Committee Bay Greenstone Belt (area inside the red line polygon). The only lands accessed will be at the base camp and all area within the claim boundaries as shown above.

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

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

**Golden Bull Resources Corporation,**

(a 100% owned subsidiary of Golden River Resources Corporation)

Level 8, 580 St. Kilda Road, P.O. Box 6315,

St. Kilda Road, Central Melbourne,

Victoria 8008. Australia.

Fax: 61 3 8532 2805

Phone: 61 3 8532 2860

Email: [peterl@axisc.com.au](mailto:peterl@axisc.com.au)

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

**Bruce Goad, P. Geo., Consulting Geologist,**

Inukshuk Exploration Incorporated,

21861 44A Avenue,

Langley, British Columbia.

CANADA V3A 8E1

Fax: 604-533-2255

Phone: 604-533-2255  
(Please call first)

Email: [inukshuk@uniserve.com](mailto:inukshuk@uniserve.com)

**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.**

- NIRB Project Proposal Screening - To assess project screening for planned exploration program to be undertaken between February 01 2012 and December 31, 2016: Current document; Requested duration of program to December 31, 2016: Screening approval pending.
- INAC – Land Use Permit: Application submitted and approval pending.

- Nunavut Water Board; water use licence; Requested duration of licence to December 31, 2016: Application submitted and pending.

### **Project Information**

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

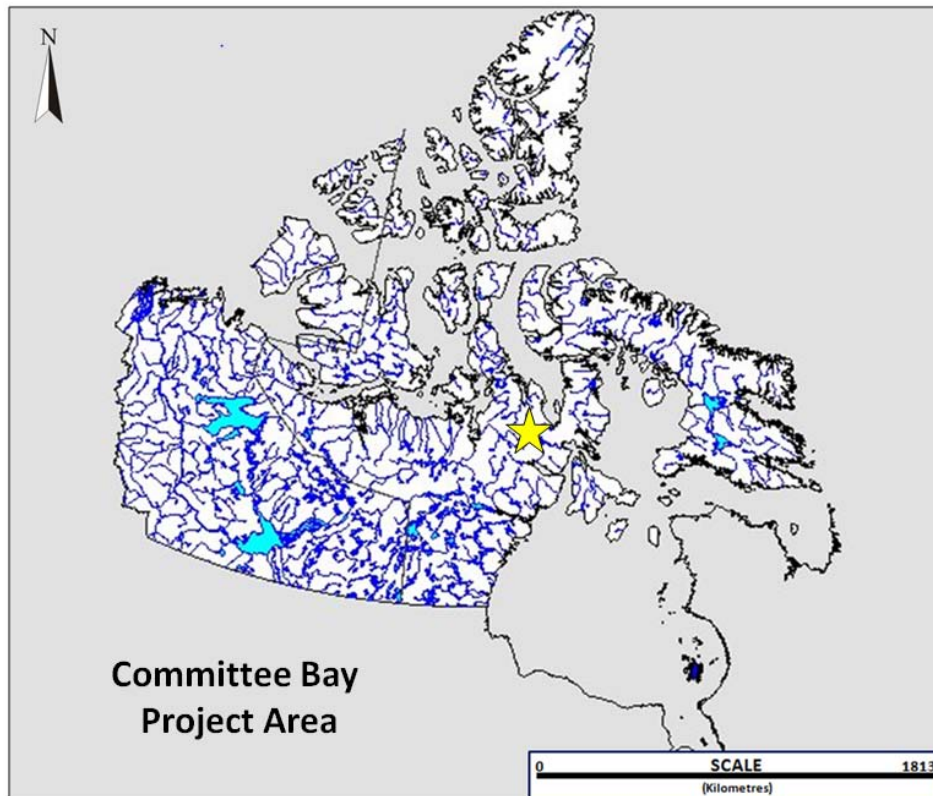
The GSC initially used the Island at the north end of Walker Lake as a campsite when they were mapping in the area. The current claims were staked on October 16, 2002. During 2004, GBR established a permitted base camp at Walker Lake Island which has subsequently been completely remediated and the existing land use permit cancelled. The Cay Lake Site has not been utilized in the past and a visual inspection of the site to confirm it as a potential campsite has not been undertaken as of the date of this application.

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

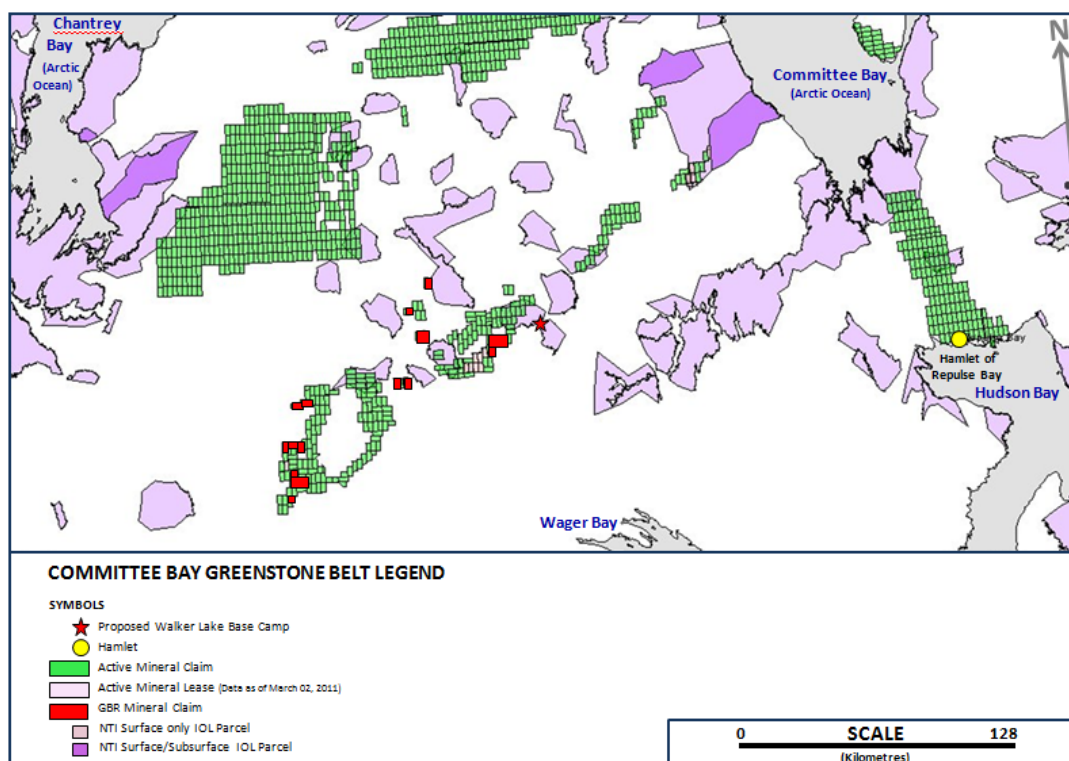
The Properties of Golden Bull Resources in the Committee Bay Greenstone Belt (CBGB) are located on National Topographic System (NTS) map sheets 56J, 56K and 56O approximately 245 to 365 kilometres northeast of the hamlet of Baker Lake (Qamani'tuag), Nunavut or between 210 to 320 kilometres west southwest of the hamlet of Repulse Bay (Naujat) on the coast of Hudson Bay. The community of Gjoa Haven (Uqsuqtuuq) lies approximately 305 kilometres northwest of the proposed campsite. The community of Pelly Bay (Kagaaruk) lies approximately 210 to 305 kilometres north-northeast of the claim groups. The centre of the area covered by the company's claim groups is approximately 66° 37' North Latitude and 92° 00' West Longitude (Figure 6-1, 2, 3.)

The closest community with regular scheduled jet service is Rankin Inlet (Kangiqliniq) located approximately 450 kilometres to the south east. Canadian North and First Air flights arrive from Yellowknife and Iqaluit (Frobisher Bay) and connect to points south. Calm Air connects Winnipeg to Rankin Inlet and Baker Lake with turbo flights daily except Sunday.

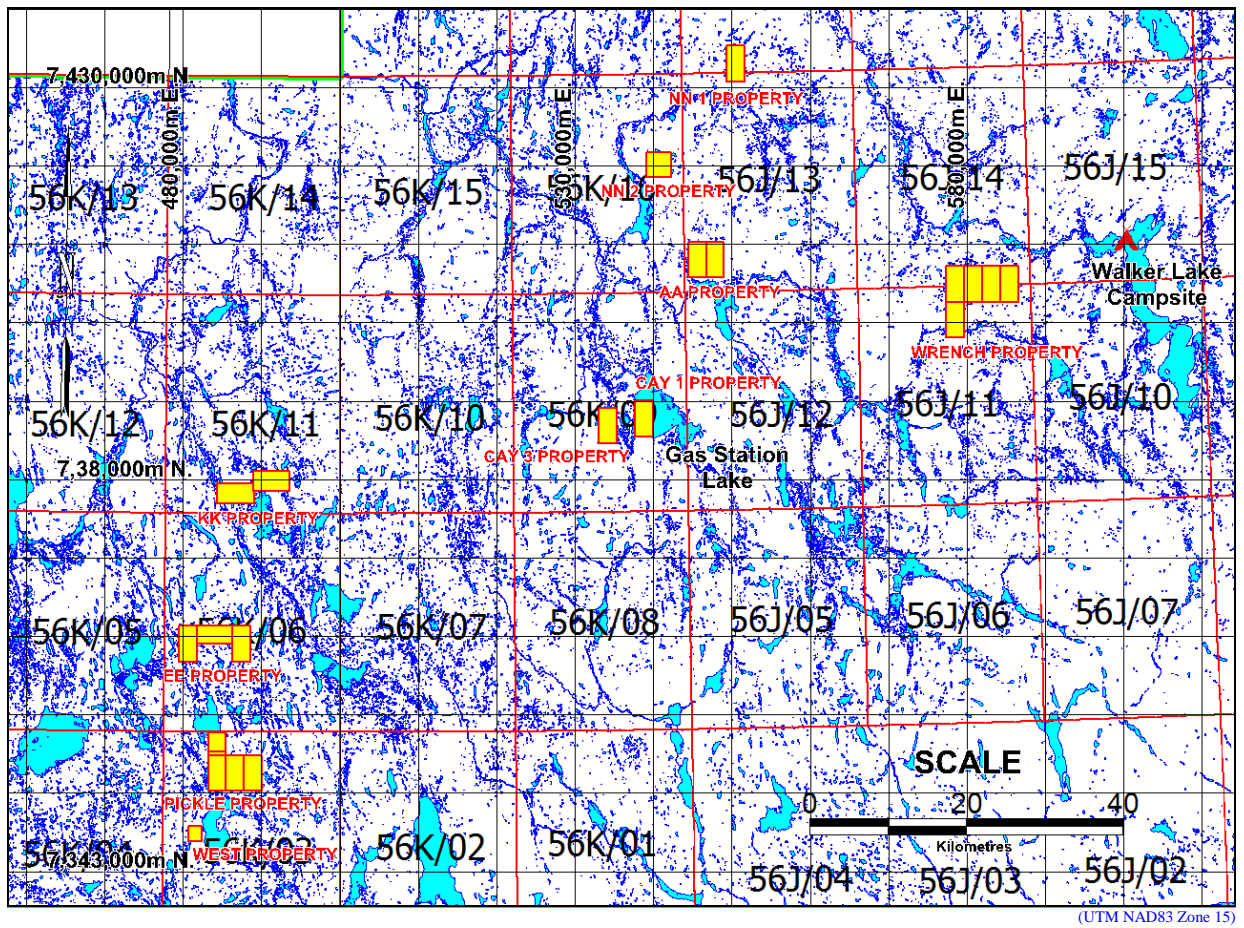
Of the 22 mineral claims owned by Golden Bull Resources Corporation within the Committee Bay Greenstone Belt none is partially or entirely located on surface-only or sub-surface Inuit owned lands (IOL) within the Kitikmeot Land Claims Parcel. Consequently, no Kitikmeot Inuit Association (KIA) exploration access and land use permits are required to operate here. Subsurface rights for all claims owned by Golden Bull Resources are administered by the Federal Government of Canada. Land Use Permits have been applied for through INAC, NIRB and NWB.



**FIGURE 6-1.** Location of the Committee Bay Greenstone Belt Project Area within Nunavut, Canada.



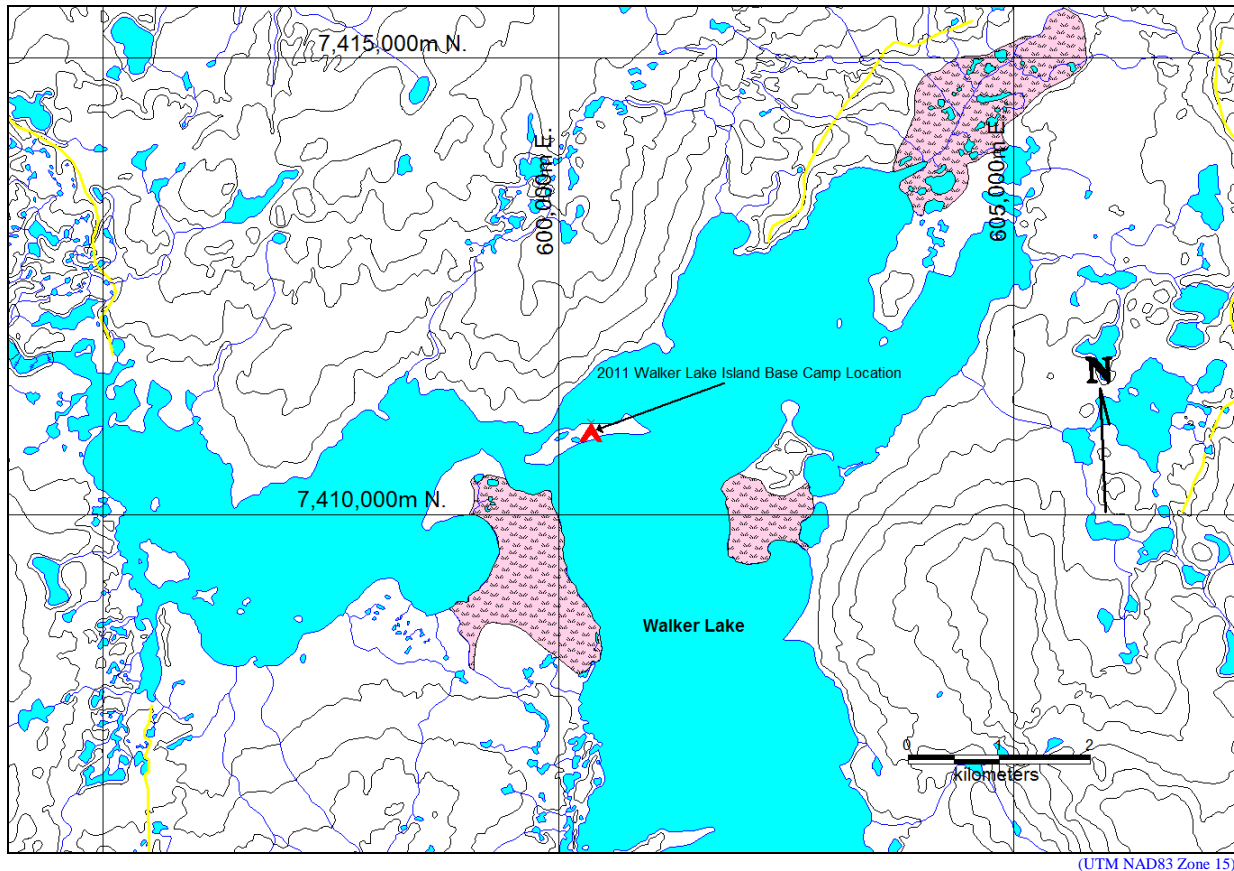
**FIGURE 6-2.** Committee Bay Greenstone Belt - Walker Lake Project, Nunavut.



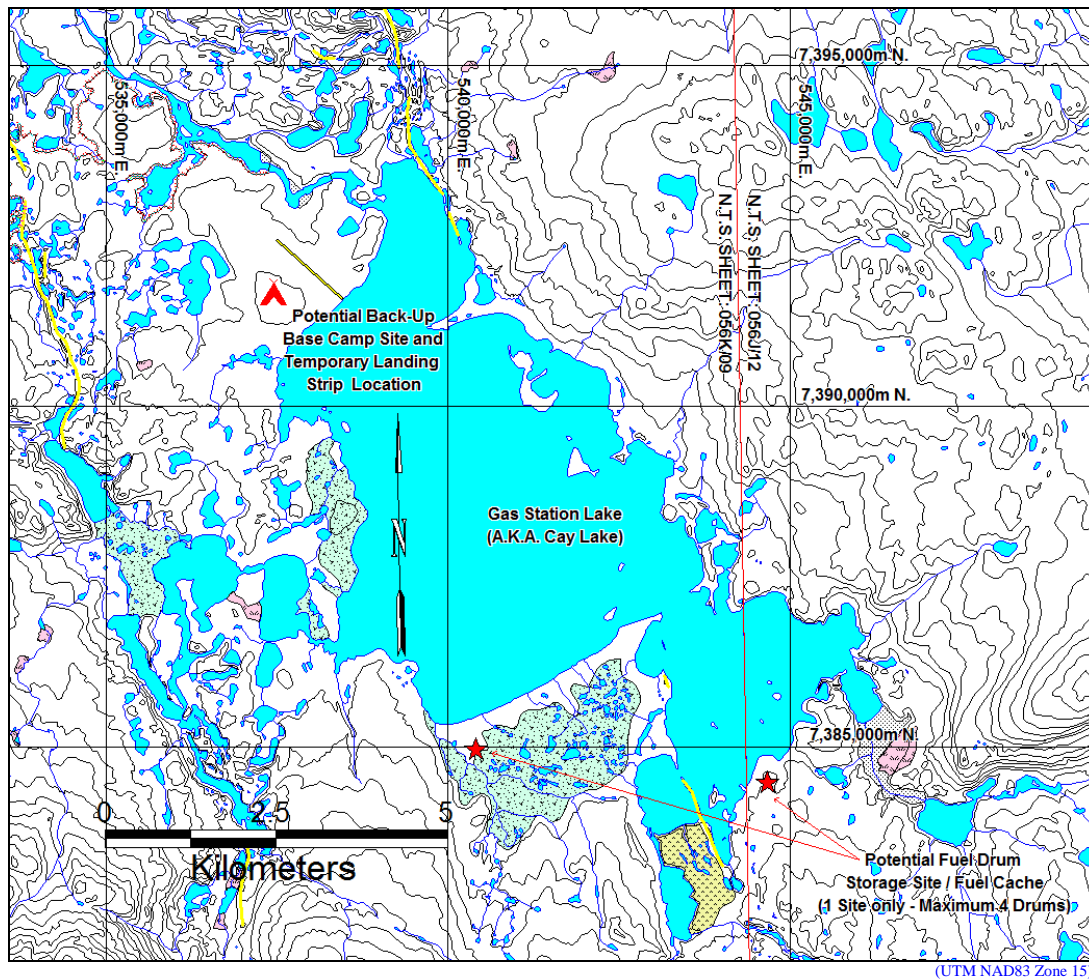
**FIGURE 6-3.** NTS Map Sheet Overview Location of the Committee Bay Greenstone Belt - Walker Lake Project, Nunavut.

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

There is currently no camp established on site at any of the Walker Lake project properties. A base camp will be (re-)established on a small island located at the north end of Walker Lake during 2012 which will service as the base camp for exploration programs on all of the company's Committee Bay Greenstone Belt Properties. (Figure 7-1). An alternate backup site is proposed for the Northwest end of Cay Lake (a.k.a. "Gas Station Lake" - Figure 7-2).

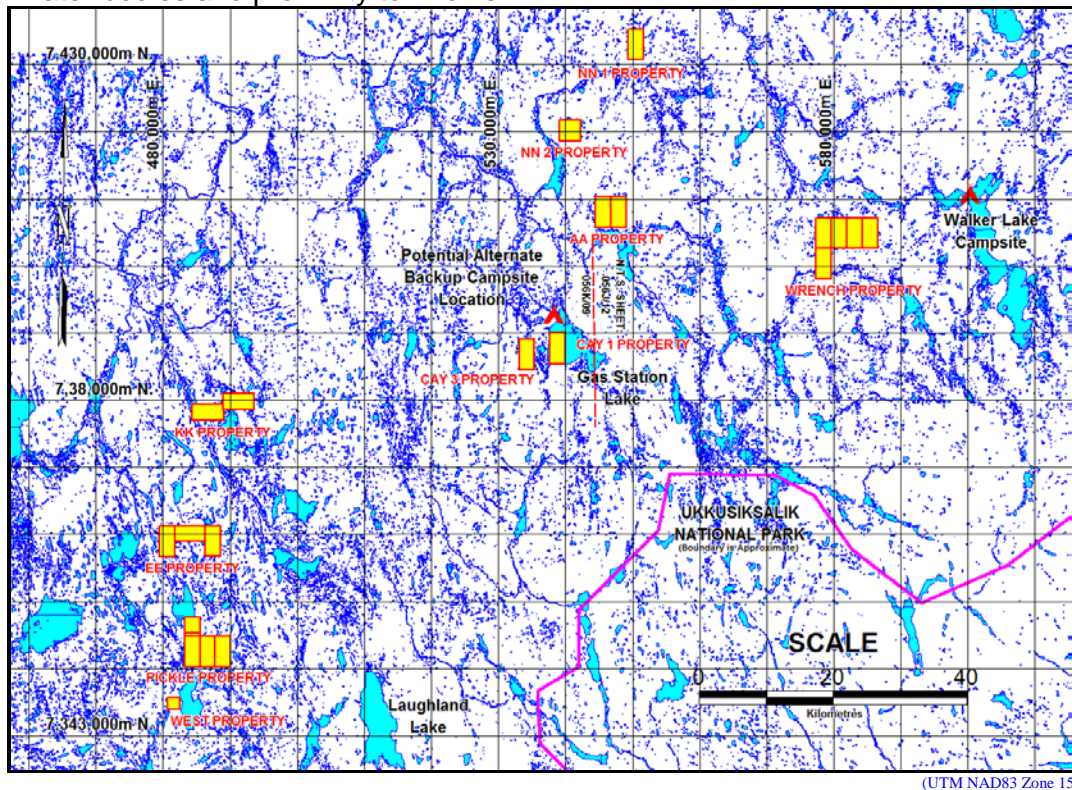


**FIGURE 7-1. BASE CAMP LOCATION MAP – Walker Lake Area, Nunavut. Proposed Camp Site, Main Re-fuelling Site and Landing Strip at Camp on Walker Lake Island.** (056J/15).



**FIGURE 7-2. POTENTIAL BACKUP SITE OF BASE CAMP – Cay Lake Area, Nunavut. Proposed Backup Camp Site, Re-fuelling Site and Landing Strip at Camp at Cay Lake (056K/09).**

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



**FIGURE 8.1. PROPERTY LOCATION MAP – Committee Bay Greenstone Belt, Nunavut.** Location of the Proposed Walker Lake (Cay Lake Alternate Site) Base Camp, Fuel Storage and Landing Site, the Cay Lake (a.k.a. Gas Station Lake) Refuelling Site/Fuel Cache and the 10 Golden Bull Resources Mineral Properties within the Committee Bay Greenstone Belt, Nunavut. (UTM NAD83 Zone 15)

9. Describe the type of mineral resource under exploration. Indicate if the mineral of interest is any of the following:
- Base metals - YES
  - Diamonds - (POTENTIALLY – Focus on Precious and Base Metals))
  - Uranium - NO
  - Other - YES 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 2012, through 2016 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 (both airborne and ground), diamond drilling, and the initiating of environmental baseline work will be required.

This proposed multi-year program will ideally commence early Spring 2012 and continue through (contingent upon ongoing positive exploration results) to 2016 to terminate at a decision point in late summer 2016. 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, one temporary base camp is being proposed. It is to be located on a small island at the north end of Walker Lake. (Figure 7:1) which will be active during 2012 to 2016 (obviously, depending upon ongoing positive exploration results). A potential backup camp site has been identified at the northwest end of Cay Lake (Figure 7-2).

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

No alternatives were considered as Golden Bull Resources previously had a camp established on this site during 2004. This site was completely remediated in October 2007 and the Land Use Permits under which it was operating were cancelled. The timing of the proposed exploration program currently is proposed to be initiated in the Spring of 2012 and (assuming ongoing positive exploration results) it is expected to be completed by 2016. This schedule will allow for a full evaluation on each of the property areas; 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)

Airborne magnetic/EM surveys, 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. Depending upon the depth to bedrock, limited trenching to bedrock over some showings may be considered prior to drilling. If blasting is required, wildlife activities will be monitored and blasting will not be undertaken if any wildlife is observed in the regional area. All pits/trenches excavated will be back filled on completion. At this point, the location of any potential trenching program is undetermined. Potential sites may be defined by future geologic mapping.

- 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

Airborne Mag/EM surveys over the claims is being planned.

- 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)

Initially, a 2000 to 3000m diamond drill program is proposed depending upon 2012 geological and geophysical results. Potentially subsequent drilling will be undertaken on the properties in upcoming years (2013-16: contingent upon positive initial 2012 evaluation of the property).

- On ice drilling (indicate drill type)

No "On Ice" drilling is planned.

- Overburden removal

Trenching may be required to expose or sample 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

No construction of an airstrip is planned. The large Walker Lake will be used as landing strips for ski and float equipped aircraft. STOL (Turbo /Twin Otter) aircraft equipped with tundra tires can land directly on the small Camp Island causing minimal disturbance.

- 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 small island located at the north end of Walker Lake during early 2012. (Figure 7-1). 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 with remaining spots for incoming corporate visitors). This camp will be demobilized back to Yellowknife / Baker Lake / Ranking Inlet after each season, leaving only the tent floors and wall in place. At the end of the program (2016) the camp will be entirely removed and the location completely remediated.

- Fuel transportation and storage

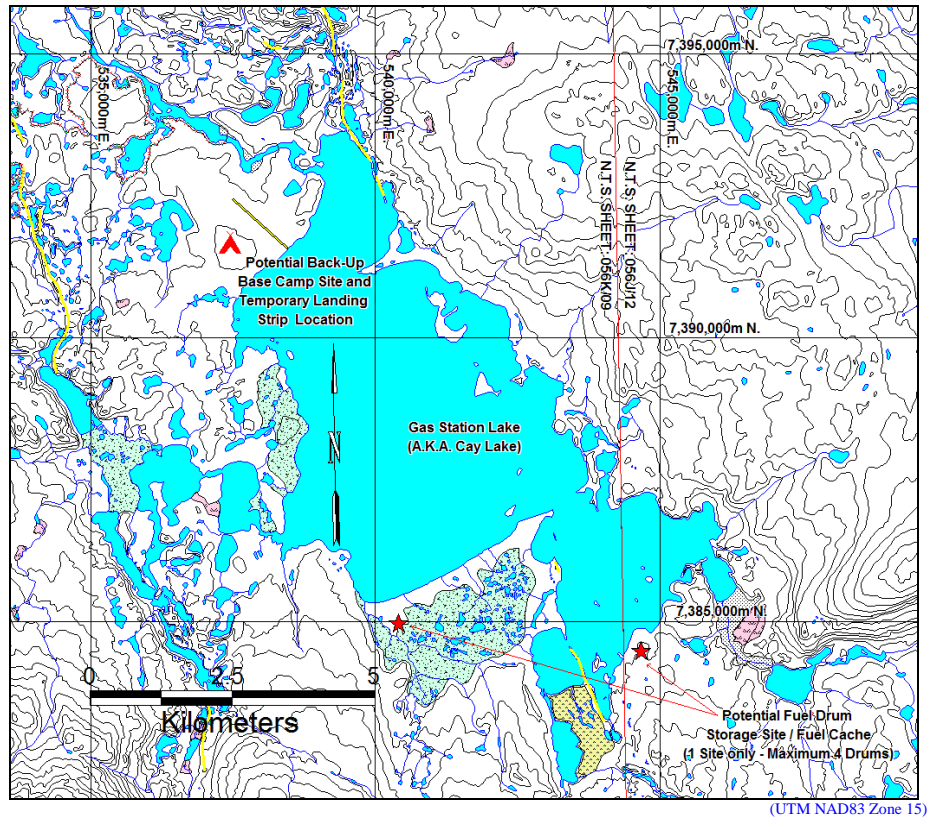
During the 2012 field program, fuel will also be flown directly to camp via Twin/Turbo Otter aircraft equipped with floats, skis or tundra tires capable of landing on Walker Lake, ice or the flat gravel area of the Camp Island respectively.

Fuel will be delivered locally on an “as required” basis so that a large amount of stored fuel is not in inventory at the camp. It will be properly stored either lying on its side where a line drawn between the two bung hole is horizontal or if on-site quantities merit, in a portable berm area capable of holding 110% of the contained fuel.

At times, GBR may have to establish a remote, short term, fuel cache for company use as a result of the extended distance from the east side to the west side of the work area. Due to this distance between the Walker Lake base camp and the western most property, occasionally, a re-fuelling stop may be required for the company’s charter helicopter to extend the return flight distance required between the base camp and the western claims. A fuel re-fuelling site is proposed to be established on the south shore of Gas Station Lake (Figure 13-1.). Typically this cache would consist of 1 to possibly up to a maximum of 4 - 205 litre fuel drums of jet fuel properly stored here at a time (dependent upon the level of activity in this western area). Fuel will be stored in accordance with CSA approved methods of storage of drummed product. Empty drums will be regularly back hauled to camp and subsequently returned to Yellowknife / Baker Lake / Rankin Inlet for refilling/refund/recycling once the fuel has been consumed. If the camp is erected at the Cay Lake site instead of on Walker Lake Island, this fuel cache will not be required.

In addition, when the drilling program commences, small 1-2 drum cache will have to be established at each (as yet undetermined) drill site to ensure the continuity of the drill program.

Where fuel is cached away from the base camp, the tanks will be stored on their side, positioned so that a line drawn between the two bung openings is horizontal. To prevent spreading in the event of a spill, this fuel cache stored in drums will be located, whenever practical, in a natural depression a minimum distance of greater than 30 metres from all streams and preferably in an area of low permeability.



**FIGURE 13-1. FUEL CACHE - Location of Cay Lake (“Gas Station Lake”) Fuel Storage/Refuelling Site and potential backup Camp Site. (NTS 056K/09 – 056J/12.)**

- Explosives transportation and storage

At this point the use of explosives is not envisaged; consequently no explosives are currently planned to 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, licensed 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 /Baker Lake / Rankin Inlet to be properly disposed of in an approved landfill site. 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 2012, 2013 and possibly 2014.

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. If established, it will be removed from the water each year at freeze-up.

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.

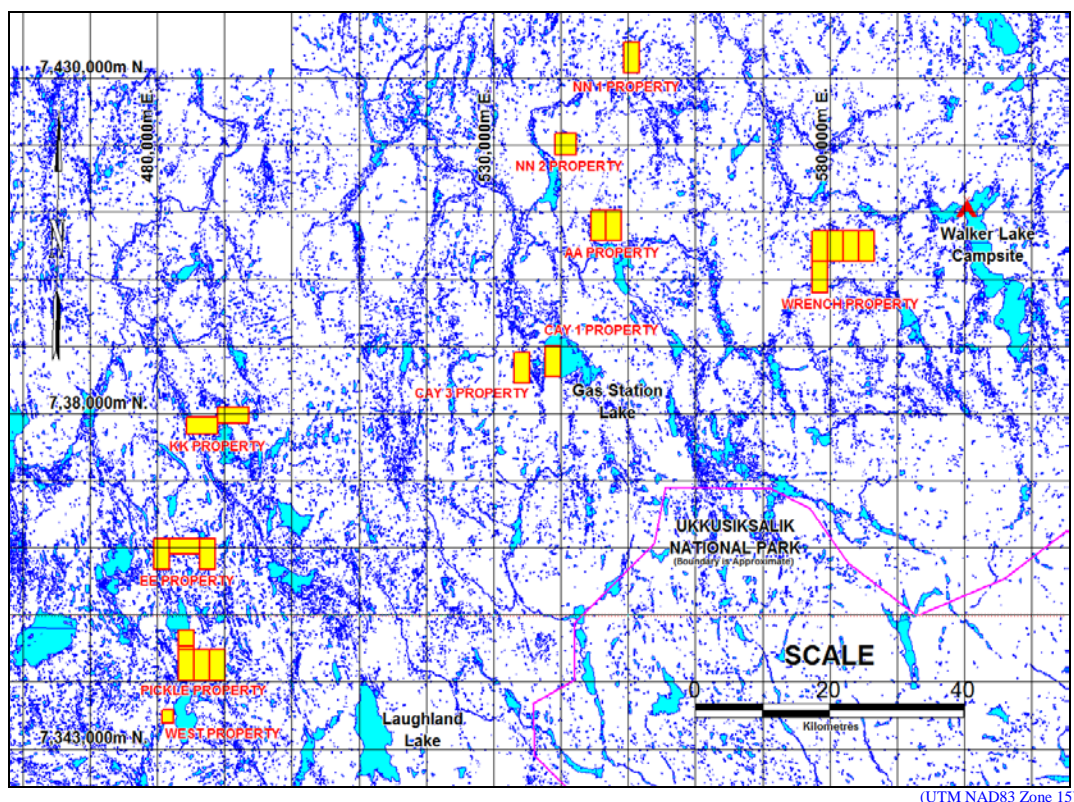
None of DFO – OS appear to apply to this project

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.  
See Figure 17-1.



**FIGURE 17-1.** Airborne Mag/EM surveys are planned to be undertaken over all claim blocks shown above. With current information, ground follow-up Mag/EM surveys will likely be undertaken over the PICKLE, KK, NN 2 and WEST Properties.  
( Parts of NTS 056J, K and O ).

18. Provide flight altitudes and locations where flight altitudes are below 300m.  
To obtain the best results, the determination of the flight elevations for airborne surveys is up to the contractor. If it is necessary to descend below 300m to undertake the survey it will be immediately local to the individual claim blocks. Flight lines will initially (during the 2012 proposed program) be set at 100m intervals. Low elevation flights will be postponed or rescheduled if animals are in the area.

## Drilling

19. The number of drill holes and number of meters (provide estimates and maximums where possible).  
At the point of permit submission (April, 2011), it is estimated that approximately up to 20 short drill holes (maximum 100m) will be collared during 2012. Approximately 2000 to 3000 metres of land based drilling will be planned. This drilling is being planned be undertaken during 2012; however, 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 attached 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, 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.

Although no “on ice” drilling is anticipated, 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 helicopter. There are no roads or runways in the area. The drill and ancillary equipment will be transported to and from individual 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 target metal with this project.

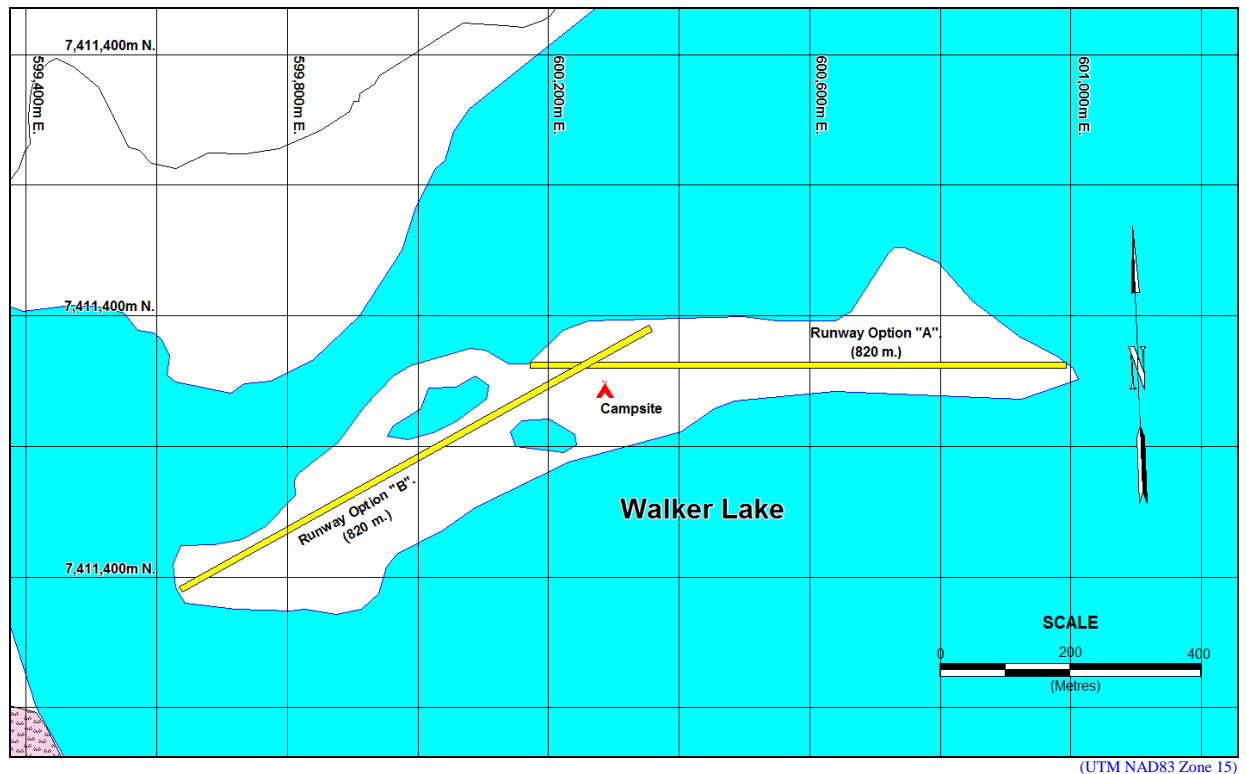
## **Transportation**

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 STOL air transport; supplies and materials required by the project will be flown from Yellowknife /Baker Lake / Rankin Inlet to the campsite using STOL Turbo/Twin Otter aircraft seasonally equipped with skis, floats or tundra tires. These aircraft have the ability to land directly on the island at the campsite. Weekly supply flights will be flown directly into the camp via ski/float/tundra tire equipped STOL Turbo/Twin Otter aircraft capable of landing on ice or water at Walker Lake or directly on the island with aircraft equipped with tundra tires.

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

There are no airstrips in the area; however, the small island at the north end of Walker Lake (or at Cay Lake, the backup camp site location) where the proposed camp is to be erected, is suitable for landing of STOL Turbo/Twin Otter aircraft equipped with tundra tires (Figure 27-1).



**Figure 27-1.** Location of the Walker Lake Island temporary landing airstrip, Walker Lake Area, Nunavut.

28. Describe expected flight altitudes.

Flight altitudes of aircraft servicing the camp are expected to be well above 600m; however, ceilings for VFR flights will obviously be affected by the current weather conditions. Daily crew set-out helicopter flights will by default be set at 610m or above. These flights may at times be forced to descend below 610 m due to weather conditions; however, in **ALL** cases, low flights over wildlife will be prohibited.

29. A list of existing and proposed camp structures and infrastructure. There currently are no existing structures onsite. It is proposed that the Base Camp facility consist of 14' by 16' 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:

- 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/if 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.



30. Describe the type of camp:

a. Mobile

No Mobile structures will be moved onsite or established.

b. Temporary

A seasonal, temporary camp will be established.

c. Seasonal

One seasonal temporary base camp located on the small island at the north end of Walker Lake (or potentially Cay Lake) will be erected during 2012. This will service exploration on all the company's mineral claims within the CBGB. Daily crew set outs from this camp to the 10 properties will be undertaken. 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 plus 5 company/contractor/visitor beds). The Walker Lake Camp will be used beginning in the 2012, season and possibly on into 2016 summer field programs depending on exploration results. The Base Camp will be prepared for wintering at the end of each season. The camp will be demobilized back to Yellowknife / Baker Lake / Rankin Inlet after each season, leaving only the tent floors and walls in place over the winter. At the end of the program (on or before 2016) the camp will be entirely removed and the site location completely remediated. If a winter drill program were to be 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.

31. Maximum number of people expected on site.

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

32. 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

33. 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	Boyles 25A	3m by 3 m: Yet to be specified.
Helicopter	A-Star, Bell 206, 500D	Yet to be specified.
Water Pump (2)	for drill and camp	Yet to be specified.

34. If possible, provide digital photos of equipment.

No photos are available.

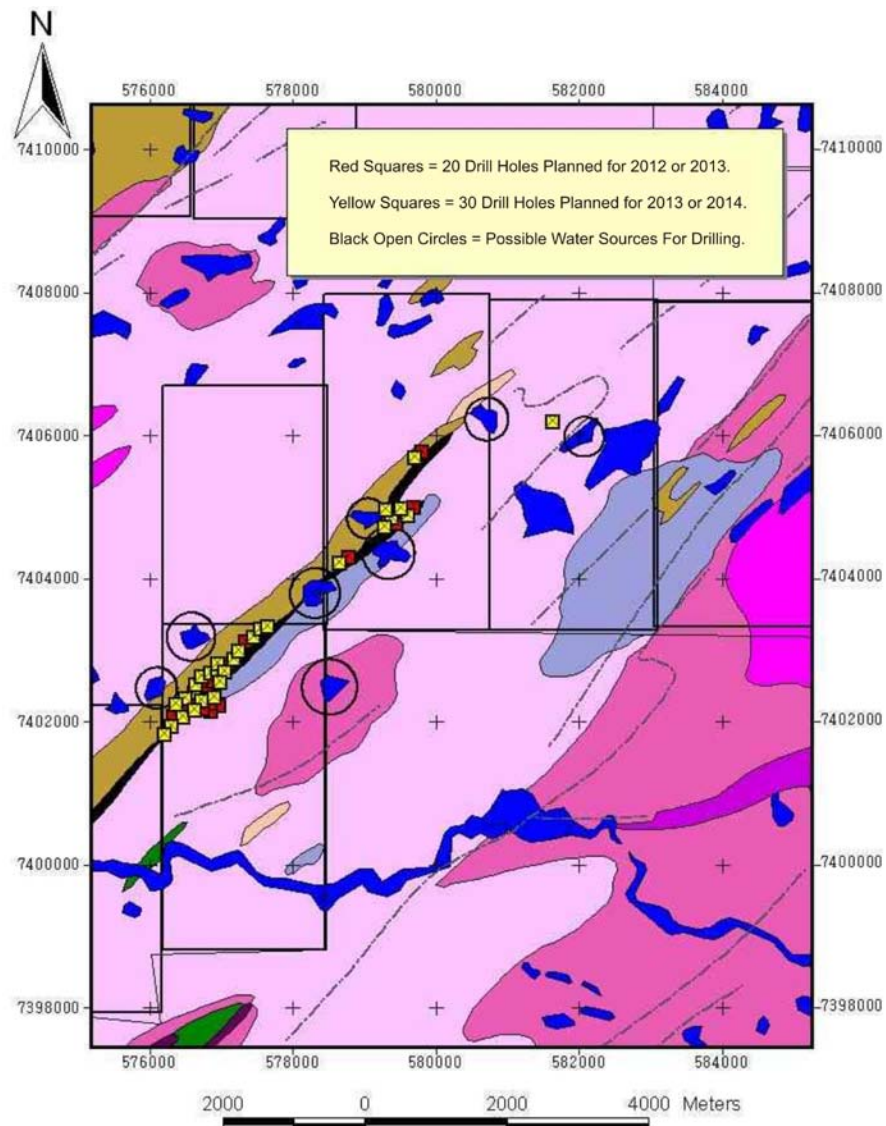
35. Method of moving equipment within the project site.

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

## Water

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

Potable water for the camp will be drawn from Walker (or Cay) Lake. To date drill sites have not been determined. Once targets have been identified, water will be drawn from adjacent large lakes where the water withdrawal volume will not be sufficient to drawdown lake levels. All water suction hoses will be fitted with a filter to prevent injury to aquatic life. Drill water will be drawn from small lakes adjacent to the drill sites. To date the only property drill ready is the Wrench Property as shown in Figures 36-1.



**FIGURE 36-1** Potential drill holes and associated water sources for drilling on the Wrench Property. Drilling will not take place within 30 metres of a body of water.

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

It is *estimated* that the rate of water consumption would be 1,000 to 2,000 L/day (1.0-2.0m<sup>3</sup>/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 50,000 L/day (50m<sup>3</sup>/day) when the drill is in operation.

38. 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/aquatic animals. 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)**

39. 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 0.0001 m<sup>3</sup> (100cm<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 or otherwise as advised by the Water Resource Officer. All latrine sumps will be back-filled upon closure. All ash from incinerated sewage will be buried or back hauled.

b. Camp grey water;

Camp grey water will be discharged to a sump established in pervious material a minimum of 30 metres from the high water edge of Walker Lake (or any other watercourse).

c. Combustible solid waste;

Combustible solid waste will be incinerated and the ash buried or back hauled to a land use facility in Yellowknife / Baker Lake / Rankin Inlet. Suppliers will be requested to use minimal packaging to reduce generation of solid waste.

d. Non-combustible solid waste;

Non-combustible solid waste (e.g. cans) will be incinerated, collected, crushed and back-hauled to Yellowknife / Baker Lake / Rankin Inlet 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 / Baker Lake / Rankin Inlet.

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 / Baker Lake / Rankin Inlet. Again, authorization for disposal will be requested.

g. Empty barrels/ fuel drums; and

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

h. Other.

N/A

## Fuel

40. 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 STOL 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 properly stored either within a containment berm or positioned so that the tanks will be stored on their side, so that a line drawn between the two bung openings is horizontal. If fuel is to be stored within a temporary berm it will be 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, again, 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. The fuel supply will be replenished on an “as required” basis as it will be flown onsite by the Twin/Turbo Otter from Baker Lake or Rankin Inlet. All fuel containers will be properly labelled and sealed with GBR’s name, fuel product type, and year the product was purchased or filled. Proposed fuel storage location at the base camp is shown in Figure 13-1 and Figure 29:1. All fuel caches will have spill kits supplied and be placed on sandy substrate or bedrock more than 30 metres from the high water of any watercourse.

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

All fuel (5-6 drums per flight) will be delivered from the fuel depot by a Turbo/Twin Otter from Baker Lake. Initially the fuel will not be stored in a berm as insufficient fuel will be onsite to merit the deployment of a berm. The spring winds will create havoc with the relatively empty, light weight berm. As fuel will be delivered on an “as required” basis, it will be consumed as it arrives; consequently, very minor fuel will actually be stored onsite. A berm may be feasible once the drill program is initiated as the volume of fuel onsite will increase but again even at this point, it will be consumed as it is delivered.

If the fuel drums are to be stored within a temporary berm it will be 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. All stored fuel onsite will be monitored daily.

42. Describe the method of fuel transfer and the method of refuelling.

Fuel will be transported to the base camp via STOL fixed wing Turbo/Twin Otter aircraft. It will be immediately moved from the initial off-loading site to the storage area/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)**

43. 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.

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

If the fuel drums are to be stored within a temporary berm it will be 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. All stored fuel onsite will be monitored daily.

45. Describe the method of chemical transfer.

All chemicals and hazardous materials will be brought to the camp site in their original container via STOL fixed wing aircraft; 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**

46. 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, licensed blaster with minimal amounts of all explosives transported and stored, as required by law, in a locked magazine. Where possible, all trenches will be back-filled to the original grade.

### **Public Involvement/ Traditional Knowledge**

47. 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. The Hamlets of Baker Lake / Repulse Bay most likely to be most affected by the project as they are most proximal.

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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 Committee Bay Belt lies within the treeless Arctic within a zone of permanent permafrost. Vegetation consists primarily of lichen and moss. The weather in the property areas is typical of the continental barren lands which experience cool summers and extremely cold winters. The mean annual temperature of  $-20^{\circ}\text{C}$  reflects its Arctic location (the Arctic Circle transects the property area). The climate is typical of the Eastern Arctic with average temperatures in the winter months of  $-30^{\circ}\text{C}$  to  $-35^{\circ}\text{C}$ , and  $+10^{\circ}\text{C}$  to  $+12^{\circ}\text{C}$  in the summer. Wind speeds have been recorded in excess of 100 kilometres per hour. . Snow accumulation begins in September and remains well 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 late July) and start freezing over again in mid September. The ground remains snow covered for more than 250 days a year (generally September to June). Rivers break up in June and lakes are ice bound until mid July. In the summer and fall, the temperature differential between the warm land and cooler ocean can create fog blankets in low lying areas.

#### 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.

Ukkusiksalik National Park lies to the south of the project area.

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

Eskers are fairly common in the area and generally all properties have at least part of an esker within the property boundaries. As the properties tend to cover the higher ground, no marshes, wetlands, sandhills, etc. were noted within the claim boundaries.

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

There is no evidence of ground slope, rock instability or seismicity any of the 10 properties in the CBGB currently being explored by Golden Bull Resources Corporation.

- Evidence of thermokarsts

No field evidence of the presence of thermokarsts was noted on any of the Walker Lake properties in 2004.

- Evidence of ice lenses

No field evidence of the presence of ice lenses was noted on any of the Walker Lake properties in 2004.

- Surface and bedrock geology.

The 10 Walker Lake Mineral Properties currently being explored by Golden Bull Resources Corporation protect portions of the Archean-aged Committee Bay Greenstone Belt (CBGB) located in the eastern Churchill Structural Province, Nunavut. The property has been subjected to greenschist to amphibolite grade regional metamorphism. The northeasterly-trending

supracrustal mafic volcanic and sedimentary rocks in the CBGB are intruded granitic plutons. The sediment and volcanic stratigraphy has been folded. Gold and arsenopyrite mineralization is hosted in Banded Iron Formation (BIF) within the Prince Albers Group sediments, similar to that reported at the adjacent Three Bluff's Showing of North Country Gold. Locally Komatiite flows have the potential to host copper-nickel mineralization.

- Topography.

The project area is on the northern section of the Wager Plateau, a shield area that has been significantly modified by glacial processes. Elevations range from 122 m a.s.l. in the southwest to 560 m a.s.l. in the northeast. Expansive till plains with eskers, kames, and moraines are the predominant geomorphologic features though glacially sculpted bedrock (including roches moutonnées), felsenmeer, and glacial boulder fields are also present. Bedrock is estimated at 10% of the total surface area, though locally it can be much higher.

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

The Walker Lake Properties are located in areas of continuous permafrost. Presumably talik zone occur under the larger bodies of water such as those contained in Walker Lake; however, this is unverified.

- Sediment and soil quality.

Soil development is poor on the Walker Lake Properties. Where bedrock is not exposed the properties are covered by extensive boulder fields, glacial till and debris.

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

The Walker Lake area is drained by the Hayes, Arrowsmith and Brown Rivers. The Hayes River and its tributaries flow northwest into Chantrey Inlet. The Brown River (southwest) flows into north-western Hudson Bay. The Arrowsmith River, to the north, flows into the Gulf of Boothia. Elongate eskers and rock striae indicate the glacial ice movement was to the north northwest in map sheets 56K and north northeast in 56J.

- Tidal processes and bathymetry in the project area.

All properties within the Committee Bay – Walker Lake Project are in non-tidal areas.

- Water quality and quantity.

On all properties within the Committee Bay – Walker Lake Project water is abundant and pristine.

- Air quality.

As the area is very remote, there are no air quality problems/issues on the Walker Lake Area Properties. This area has historically experienced little human impact because of its remote location. Water, soil and air quality remain in a generally pristine state, affected only by global factors.

- Climate conditions and predicted future climate trends.

Although this area is typically characterized by long, cold winters and continuous permafrost climate change is rapidly altering the Arctic environment. In the future climate in the north will likely continue to trend towards warmer temperatures and absence of ice.

- Noise levels.

Noise levels in the project area are negligible due to its remote location.

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

N/A

## Biological Environment

- Vegetation.

Vegetation on the properties consists primarily of sedges, lichen and moss.

- Wildlife, including habitat and migration patterns.

The regional area is used by wolves, caribou and muskoxen and may be used by grizzly bears and Polar bears (both COSEWIC listed as special concern). Important Polar bear denning and summer retreat habitat is present in the Wager Bay area now covered by the Ukkusiksalik National Park. The North-East Mainland caribou (barren-ground) may migrate through or close to the planned exploration area between late February and early May and again from late July to early December. A known calving area is located south of the exploration area. Pelly caribou (COSEWIC listed as threatened) may be present in the winter as far south as the Hayes River. Based on a July 2000 survey and personal visual confirmation in 2004, muskoxen are present in the area in very low density. The Wager Bay area is known as an important raptors' nesting area. Species include Peregrine falcon, Gyrfalcon and Rough-legged hawk

During the 2004 field season limited numbers of caribou, musk oxen, arctic wolf, arctic hare, tern, arctic fox have been observed within the project area. No grizzly or polar bears were noted. Generally, during the 2004 work program it was noted that wildlife sightings in this area were rare.

- Birds, including habitat and migration patterns.

During the 2004 field season, terns were the only birds observed within the project area.

- 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.

The Species at Risk Act (SARA) protects certain listed mammals, reptiles, amphibians, molluscs, lepidopterans, and plants on federal lands and certain listed birds and fish on all lands in Canada. Species that are legally protected under SARA are those listed as Endangered or Threatened and are listed in Schedule 1 of the Act. Those species listed as Special Concern and all species listed in Schedule 3, regardless of their status, are not legally protected by SARA. One species in the South Arctic Ecozone, the eastern population of Wolverine (*Gulo gulo*), is listed as endangered under Schedule 1 of SARA. There are 6 species (short eared owl, tundra peregrine, blackline prickleback, western population wolverine, grizzly bear and polar bear) which are listed as species of concern.

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

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

The western limit of the proposed Ukkusiksalik (Wager Bay) National Park is located north and east of Laughland Lake and south of the project area (Figure A).



**FIGURE A.** Location of the Ukkusiksalik National Park with Respect to the General Project Area. (Reproduced from Google Maps, 2011.)

The region west of Committee Bay is used for hunting muskox, caribou and wolves between November and May of each year (Ema Qaggutag of Hunters and Trappers Association). Commercial fishing takes place in the Brown and Arrowsmith Rivers.

There is no known existing manmade infrastructure (roads, power-lines, buildings, campsites) at the proposed site. The proposed site is located beside a source of water and adjacent to known landing sites suitable for tundra tire, float or ski equipped aircraft.

The chief archaeologist / CLEY has been contacted and they report one known archaeological and/or cultural site within the general project area, approximately 10 kilometres east of the closest claim boundary/property. No sites have been reported within the boundary of any of the company's 22 mineral claims currently being explored by Golden Bull Resources Corp..

- Palaeontological component of surface and bedrock geology.

No fossils have been observed/reported in the surface bedrock on any of the 10 mineral properties in the CBGB currently being explored by Golden Bull Resources Corp.

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

The land encompassing the Committee Bay Greenstone Belt – Walker Lake 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

## 4. IDENTIFICATION OF IMPACTS

- 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).

THE NUNAVUT IMPACT REVIEW BOARD SCREENING PART 2 FORMS																													
TABLE 1 - IDENTIFICATION OF ENVIRONMENTAL IMPACTS																													
		ENVIRONMENTAL COMPONENTS		PHYSICAL														BIOLOGICAL				SOCIO-ECONOMIC							
		designated environmental areas (i.e. Parks, Wildlife Protected areas)	ground stability	permafrost	hydrology / limnology	water quality	climate conditions	eskers and other unique or fragile landscapes	surface and bedrock geology	sediment and soil quality	tidal processes and bathymetry	air quality	noise levels	other VEC	other VEC	other VEC	vegetation	wildlife, including habitat and migration patterns	birds, including habitat and migration patterns	aquatic species, incl. habitat and migration/spawning	wildlife protected areas	other VEC	other VEC	other VEC	archaeological and cultural historic sites	employment	community wellness	community infrastructure	human health
CONSTRUCTION	<b>PROJECT ACTIVITIES</b>																												
	Camp and Airstrip																												
	Site preparation – groundwork																												
	Set up buildings																												
	Helicopter and plane access																												
	Water use																												
	Movement of people within camp																												
	Power supply																												
OPERATION	Fuel use and storage																												
	Waste disposal (food, materials, fuel, sewage)																												
	<b>Exploration Activities</b>																												
	Camp Use																												
	Helicopter access																												
	Foot access - prospecting / staking / geophysics																												
	Drilling (incl. site prep and water use)																												
	Wildlife interactions																												
	Geophysical Surveys																												
	Snowmobiles used with Geophysical Surveys																												
	Geophysical Surveys (Airborne)																												
	Geophysical Surveys (Ground)																												
DECOMMISSIONING	Water use																												
	Movement of people within camp																												
	Power supply																												
	Fuel use and storage																												
	Waste disposal (food, materials, fuel, sewage)																												
	<b>Reclamation and Remediation</b>																												
	Site abandonment																												

Notes: Please indicate in the matrix cells whether the interaction causes an impact and whether the impact is:  
**P** Positive  
**N** Negative and non-mitigable  
**M** Negative and mitigable  
**U** Unknown  
 If no impact is expected then please leave the cell blank

Prepared for: Golden Bull Resources Corporation,  
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- 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 fuelling 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 cleanup 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. Walker Lake). Extraction volumes to sustain 15 to 25 people will be approximately 1.0 to 2.0 m<sup>3</sup> per day, which will not impact aquatic habitat in the large lake. Drilling could use up to 50 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 defence.

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
- interactions with wildlife
- injury while working with power
- machinery (the drill rig)
- hazardous materials,
- slipping on lichen-covered rocks,
- falls in general
- drowning
- rock chip injuries
- 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 defence 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 trans-boundary 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 north from the Kitikmeot/Kivalliq 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.

One species in the South Arctic Ecozone, the eastern population of Wolverine (*Gulo gulo*), is listed as endangered under Schedule 1 of SARA. There are 6 species (short eared owl, tundra peregrine, blackline prickleback, western population wolverine, grizzly bear and polar bear) which are listed as species of concern. Human-wildlife interactions will be kept to an absolute minimum. Crews will avoid areas where wildlife is present. A daily log of wildlife sightings will be maintained.

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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 form entering any water body frequented by fish.
- Drilling additives or mud will not be used in connection with holes drilled though 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. 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 (during or before 2016), all materials will be removed from site and backhauled to Yellowknife / Baker Lake / Rankin Inlet (for re-use or appropriate disposal). All disturbed areas (including grey water sump) will be covered and graded on a yearly basis, after use with complete remediation at the termination of the project.

If the proposed exploration program is terminated during or before 2016, there will be no evidence that either of the proposed camps previously existed. Conversely, if the program is ultimately successful and a viable mine is identified which would continue 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 1 Form (English): Project Proposal Information Requirements – NIRB  
**ATTACHED:** [2011 COMBAY-NIRB-PPIR Pt\\_1 \(ENGLISH\) Summary-OT4E.pdf](#)
  - Part 1 Form (Inuktitut): Project Proposal Information Requirements – NIRB  
**ATTACHED:** [2011 COMBAY-NIRB\\_PPIR\\_Part 1 \(INUKTITUT\).pdf](#)
  - Part 1 Form (Inuinnaqtun): Project Proposal Information Requirements – NIRB  
**ATTACHED:** [2011 COMBAY-NIRB\\_PPIR\\_Part 1 \(INUINNAQTUN\).pdf](#)
  - Part 2 Form (English): Project Specific Information Requirements – NIRB  
**ATTACHED:** [2011 COMBAY-NIRB-PSIR-Pt\\_2-Exploration-ENGLISH\\_OTAE.pdf](#)
  - Table 1 - Identification of Environmental Impacts.  
**ATTACHED:** [2011 COMBAY-ScreeningPart2-Tables-FTAE.pdf](#)
  - Abandonment and Decommissioning Plan.  
**ATTACHED:** [2011 COMBAY-Abandonment and Decommissioning Plan.pdf](#)
  - Emergency Response and Spill Contingency Plan.  
**ATTACHED:** [2011 COMBAY-Fuel Spill Contingency Plan.pdf](#)
  - Waste Management Plan.  
**ATTACHED:** [2011 COMBAY-Waste Management Plan.pdf](#)
  - Wildlife Mitigation and Monitoring Plan.  
**ATTACHED:** [2011 COMBAY-Wildlife Mitigation and Monitoring Plan.pdf](#)
  - Data Base Search Results from Chief Archaeologist, Nunavut.  
**ATTACHED:** [2011 COMBAY Chief Archaeologist Email Response.pdf](#)
  - Metadata Files: MapInfo (UTM NAD83 Zone 15).  
**ATTACHED:** [2011 COMBAY MapInfo data \(NIRB MapInfo Data.zip\)](#)
  - Non-Technical Project Summary (English)  
**ATTACHED:** [2011 COMBAY - Summary of Operations ENGLISH.pdf](#)
  - Non-Technical Project Summary (Inuktitut)  
**ATTACHED:** [2011 COMBAY - Summary of Operations INUKTITUT.pdf](#)
  - Non-Technical Project Summary (Inuinnaqtun)  
**ATTACHED:** [2011 COMBAY - Summary of Operations INUINNAQTUN.pdf](#)
  - Maps of the Project Areas.  
**INCLUDED WITHIN APPLICATION**
  - Maps of the Permit Areas.  
**INCLUDED WITHIN APPLICATION**
  - Existing site photos with descriptions.  
**NONE IS AVAILABLE (SEE: Frontispiece Photos).**
  - Nunavut Planning Commission Response.  
**ATTACHED:** [2011 COMBAY NPC Approval.pdf](#)
  - Waste Disposal Permission - Yellowknife.  
**ATTACHED:** [2011 Yellowknife Landfill.pdf](#)

Respectfully submitted, on the 27<sup>th</sup> day of April, 2011.

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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.