



AREVA Resources Canada Inc.

KIGGAVIK PROJECT, NUNAVUT

WILDLIFE MITIGATION AND MONITORING PLAN

May 2013 – Version 5, Revision 2

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HISTORY OF REVISIONS

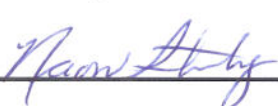
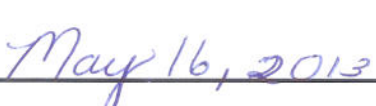
Version	Revision	Date	Details of Revision
01	0	March 2007	Original submission
02	0	January 2008	Updated to reflect changes in field activities/capabilities and areas of continual improvement
02	01	May 2008	Updated to reflect program changes initiated by new consulting biologist and to integrate comments received by Nunavut and NWT biologists
03	0	January 2009	Updated to reflect opportunities for improvement
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05	0	April 2011	Updated to reflect lessons learned throughout the 2010 field season. These changes include an appendix which outlines the appropriate responses to a variety of scenarios to ensure appropriate mitigative actions are carried out in a timely and effective manner.
05	01	May 2012	Updated to reflect change in personnel titles
05	02	May 2013	Updated to reflect changes in personnel

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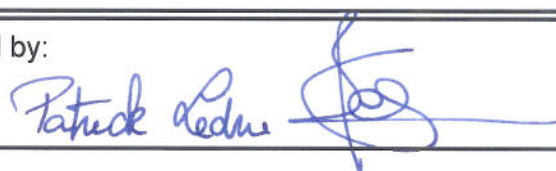
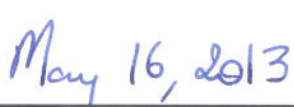
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1 INTRODUCTION

The Wildlife Mitigation and Monitoring Plan (Plan) described herein has been developed by AREVA Resources Canada Inc. (ARC) for the Kiggavik Project (Project) located approximately 80 km west of Baker Lake, Nunavut. The Plan is implemented during the field season to monitor and reduce Project impacts on wildlife, particularly caribou. The Plan serves as a work instructional and internal best management practice and encompasses activities in Nunavut, including continued exploration and environmental baseline programs.

All ARC Kiggavik staff, contractors, subcontractors, helicopter contractors, and Independent Wildlife Monitors, have the responsibility to be familiar with and to follow this Plan. Implementation and enforcement is the responsibility of the Safety, Health, Environmental, and Quality (SHEQ) Supervisor or designate. Current field worksites include locations of:

- Camp Activities (including fuel caching)
- Drilling Operations
- Airborne Geophysics
- Ground Geophysics and Exploration Activities
- Environmental Baseline Work and
- Environmental Monitoring

The Plan is reviewed and updated annually, and was developed in consultation with a biologist knowledgeable in barren ground caribou issues. The Plan is reviewed to reflect lessons learned through ARC experience and the experience of other development projects as well as feedback and recommendations from regulators and community members.

The current Plan has evolved with lessons learned during the previous field seasons; community input; and regulatory commitments. ARC is working closely with the Government of Nunavut Department of Environment (GN-DoE) to investigate options for collecting meaningful caribou population data using low invasive methodologies.

2 MONITORING PLAN

2.1 Independent Wildlife Monitoring

ARC will employ an Independent Wildlife Monitor(s) to:

- Verify that this plan is carried out;
- Report regarding wildlife issues at Kiggavik outside of ARC; and
- Provide safety assistance regarding wildlife issues.

The Independent Wildlife Monitor must become familiar with Kiggavik's Procedure for Wildlife Monitoring and Work Instruction *Independent Wildlife Monitor Scope of Work* for proper implementation of the Plan which will be provided by ARC.

2.2 Baseline Data to Support an Environmental Assessment

Wildlife survey data collected to support the development of an Environmental Impact Statement (EIS) may be used to support site monitoring and help inform appropriate mitigation actions as required. The environmental consultants communicate regularly with the SHEQ Supervisor or designate to ensure important wildlife observations are recorded and communicated to appropriate personnel at site.

2.3 Aerial Observations

Wildlife observations during daily transportation of field staff and contractors are recorded, and provide information about the presence of caribou. Please refer to section 3.4 Flight Specific Mitigation for the required altitudes of the above mentioned flights.

2.4 Wildlife Logs

ARC has provided *Incidental Wildlife Sightings Form* for all site personnel, contractors, and visitors to complete following the observation of any wildlife. Instructions regarding this form are provided during orientation. The Independent Wildlife Monitor utilizes the *Wildlife Monitoring Data Form* to record information obtained in the field. All wildlife information is transcribed to an electronic file and a summary is included in the monthly wildlife reports.

2.5 Caribou Radio-Collaring Data

The study area will be monitored for approaching caribou with the use of satellite collar information provided by caribou biologists with the Governments of Nunavut and the Northwest Territories.

3 MITIGATION AND PROTECTION MEASURES

Mitigation and protection measures are heavily based on compliance with permit/lease terms and conditions. Additional ARC commitments were adopted from recommendations from the Government of Nunavut, GN-DoE, Environment Canada (EC), Beverly and Qamanirjuaq Caribou Management Board (BQCMB) and ARC-led commitments. ARC will implement the following mitigation and protection measures for caribou, and other wildlife that are seasonal or annual residents of the Project area.

3.1 General Protection Measures

- Site activities (camp layout, drilling) will be performed in a manner that limits the size of the Project footprint.
- Staff will be required to follow the procedures in the “Safety in Bear Country” manual and all man-bear interactions will be reported to the Baker Lake Conservation Officer.
- If there is a disturbance to caribou or if an incident occurs between a grizzly bear, wolverine, wolf, or fox and the field staff a Supervisor's Investigation Report will be completed. An incident is defined as a disturbance to caribou, damage to camp facilities caused by wildlife, continued persistence of a carnivore(s) within the camp or work site, and/or interactions between humans and wildlife that lead to harm to either. In the case of a wildlife incident notify the Baker Lake Conservation Officer.
- An ARC representative will contact the Baker Lake Conservation Officer for appropriate protocols and actions if a need for deterrents or other wildlife management techniques are identified.
- Use of “good housekeeping” practices to maintain a garbage-free camp and exploration area, should limit the attraction of wildlife to the Project site. Non-hazardous combustible garbage is burned in an incinerator (see Waste Management Plan). Non-combustible waste and hazardous materials are stored in a designated area for future shipment to an approved facility.
- ARC educates and enforces “no feeding or harassment of wildlife” and the appropriate response to animal encounters, specifically carnivores and muskoxen is communicated.
- The use of firearms is strictly controlled. The Project Geologist or designate must approve any firearm coming on site. The only allowable use of firearms is for dangerous animal deterrence measures (e.g., firearms, bear bangers, bear spray, cracker shells and rubber bullets), and for safety kills to protect human life should a situation arise when other measures have failed. The Independent Wildlife Monitor is permitted to carry a firearm. Refer to *GSP Section 9.03 Firearms and Offensive Weapons* regarding storage and use of firearms.
- Hunting and trapping by ARC employees and contractors is prohibited on the Kiggavik lease.

- ARC employees and contractors must obtain a Sport Fishing Licence, and provide a copy to the SHEQ Supervisor or designate before commencing on a fishing trip leaving from site.
- Wildlife has the “right-of-way” and will not be blocked or deterred from moving through the Project area.
- Materials, chemicals, and equipment will be removed from the drill sites and camp area at completion of the project as described in the Abandonment and Restoration Plan. The intent is to reclaim the area as close as possible to the natural state.
- Chemicals are stored in double-walled containers or in secondary containment. Diesel fuel, gasoline, and aviation fuel is contained within arctic berms or double-walled storage tanks (see Spill Contingency Plan). In the event of a spill, the Spill Contingency Plan will be implemented immediately. Used chemicals are stored for transportation off site for proper handling.
- Refer to the Noise Abatement Plan for measures taken to control noise.

3.2 Raptor (and Other Migratory Bird) Protection Measures

ARC has implemented the following protection measures to mitigate potential impacts to raptors and other migratory birds.

- ARC will avoid disturbing known raptor nests from April 15th to September 1st by maintaining a 1.5 km buffer when in transit by aircraft and will avoid approaching known nests closely while on foot. Limited disturbance (e.g. raptor nest monitoring) within the aircraft buffer may occur infrequently prior to September in order to obtain necessary baseline data. The consulting biologist will be informed of all other potential disturbances in order to implement potential protection and mitigation measures, and to initiate monitoring efforts to determine vulnerability and susceptibility to the disturbance. Efforts to monitor disturbance response will help to inform future activities.
- If a nest site is established on a man-made structure and eggs are present, the nest will be avoided as much as possible and monitored for nest success.
- Where land disturbance activities occur during the breeding period for land birds (May 30th to July 31st) a bird nest survey will be conducted prior to the land disturbance following *Work Instruction KIG-722-02, Active Bird Nest Identification and Monitoring*. All nests will be recorded and efforts to create appropriate buffers (dependant on species tolerance and protection level) around migratory birds and species at risk will be made. Nests will be monitored for hatch or termination.

3.3 Caribou Protection Measures

The calving grounds for the Beverly and Qamanirjuaq herds are approximately 70 km and 200 km from the exploration areas, respectively. ARC does not conduct any activity within the designated

Caribou Protection Areas or within the larger known Caribou Calving Grounds. The distance between the Kiggavik camp and the nearest known caribou water crossings is 25 km. Figure 3.3-1 shows the caribou crossings and calving areas in relation to the Kiggavik Project Site. ARC follows the DIAND Caribou Protection Measures (AANDC, 2010) as well as additional caribou protection and mitigation commitments.

- No camp construction, caching of fuel, or blasting will occur within 10 km of a designated and/or recognized caribou crossing during periods of migration between May 15 and September 1. No diamond drilling activity will occur within 5 kilometres of any designated and/or recognized caribou crossing during periods of migration between May 15 and September 1. Operation of ground, air or water-based mobile equipment within 10 km of a caribou crossing is anticipated to happen infrequently and will only occur in the absence of caribou concentrations. Ground-based monitoring and/or aerial reconnaissance flights will be used to monitor caribou presence as required and appropriate prior to and during operations of mobile equipment (AANDC, 2010).
- Snowmobile and ATV use will be suspended if cows and calves are within 2 km of activities.
- If a collared caribou is identified as approaching site activities the SHEQ Supervisor or designate may determine what the collar represents by communicating with the GN or GNWT, with environmental consultants, and exploration companies within the area. The Manager of Nunavut Affairs will be notified and if required, verification will occur through an aerial reconnaissance survey.
- In the event that caribou cows calve outside the designated Caribou Protection Areas, ARC will suspend operations within 10km¹ of any area occupied by cows and calves between May 15 and July 15 (AANDC, 2010). Water circulation in the drills will continue to avoid the rods from freezing in the hole. Monitoring activities and visuals from the drill area will be used to identify when caribou are within 10 km of drilling activities. Through ground based monitoring, the Independent Wildlife Monitor will determine when caribou cows and calves are outside the 10 km buffer, and report the information to the SHEQ Supervisor or designate. Activities can resume when the caribou are outside the 10 km buffer following confirmation by the SHEQ Supervisor. If a concentration of caribou remains within 10 km of drilling operations for more than 2 days the SHEQ Supervisor or designate will contact the Conservation Officer in Baker Lake and the consulting biologist to determine the next appropriate course of action.
- During June and July (to avoid injuries to caribou and humans), drilling activities will be suspended if concentrations of caribou (50 or more) approach within 2 km² of drilling operations (NIRB, 2007a and GN-DoE, 2008). Water circulation within the drill will continue to keep the rods from freezing in

¹ The 10 km calving period buffer originated from comments by the BQCMB and GNDOE (BQCMB, 2007, GN, 2007, GN 2008)

² With respect to the recommendation for suspending activities when caribou are within 10 km of exploration activities (GN-DoE 2007, GN-DoE 2008), ARC offers the following information and approach. Studies of woodland caribou have demonstrated avoidance of up to 1 km for well sites and 250 m for roads and seismic lines (Dyer et al. 2001). Data from the Ekati Diamond Mine suggests that the instantaneous negative response (alert, stop feeding) of barren-ground caribou to stressors (e.g., truck traffic) increases within 1 km of the source (BHPB 2004). Behaviour data also demonstrated that the amount of time spent feeding by females with calves was reduced when animals were within 5 km of Ekati mine footprint (BHPB 2004). The size and level of activity of the Kiggavik-Sissons project is much less than an operating diamond mine or road.

the hole. Monitoring activities and visuals from the drill area will be used to identify when caribou are within 2 km of drilling activities. Through ground based monitoring, the Independent Wildlife Monitor will determine when caribou are outside the 2 km buffer, and report the information to the SHEQ Supervisor or designate. Activities can resume when caribou are outside the 2 km buffer following confirmation by the SHEQ Supervisor or designate. If a concentration of caribou remains within 2 km of drilling operations for more than 2 days the SHEQ Supervisor will contact the Conservation Officer in Baker Lake and the consulting biologist to determine the next appropriate course of action.

- Caribou will have the “right-of-way”, and will not be blocked or deterred from moving through the Project area. Activities that may interfere with migration will cease during migration.
- ARC will forward any direction from GN-DoE or KIA regarding caribou monitoring to NIRB (NIRB 2007).
- Refer to 3.4 Flight Specific Mitigation for altitudes over concentrations of caribou 50 or more within close proximity to one another.

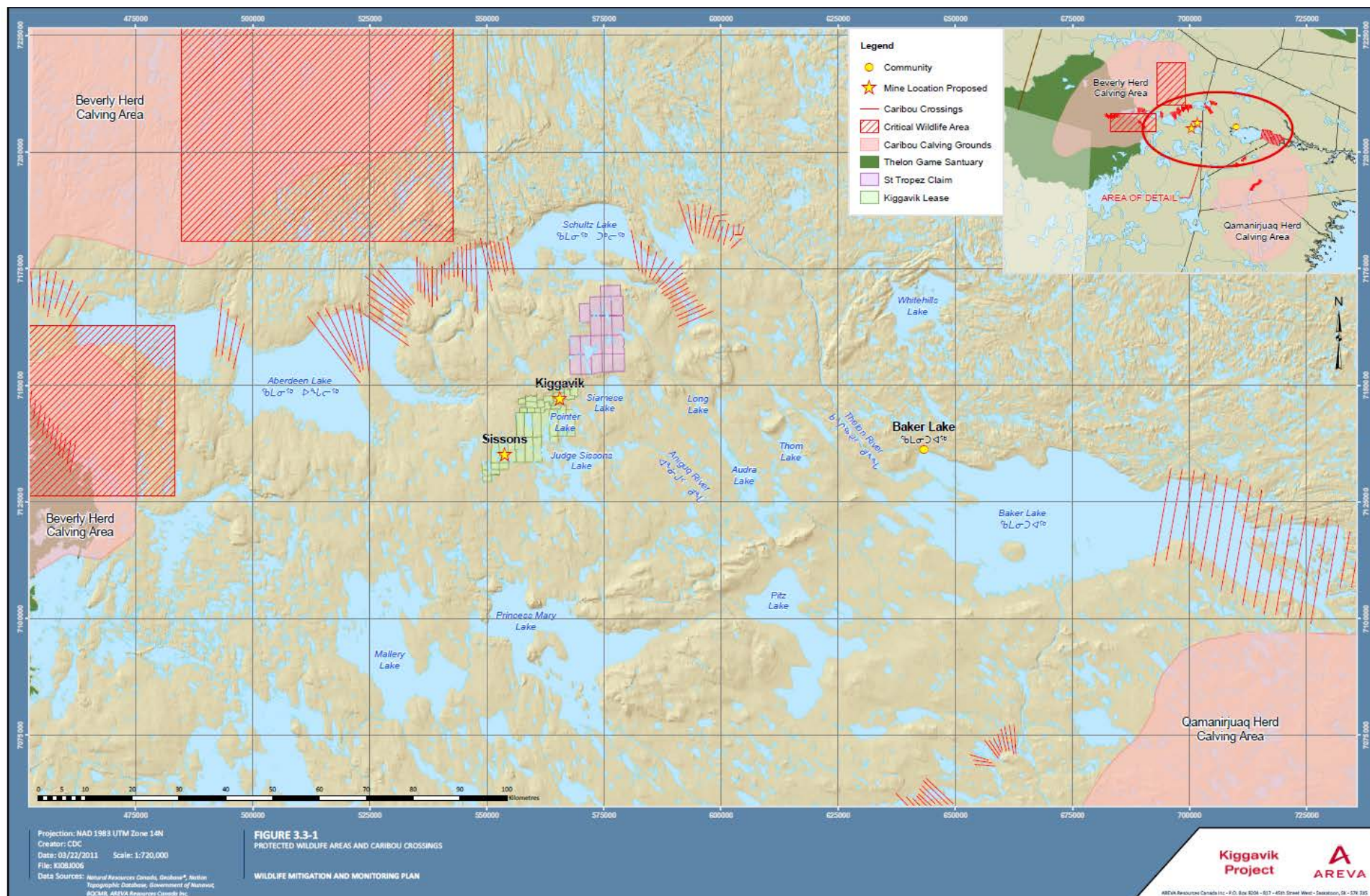


Figure 3.3-1 Beverly and Qamanirjuaq Calving Areas and Caribou Crossings in Relation to Kiggavik Project Site

3.4 Flight Specific Mitigation

ARC will make efforts to avoid wildlife during flights and to avoid low-level flying to minimize impact of helicopter and airplane noise and presence. Although required flight altitudes are outlined below, some low-level flights are occasionally required for geological/environmental surveys, slinging operations, and during periods of poor weather. Geological or environmental surveys that will be flown below desired altitude must be pre-approved by the SHEQ Supervisor or designate. Unless otherwise approved by the SHEQ Supervisor or designate, personnel must adhere to the minimum flight altitudes listed below. If flying at lower altitudes is required, the SHEQ Supervisor must be notified and reasons documented. Any special requirements including the necessity for high level reconnaissance surveys will be determined by the SHEQ supervisor or designate.

- For long-range transportation flights (>25 km), aircrafts are required to fly at a minimum of 610 m (2000 ft) above ground level.
- For shorter transportation flights (between 4-25 km)(e.g. movement of staff and equipment between camp and deposits within the Kiggavik lease), the normal practice is to fly all aircraft at a minimum of 300 m (1000 ft) above ground level.
- Unless caribou are present there are no altitude restrictions for flights less than 4 km.
- In the presence of 50 or more caribou, best practice is to avoid the caribou by a minimum distance of 610 m ¹ above or around the herd.
- Taking-off or landing of aircraft does not occur if 50 or more caribou are within 1 km of the landing area, except where safety is at risk (NIRB, 2007).
- From April 15th to September 1st, ARC will not fly within 1.5 km of nesting raptors when in air transit and will avoid disturbance in poor weather. Efforts to protect raptors during baseline data collection are given in Section 3.2.
- Aircraft pilots are instructed not to fly over the Beverly calving grounds 70 km northwest of the Project area (Figure 3.3-1).
- A requirement of the project's main helicopter contractor is to provide altitude reports for all flights. Track logs of helicopter flights are maintained.

Protection measures specific to low-level airborne surveys are given in the following section.

¹ For helicopter safety, the normal practice is to fly 2500 ft westbound for long flights such as Baker Lake to the Kiggavik Camp, and 3500 ft eastbound from the Kiggavik Camp to Baker Lake using the altimeter setting of 29.92". This is in accordance with Canadian Aviation Regulations (CARS 602.34 and CARS 602.36)

Table 3.4-1 Required activities and their applicable frequencies and flying altitudes

Activity	Flying Altitude (above ground)¹
Regular Long Distance Flights >25 km	≥610 m
Short Distance Flights between 4 and 25 km	≥300 m
Aerial Reconnaissance Surveys	≥300 m
Airborne Geophysical Surveys	≥120 m (as required by the survey protocol)
Flights in the vicinity of ≥ 50 caribou	≥610 m (horizontal separation if vertical is not possible)

3.5 Mitigation Specific to Aerial and Ground Geophysical Surveys

3.5.1 Survey Rationale

Aerial

Airborne geophysical techniques are used extensively in exploration to identify physical variations in the underlying geology which can be then used as a means of defining areas of interest. Airborne geophysical surveys are normally conducted at least once in a cycle of exploration activity. Different methods are employed such as Electromagnetics (EM), Gravity Gradiometry, Magnetism and Radiometrics which may be conducted in different years if required. Flying altitudes and line spacing's are the main factors that govern the resolution of the survey. To map the targets both a tight line spacing (~150 m) and a low altitude of (50-200 m) following the topography is required.

Airborne geophysical surveys can gain access to remote areas quickly and reduce exploration time. In addition, where environmental issues may limit the amount of exploration possible with ground activities, airborne surveys offers a solution to these issues. If flying over concentrations of caribou is avoided, then this technique is a non-invasive passive technology, an environmentally friendly alternative that will help focus future ground-based activities while limiting or reducing impacts to the environment.

Ground Geophysical Surveys

Ground geophysical surveys are generally the second step in the geophysical exploration. Mainly used to refine the areas of interest that result from the airborne surveys, they employ the same kind of techniques such as DC Resistivity, EM, Gravity, Magnetism, and Radiometrics. They are used to better understand the underlying geology with more detail and to help geologists to define their drill targets.

Ground geophysical surveys have a lower production rate compared to airborne surveys because they are generally realized by men on the ground but the accuracy is better. Techniques have almost no

¹ Normally the altitude above ground is estimated using the aircraft altimeter set to 29.92" of mercury and correcting for the ground elevation along the track. This causes uncertainties due to estimating the ground elevation and the difference between the barometric pressure at the time of the flight and standard pressure of 29.92".

effects on the environment (walking on the ground) and instruments can be quickly removed from the field if caribou are getting too close to the survey area.

3.5.2 Survey Specifications

Airborne Geophysical Survey Specifications

The chosen method is to mount survey instrumentation in a suitable aircraft. Instrumentation includes among others the data acquisition system (which records full tensor gravity gradiometry, triaxial magnetic gradiometry etc if any), digital video, and a complete digital terrain model from an inertially referenced laser (Lidar) altimeter system or a radar system. Specific requirements to complete a survey could be as follows:

- Nominal Flying Height: 120 - 200 m
- Flying Mode: Modified Drape
- Line Spacing: 150 m
- Tie Line Spacing: 750 m
- Ground Cover Restriction: Results are much more precise without snow cover
- Survey time: Dependant on weather conditions and the presence of caribou within the survey area)

Ground Geophysical Survey Specifications

The chosen method is to deploy in the field the adequate technique to realize, if any, a mapping of the apparent resistivity or gravity, to locate anomalous radioactivity, to define magnetic structures and to characterize targets in depth.

The specific requirements to complete a mapping survey could be as follows:

- Line Spacing: 150 m
- Number of lines: 20
- Length of lines: 2000 m
- Surface covered: 6 km²
- Ground Cover Restriction: Results are much more precise without snow cover and frozen ground
- Survey time: Dependent on surface cover, contractor's crew size, quantity of equipment used, weather conditions and the presence of caribou within the survey areas

3.5.3 Protection Measures

The following protection measures apply to airborne and ground geophysical surveys. The intent of these protection measures is to help ensure surveys are only conducted when caribou disturbance can be minimized.

- The preferred window for conducting geophysical surveys is in June after the northern migration, and efforts will be made to avoid the migration and post calving periods from July 15 to 31.

- The SHEQ Supervisor or designate is notified of the requested survey area and duration to confirm compliance with the Plan.
- A reconnaissance flight is flown at an altitude of 300 m over the initial line of the proposed area to determine the presence of caribou. If the ceiling is lower than the 300 m but at an altitude that permits safe flying, the reconnaissance flight will be flown at the maximum altitude possible.

Airborne Geophysical Surveys

- If a concentration of caribou (50 or more individuals in close proximity to one another) are within the survey area the aircraft will relocate to another part of the survey block and repeat the reconnaissance flight or the survey will be postponed until the caribou are at a distance of 2 km from the survey area.
- If caribou calves are present in the survey area between May 15th and July 15th the survey will be postponed until either the calves are gone or the survey can be conducted outside of this time period.
- If concentrations of caribou are not observed within the survey route, then the survey proceeds at the approved altitude
- A continuous watch is kept for caribou during the survey. If concentrations of caribou are observed in the survey area during the course of the work, the survey is aborted and another part of the block is selected.
- The contractor must notify the SHEQ Supervisor or designate of such caribou encounters and provide information pertaining to the location, time, numbers, etc of caribou.

Ground Geophysical Surveys

- Reconnaissance flights are flown daily during the survey to confirm the absence of caribou herds in proximity to the survey area.
- If 50 or more caribou or cows with calves between May 15th and July 15st are not within 10 km of the study area, or are not expected to be within the study area during the survey, the survey can be conducted. In the event the caribou are within 10 km, the geophysical survey will be postponed.
- For concentrations of caribou the SHEQ Supervisor or designate along with the Consulting Biologist, will determine an adequate distance at which the geophysical wire is to be retrieved. The time required to retrieve wire and the speed in which the caribou are migrating will be considered. This distance will be determined prior to conducting each new survey.
- If 50 or more caribou (in close proximity to one another) approach the survey area, within the minimum distance determined above, the geophysical wire will be retrieved to ensure they are protected.

4 REPORTING

All wildlife activities will be recorded and reported monthly during the field season. With the assistance of the independent Wildlife Monitor, reports will be submitted by the SHEQ Supervisor or designate on site to the Manager, Nunavut Affairs, the District Geologist, Nunavut, the consulting biologist, Baker Lake Hunters and Trappers Organization (HTO) the Baker Lake Conservation Officer, the GN Department of Environment (GN-DoE), Regional Biologist, Kivalliq Inuit Association (KIA) and Aboriginal Affairs and Northern Development Canada (AANDC). The monthly reports will be used to help construct a year-end overview to be included in the Kiggavik Project Annual Report.

5 REFERENCES

- Aboriginal Affairs and Northern Development Canada (AANDC), 2007. Land Use Permit N2006C0037 (April 5, 2007)
- Aboriginal Affairs and Northern Development Canada (AANDC), 2010, Land Use Permit N2009C0017 (January 21, 2010)
- BHPB (BHPB Diamonds Inc). 2004. Ekati Diamond Mine 2003 Wildlife Effects Monitoring Program. Prepared by Golder Associates Ltd. for BHPB Diamonds Inc
- BHPB. 2007. Ekati Diamond Mine 2006 Wildlife Effects Monitoring Program. Prepared by Rescan™ Environmental Services Ltd. for BHP Billiton Diamonds Inc
- BQCMB. 2007. Letter from BQCMB providing comments and recommendations regarding the Kiggavik and Sissons Uranium Exploration Project (March 12, 2007)
- BQCMB, 2008. Letter from BQCMB providing comments and recommendations regarding extension request with AANDC and KIA for the Kiggavik-Sissons Project (December 16, 2008)
- Durey, O. 2007. Letter from Orin Durey providing comments and recommendations regarding the Kiggavik and Sissons Uranium Exploration Project (March 12, 2007)
- Dyer, S.J., J.P. O'Neill, S.M. Wasel, and S. Boutin. 2001. Avoidance of industrial development by woodland caribou. *Journal of Wildlife Management*, 65:531-542
- EC (Environment Canada). 2007. Letter from EC providing comments and recommendations to AREVA Resources Canada Inc. for Kiggavik and Sissons Uranium Exploration Project (March 12, 2007)
- EC, 2008. Letter from EC providing comments and recommendations regarding extension request with AANDC and KIA for the Kiggavik-Sissons Project (December 16, 2008)
- GN-DoE (Government of Nunavut, Department of Environment). 2007. Letter from GNDOE providing comments and recommendations to AREVA Resources Canada Inc. for Kiggavik and Sissons Uranium Exploration Project (March 7, 2007)
- GN-DoE, 2008. Letter from GN-DoE providing comments and recommendations regarding extension request with AANDC and KIA for the Kiggavik-Sissons Project (December 16, 2008)
- Kivalliq Inuit Association (KIA), 2007. Land Use Licence No. KVL306C02 (April 3, 2007)
- KIA, 2008. Extension of Land Use Licence No. KVL306C02 (December 19, 2008)
- Nunavut Impact Review Board (NIRB), 2007a. Screening Decision Report, NIRB File No. 06AN085. (April 3, 2007)
- NIRB, 2007b. Screening Decision on Amendment Request from AANDC - Additional Terms and Conditions for NIRB File No. 06AN085 (August 30, 2007)
- NIRB, 2009. Screening Decision on Extension Request from AANDC and KIA - Additional Terms and Conditions for NIRB File No. 06AN085 (January 9, 2009)
- Nunavut Water Board (NWB), 2008. Nunavut Water Board Licence No. 2BE-KIG0812 (May 12, 2008)

Appendix A - Events and responses

Event	Contractors	Wildlife Monitor	SHEQ Supervisor or Designate
General Mitigation			
A disturbance to caribou	<ul style="list-style-type: none"> Notify the SHEQ Supervisor Assist with the completion of the Supervisor's Investigation Report where necessary 	<ul style="list-style-type: none"> May be required to assist in emergency situations such as using firearm for safety kills or notifying camp when danger (wildlife) is out of the area Assist with the completion of the Supervisor's Investigation Report where necessary 	<ul style="list-style-type: none"> Complete a Supervisor's Investigation Report Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report
An incident occurs between grizzly bear, wolverine, wolf, fox and field staff	<ul style="list-style-type: none"> Notify the SHEQ Supervisor Assist with the completion of the Supervisor's Investigation Report where necessary 	<ul style="list-style-type: none"> May be required to assist in emergency situations such as using firearm for safety kills or notifying camp when danger (wildlife) is out of the area Assist with the completion of the Supervisor's Investigation Report where necessary 	<ul style="list-style-type: none"> Complete a Supervisor's Investigation Report Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Notify the Baker Lake Conservation Officer Note in monthly wildlife report
If a need for deterrents or other wildlife management techniques are identified	<ul style="list-style-type: none"> No action required 	<ul style="list-style-type: none"> No action required 	<ul style="list-style-type: none"> Contact Baker Lake Conservation Officer
Caribou Mitigation			
Collared Caribou are identified as approaching site activities	<ul style="list-style-type: none"> No action required 	<ul style="list-style-type: none"> Assist SHEQ Supervisor with identifying what the collar represents and aerial reconnaissance surveys where necessary 	<ul style="list-style-type: none"> Determine what the collar represents by contacting the GN and/or GNWT, environmental consultants, or exploration companies in the area Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report
If caribou with calves approach drilling rig between May 15 and July 15 ,	<ul style="list-style-type: none"> Notify the SHEQ Supervisor and Wildlife Monitor If caribou and calves are observed within 10 km of drilling rig, shut down drilling activity (continue water circulation). 	<ul style="list-style-type: none"> Station at a vantage point for observing proximity of herd and presence of calves. Notify the SHEQ Supervisor of observations If drilling activity is suspended, continue 	<ul style="list-style-type: none"> Advise Contractor to shut down drilling activity if Wildlife Monitor determines calves are present within 10 km Following verification from Wildlife Monitor, advise Contractor to commence drilling when caribou are

Event	Contractors	Wildlife Monitor	SHEQ Supervisor or Designate
		monitoring and notify SHEQ Supervisor of caribou proximity to drill rig	<p>outside the 10 km range</p> <ul style="list-style-type: none"> If caribou remain within 10 km for >2 days, notify the Baker Lake Conservation Officer and consulting Biologist for further action Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report
<p>> 50 caribou approach drilling rig during June or July</p>	<ul style="list-style-type: none"> Notify the SHEQ Supervisor and Wildlife Monitor If >50 caribou are observed within 2 km of drilling rig, shut down drilling activity (continue water circulation) 	<ul style="list-style-type: none"> Station at a vantage point for observing proximity of herd and presence of calves. Notify the SHEQ Supervisor of observations If drilling activity is suspended, continue monitoring and notify SHEQ Supervisor of caribou proximity to drill rig 	<ul style="list-style-type: none"> Advise Contractor to shut down drilling activity if Wildlife Monitor determines >50 caribou are present within 2 km Following verification from Wildlife Monitor, advise Contractor to commence drilling when caribou are outside the 2 km range If >50 caribou remain within 2 km for >2 days, notify the Baker Lake Conservation Officer and consulting Biologist for further action Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report

Event	Contractors	Wildlife Monitor	SHEQ Supervisor or Designate
Flight Mitigation			
>50 caribou are within 1 km of landing area	<ul style="list-style-type: none"> Pilot will not land or take off within 1 km of >50 caribou except for flight safety. Flights must be 610 m above ground when flying over >50 caribou (horizontal separation of 610 m is acceptable if 610 m altitude is not possible) If possible, choose an alternate landing area > 1 km from the herd, Notify the SHEQ Supervisor and Wildlife Monitor 	<ul style="list-style-type: none"> If landing area is within sight, monitor proximity of herd Notify the SHEQ Supervisor of observations 	<ul style="list-style-type: none"> Notify pilots when >50 caribou are within 1 km of their landing area as advised by the Wildlife Monitor Notify pilots when the caribou have moved outside the 1 km range of the landing area as advised by the Wildlife Monitor Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report
Aerial Geophysical Surveys			
During flight, 50 or more caribou are within the aerial survey route	<ul style="list-style-type: none"> Notify the SHEQ Supervisor The aircraft will relocate to another part of the block and repeat the reconnaissance flight or will be postponed until the animals are a distance of 2 km from the survey area 	<ul style="list-style-type: none"> No Action Required 	<ul style="list-style-type: none"> Notify Project Geologist or designate, Wildlife Monitor and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report.
If calves are present between May 15 and July 15	<ul style="list-style-type: none"> Notify the SHEQ Supervisor The survey will be postponed until either the calves are gone or the survey can be conducted outside of this time period. 	<ul style="list-style-type: none"> No Action Required 	<ul style="list-style-type: none"> Notify Project Geologist or designate, Wildlife Monitor and Manager of Nunavut Affairs of mitigating actions
Ground Geophysical Surveys			
Caribou cows and calves are present within 10 kms between May 15 and July 15	<ul style="list-style-type: none"> Notify the SHEQ Supervisor and Wildlife Monitor Retrieve wire following verification from SHEQ Supervisor 	<ul style="list-style-type: none"> Station at a vantage point for observing proximity of herd and presence of calves. Notify the SHEQ Supervisor of observations 	<ul style="list-style-type: none"> The SHEQ Supervisor in consultation with the Wildlife Monitor will notify the Contractor to retrieve the wire Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report

Event	Contractors	Wildlife Monitor	SHEQ Supervisor or Designate
> 50 caribou are within close proximity (as determined in Section 3.5.3 Protection Measures – Ground Geophysical Surveys) of the ground survey area during June/July	<ul style="list-style-type: none"> Notify the SHEQ Supervisor and Wildlife Monitor Retrieve wire following verification from SHEQ Supervisor 	<ul style="list-style-type: none"> Station at a vantage point for observing proximity of herd and presence of calves. Notify the SHEQ Supervisor of observations 	<ul style="list-style-type: none"> The SHEQ Supervisor in consultation with the Wildlife Monitor will notify the contractor to retrieve the wire Notify Project Geologist or designate and Manager of Nunavut Affairs of mitigating actions Note in monthly wildlife report