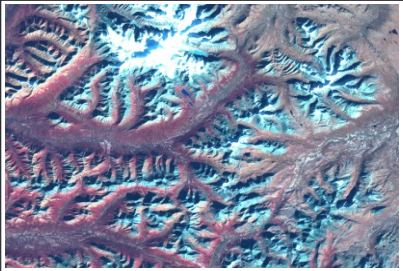




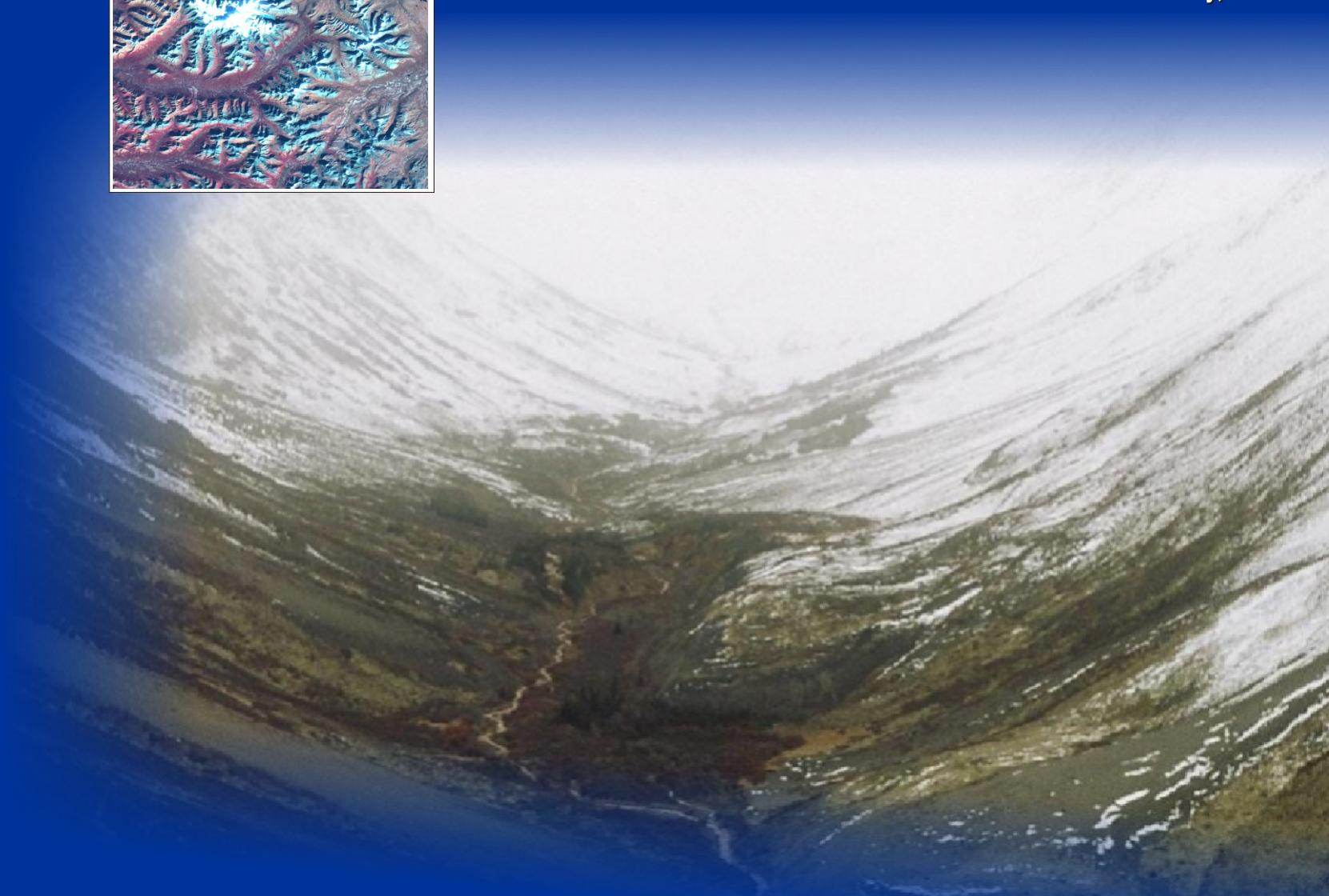
ENVIRONMENTAL BASELINE STUDIES 2005 PRELIMINARY WILDLIFE SURVEY MACTUNG PROJECT AREA, YUKON



Submitted To:
North American Tungsten Corporation Ltd.

1200163

February, 2006



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APPENDIX

Appendix A EBA's General Conditions for environmental reports

1.0 INTRODUCTION

North American Tungsten Corporation Ltd. (NATCL) retained EBA Engineering Consultants Ltd. (EBA) in October, 2005 to complete a baseline wildlife survey at the MacTung Project Property (MacTung study area), located in the Yukon near it's border with the Northwest Territories (Figure 1). The survey objective was to document wildlife species within the study area for future regulatory submissions leading to MacTung Project approvals and implementation.

This report identifies wildlife recorded within the study area during the October aerial survey, using previous studies conducted within the project area, as a foundation for survey methodology.

2.0 METHODS

An aerial wildlife survey was completed on October 6, 2005 following similar methods employed during the late 1970s (Gill 1978) and early 80s (AMAX ND). Based on the results of past surveys, moose, woodland caribou, Dall's sheep, and grizzly bear were the selected species for the 2005 survey program.. Although these key species were the main focus, all wildlife observed were recorded. For the October 2005 program, the survey area was divided into ten east – west transects (as per earlier programs), each 36 km long and spaced 2 km apart (total area 720 km²). The wildlife study area and survey transects flown in 2005 are shown in Figure 1.

Prior to departing Whitehorse airport for the study area, weather conditions were closely monitored and were determined to be good for the proposed survey. However, once the survey crew began their survey, weather conditions deteriorated rapidly. Clouds moved into the area and the ceiling dropped below the mountaintops, limiting the survey to the valley walls and bottoms.

The survey was completed using a fixed-wing Cessna 206. Three personnel flew on the survey: the pilot (pilot and professional outfitter), a navigator/observer on the right, and a left observer. The pilot concentrated on maintaining altitude and ground speed.. The navigator/right observer collected waypoints for each observation, and counted those animals to the right of the airplane that were out of sight of the left observer in the backseat.

UTM coordinates were recorded for each wildlife observation (including tracks, digs, and dens).

Incidental observations of all wildlife and wildlife sign including carnivores, raptors, and other noteworthy wildlife observations were documented and reported in Section 3.5.

3.0 RESULTS

During the field study, a total of 42 wildlife observations, including actual sightings and sign of mammals and birds were noted and recorded. Of the 42 observations, evidence of six different mammal species were documented as occurring in the study area during the survey or within the last 48 hours. A list of species recorded within the study area during the time of the field survey is listed in Table 1.

Target species, selected from previous studies in the study area include moose, woodland caribou, Dall's sheep, and grizzly bear, and are discussed in further detail below. Additional wildlife species observed during the October 2005 survey are documented in Section 3.5.

3.1 MOOSE

Moose occur throughout the forested zone of the Yukon and Northwest Territories (NWT). In the Yukon, moose numbers are estimated at 50,000 (Yukon Government 2005). Gill (1978) indicated that Macmillan Pass supports a modest number of resident moose. In the NWT, the number of moose is unknown, however the population is estimated at more than 10,000 (RWED 2002). A three-day survey in the study area in 1981 – 1982 observed 21 moose during spring calving, 17 during summer, 79 in fall rut, and 14 in winter (AMAX ND).

During the October 2005 aerial survey, 17 moose (eight bulls and nine cows) were recorded. Moose were sighted in riparian willow, scrub birch, and open spruce communities in river and tributary valleys (photographs 1 and 2), and were typically in groups ranging in size from one to six individuals (average of two individuals per sighting). Moose observations are mapped in Figure 2.

Moose range is restricted in the Cordillera zone, favouring valley bottoms, recent burn areas and deciduous zones in the narrow transition from subalpine forest to alpine tundra (Parks Canada 1984).

Moose are primarily browsers and require abundant food supplies. Riparian willow communities in valley bottoms and to a lesser extent willow-forb communities that develop at lower elevations and seepage areas between 1380 m – 1720 m appear to be a major factor determining moose winter distribution (AMAX 1976; Gill 1978). Felt-leaf willow (*Salix alaxensis*) dominates riparian willow habitats, in particular along the upper Tsichu River within the study area (Gill 1978). *Salix alaxensis* is considered an important browse species for moose since the terminal shoots and winter buds contain higher levels of crude proteins,

compared to other willow species (Gill 1978). In addition, this willow species reaches heights of 3 – 4 m within the local area and provides some winter cover (Gill 1978). Gill (1978) also describes the process of icing¹ on high-gradient rivers, like Tsichu River, that provide a relatively snow-free hardened route for moose to easily move and browse along riparian willow habitats.

Moose within the Macmillan Pass area appear to select summer habitat in wooded areas at lower elevations (AMAX 1976; Gill 1978). Within the study area, important summer habitat includes an open white spruce – subalpine fir community surrounding a mineral spring in the Hess Valley (Gill 1978). In addition to important summer habitat, this mineral lick remains open throughout the winter and is therefore used by moose throughout the year (AMAX 1976; Gill 1978). This mineral lick was observed during the 2005 aerial survey, and has been mapped in Figure 2.

3.2 WOODLAND CARIBOU (NORTHERN MOUNTAIN ECOTYPE)

Although no woodland caribou were sighted during the 2005 aerial survey, fresh tracks and trails were observed within the study area. Based on snow and past weather conditions, it was estimated that caribou had been within the study area at least 48 hours prior to the aerial survey. Tracks were observed at elevations ranging between approximately 1300 m – 1650 m, and all trails were heading east towards the Keele River watershed (photographs 3 and 4). Observations of caribou sign are mapped in Figure 2.

The *Redstone* caribou herd occupies summer ranges along the Yukon/ NWT border in the MacMillan Pass area, moving down to lower elevations along the Keele, Moose Horn, and Redstone River basins on the eastern slopes of the Mackenzie Mountains during the winter (Olsen 2001).

Within the study area, caribou exhibit directional movements from valleys to higher elevations in the spring, reside in alpine/subalpine areas from June to October and move back down to lower elevations for winter. Caribou occupy the study area during summer, and migrate to lower elevations outside the study area to spend winter in spruce – lichen habitats (Gill 1978). AMAX (ND) reported that caribou frequently visit a mineral lick in the Hess valley within the study area (refer to Figure 2 for the mineral lick location). Caribou typically arrive in the MacMillan Pass area in early June and commonly depart at the end of September, although some caribou have been recorded in the study area until the end of November (AMAX ND; Gill 1978).

¹ Gill (1978) describes icing as a process where shallow riffle areas freeze to the river bottom, creating hydrostatic pressure upstream that forces water to break through the ice and flow over river sections at various times throughout the winter.

In 1982, AMAX (ND) recorded a caribou calving ground near the eastern limit of the study area. In addition, Gill (1978) suggested a potential calving site approximately 5 km south of Camp 222, outside the study area (this potential calving site has not been confirmed). Caribou migrate to known calving areas, such as plateaus and upland sites to give birth. Post-calving areas include moist alpine tundra and open meadows in the mountains (Gray and Panegyuk 1989).

The northern mountain population of woodland caribou are listed under the Species at Risk Act (SARA) as a species of Special Concern. The *Redstone* caribou herd has been estimated in the Yukon Territory at 5,000 – 10,000 individuals (Yukon Government 2005); however, population estimates in the NWT are unknown (ENR 2005). During the 1981 and 1982 surveys within the study area, caribou densities were estimated at 42 and 53 caribou per 100 km² during spring and summer periods, respectively (AMAX ND). Few caribou were recorded during late September surveys (AMAX ND).

3.3 DALL'S SHEEP

Dall's sheep occur in the Mackenzie Mountains and the MacTung study area. Approximately 18,000 Dall's sheep live in the Yukon (Yukon Government 2005), and within the Mackenzie Mountains, populations are estimated to range from 14,000 to 26,000 sheep (RWED 2002).

No Dall's sheep were observed within the study area during the October 2005 aerial survey. Poor weather conditions generated a low ceiling which restricted the aerial survey to the valleys where Dall's sheep do not generally occur.

Sheep density is dependent on habitat quality. Gill (1978) indicated the study area supports a small resident sheep population of approximately 20 to 25 individuals. However, a subsequent survey in 1981 and 1982 reported a significant decline in Dall's sheep populations within the study area (AMAX ND). Only three ewes were observed during these years. Extreme winter conditions (interpreted from local climate data) may have resulted in die off, and or emigrations outside the study area are possible causes for the population decline (AMAX ND). Other surveys have discovered additional Dall's sheep wintering grounds within the study area (Gill 1978).

In addition to Dall's sheep surveys within the study area, winter aerial surveys were conducted from 1966 to 1973 on Dall's sheep populations approximately 13 km southeast of the MacTung Project study area. During this time, densities were estimated at 100 sheep per 100 km² (Simmons *et al.* 1984). In addition, summer and winter ranges of Dall's sheep on the NWT side of the Mackenzie Mountains were also delineated (Simmons 1982).

Succeeding the Dall's sheep surveys in 1966 to 1973, Shank *et al.* (1993) resurveyed the same area (approximately 13 km southeast of the MacTung study area) in 1990 and 1991 and estimated population densities of 43 and 41 sheep per 100 km²; much lower than compared

to densities observed by Simmons *et al.* 1984 (100 sheep per km²). It was assumed this difference in sheep densities was due to observer error. Sheep densities were believed to have remained relatively stable (Shank *et al.* 1993).

Dall's sheep were also surveyed in 1992, approximately 200 m north of the MacTung Project study area (Latour 1992). During the 1992 survey, Latour recorded a density of 19 sheep per 100 km² (survey included a 4,956 km² area).

Dall's sheep within the study area do not exhibit large migratory movements and typically confine most of their movements to a particular mountain block. A subpopulation of sheep may occupy a particular mountain range and use the same winter and summer ranges each year and from generation to generation. Winter ranges typically lie within the summer range. Winter ranges can include 30 to 90 % of the summer range (Simmons 1982).

Wind action, snow depth and hardness appear to be limiting factors in determining suitable habitat (Heimer 1987). Winter weather is considered the major factor influencing sheep numbers and severe winters may cause population declines (AMAX ND). In some localities, snow deposition can cover winter forage and, consequently, influence winter habitat selection. Low plateaus and ridges that are swept free of snow by wind provide important Dall's sheep winter range. In addition, other characteristics of optimum winter range include proximity to timberline and areas with easy access to graminoid plants (Simmons 1982).

In early summer, as the snow melts, sheep merely expand their movements to incorporate recently exposed, greening vegetation, generally at higher elevations. The main characteristic of summer range is alpine tundra located close to rugged terrain that can be used as escape cover (Simmons 1982).

Sheep are grazers and require food supplies juxtaposed with security cover. Grasses and sedges make up about 70% of their diet. The leaves and stems of some shrubs and certain flowering plants are also selected, and may be seasonally important. Security cover is important and is normally found in the form of precipitous escape areas.

Minerals from mineral licks are an essential component of Dall's sheep diets. Well-established trails commonly lead to licks, which are used most frequently in the spring and early summer. Ewes with lambs are the most frequent visitors, and they may linger for days in the vicinity of a lick. Simmons (1982) suggests that the location of mineral licks determines the size and shape of summer ranges in the Mackenzie Mountains, particularly family groups containing lactating ewes. A mineral lick was recorded during the aerial survey, and is mapped in Figure 2.

3.4 GRIZZLY BEAR

Grizzly bears occupy much of the Yukon and NWT, including the Mackenzie Mountains and the MacTung study area. In the Yukon, grizzly bear populations are estimated at 6,000 – 7,000 bears (Yukon Government 2005). The NWT is home to an estimated 3,500 - 4,000 grizzly bears (including both mountain and barren-ground grizzlies), and the Mackenzie Mountains are considered to support the highest concentrations of grizzly bears in the NWT. Within the study area, grizzly bears are considered common (Gill 1978).

Fresh grizzly bear sign was documented during the 2005 aerial survey, including tracks and ground squirrels digs. All grizzly bear sign was recorded in large valley bottoms (photograph 1). Figure 2 maps the location of each of the grizzly bear sign. For a six-year period, in the mid 1970's AMAX personnel continually reported a sow grizzly with cubs in the east-central portion of the study area (Gill 1978). This particular sow produced two cubs every three to four years in that six-year observation period (Gill 1978). In addition, several observations of a single bear were recorded. These single bear observations were explained as part of a transient population. During the 1981 – 1982 surveys, three grizzly bears were recorded in the study area (AMAX ND), and were assumed to be transients.

Grizzly bears have large home ranges relative to most other bear species. On average, a male's range can extend over 2000 km² while a female's range is about half that size (RWED 2002). Grizzly bear habitat use outside of the denning season is complex and a function of many factors, including plant phenology and the availability of food prey.

Miller *et al.* (1982) documented the food habits of grizzly bears within the Mackenzie Mountains, and found that 96% of their diets are composed of eight plant species (*Equisetum* species, *Hedysarum alpinum*, *Graminae* species, *Vaccinium uliginosum*, *Shepherdia canadensis*, *Carex* species, *Empetrum nigrum*, and *Vaccinium vitis-idaea*). Three percent of their diets consisted of meat. After den emergence it is expected grizzly bears feed primarily on roots, and then horsetails, grasses, and sedges upon green up. Berries and roots (especially of *Hedysarum* species) become more important food components in the fall. They also eat many lemmings and ground squirrels, which they excavate from burrows. With respect to large animals, bears are opportunistic predators and will kill caribou, moose and sheep if the occasion arises, and will feed on carrion.

Bears in mountainous areas move up and down slopes in response to available vegetation. Alpine areas are used intensively during June and July, and then shift to subalpine areas in August (Miller *et al.* 1982; Parks Canada 1984). In September, subalpine and alpine habitats are used equally (Miller *et al.* 1982; Parks Canada 1984). Winter denning typically occurs the first week of October in alpine habitat above 1520 m in elevation (Miller *et al.* 1982). However, subalpine and forest dens have been documented in the Mackenzie Mountains (Miller *et al.* 1982).

Typical denning habitat within the Mackenzie Mountains includes steep slopes with a southeast orientation, constructed within a vegetation community dominated by willow with a variable composition of fescue grass (*Festuca altaica*), bluebell (*Mertensia paniculata*), larkspur (*Delphinium glaucum*), anemone (*Anemone parviflora*), and death camas (*Zygadenus elegans*) (Miller *et al.* 1982; Gill 1978). A number of suitable denning sites were suggested within the study area, in particular in the Tsichu River area (AMAX ND; Gill 1978).

The solitary nature and low densities of grizzly bears make it extremely difficult and expensive to survey populations. Information about grizzly bears often comes from individual sightings made during other animal surveys. Based on the size of the MacTung study area (720 km²) and minimum home range sizes of sow grizzlies (deduced from neighbouring portions of the Mackenzie Mountains [265 km²]), AMAX (ND) estimated the MacTung study area could support at least two female territories and a small transient population. Gill (1978) outlined one female grizzly range in the east-central portion of the study area.

Grizzly bears (northwest population) are considered a species of Special Concern by COSEWIC 2002, but will not be listed under the Species At Risk Act (SARA) until further consultation with the Nunavut Wildlife Management Board is completed.

3.5 MISCELLANEOUS WILDLIFE OBSERVATIONS

Five miscellaneous species (non-target species) were recorded during the 2005 aerial survey. These five species include two birds; the Common Raven (*Corvus corax*) and Ptarmigan (*Lagopus* species), and three mammals; wolf (*Canis lupus*), red fox (*Vulpes vulpes*), and beaver (*Castor Canadensis*).

Common Ravens occur in a broad range of habitats and occupy the study area throughout the year. Previous observations of Common Ravens within the study area have been reported (AMAX 1982). Three Common Ravens were recorded during the 2005 aerial survey.

Five Ptarmigans were observed during the 2005 aerial survey. In previous studies, numerous Rock and Willow Ptarmigan have been recorded in river valley systems throughout the year feeding on buds and small twigs (AMAX ND).

A pack of five wolves was observed near the Canol Road, immediately south of the study area. Wolves have been reported within the study area during previous surveys (AMAX ND; Gill 1978).

A single red fox was observed within the study area, south of the Canol Road, at an elevation approximately 1500 m. Foxes were not documented during previous studies.

Many beaver lodges, dams, and food caches were observed throughout the river systems in the study area. Beaver activity observed from past surveys was not reported.

4.0 SPECIES OF SPECIAL CONSERVATION STATUS

Several species of special conservation status (either listed under SARA², COSEWIC³, and/or the Yukon and NWT governments) occupy or potentially occupy the study area including woodland caribou, grizzly bear, wolverine, Peregrine Falcon *anatum*, and Short-eared Owl. For this report, only the species within the study area considered Endangered, Threatened, or Special Concern under SARA and COSEWIC are reported below. Similarly, only species listed as At Risk, May Be At Risk, and Sensitive under the NWT government, and likewise only species listed as Specially Protected under the Yukon Wildlife Act are referenced.

Woodland caribou are listed under the SARA as a species of Special Concern. A species listed as Special Concern may become threatened or endangered because of its habits that make it vulnerable to human activities or natural events. The NWT lists woodland caribou as Sensitive, however they are not listed under the Yukon Wildlife Act as a Specially Protected species. Woodland caribou have been documented within the MacTung study area, including during the 2005 aerial survey. Refer to Section 3.2 for further details.

The northwestern population of grizzly bears are listed as a species of Special Concern by COSEWIC (2002), however they are not protected under SARA. SARA currently does not protect the northwestern population of grizzly bears because further consultation with the Nunavut Wildlife Management Board is required (Her Majesty the Queen in Right of Canada 2005). A decision as to the protected status of the northwestern population of grizzly bears was expected after consultations in 2005 (Her Majesty the Queen in Right of Canada 2005). The status of these consultation proceedings is not known at this time. In the NWT grizzly bears are considered Sensitive and may need special protection to prevent further population declines. Grizzly bears are not listed under the Yukon Wildlife Act as a Specially Protected species. Grizzly bears were recorded within the MacTung study area during the 2005 survey program as well as in past surveys. Refer to Section 3.4 for further details.

COSEWIC (2003) has ascribed a Special Concern status to the western population of wolverine, however is not protected against prohibitions listed under SARA (2005). SARA does not protect the western population of wolverine since further consultation with the Nunavut Wildlife Management Board is required (Her Majesty the Queen in Right of Canada 2005). In the NWT wolverine populations are considered Secure, and wolverine are

² The Species at Risk Act (SARA) is a federal legislation to protect species at risk and their habitats in Canada. The Act passed parliament in 2002 and has come into full force June 1, 2004. Through research reviews and considering community and Aboriginal traditional knowledge, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) identifies and assesses the biological status of a species and then recommends a species status to SARA's Government in Council so the council can decide whether a species requires protection under the Act.

³ Committee on the Status of Endangered Wildlife in Canada

not listed as a Specially Protected species in the Yukon. Wolverine was not observed during the 2005 aerial survey; however, they have been documented as occurring in the MacTung study area from previous surveys (Gill 1978).

SARA ascribes a Threatened status to the subspecies of Peregrine Falcon (*Falco peregrinus anatum*), occurring in the MacTung study area. By definition this is a wildlife species likely to become endangered if limiting factors are not reversed. This subspecies of Peregrine Falcon is considered At Risk in the NWT and Specially Protected in the Yukon. Peregrine Falcons were not recorded during the 2005 aerial survey, however, AMAX (1982) reported Peregrine Falcons have been previously recorded, however breeding does not occur in the study area.

SARA designates the Short-eared Owl as a species of Special Concern (based on a COSEWIC 1994 assessment), however a reassessment by COSEWIC is required. A species listed as Special Concern may become threatened or endangered because of its behaviour that make it vulnerable to human activities or natural events. The NWT lists Short-eared Owls as Sensitive, but they are not listed as Specially Protected in the Yukon. No Short-eared Owls were noted during the 2005 field program; however, AMAX (1982) reported they breed within the project area.

5.0 CONCLUSION

To document wildlife species occurring in the MacTung Project study area in October 2005 an aerial survey was completed following the methodology outlined from previous studies in the study area. Target species, such as moose, woodland caribou, Dall's sheep, and grizzly bear were adopted from previous studies.

Due to weather conditions, the 2005 aerial survey was reduced to flying valleys open from cloud cover. However, during the survey, evidence of six mammal and two bird species were recorded, most notably moose, caribou, and grizzly bear. Additional wildlife observed include wolf, red fox, beaver, Common Raven, and Ptarmigan. Dall's sheep were not observed, likely because ideal Dall's sheep habitat, alpine and subalpine areas were inaccessible due to poor weather at the time of the survey.

In addition to the target species, the MacTung study area supports species of special conservation status, including woodland caribou, grizzly bear, wolverine, Peregrine Falcon *anatum*, and Short-eared Owl. All of these species have been documented within the study area during the 2005 aerial survey, or past wildlife programs (AMAX ND; AMAX 1982; Gill 1978).

6.0 LIMITATIONS OF LIABILITY

Information presented herein is based on a Preliminary Wildlife Survey as described in Section 1.0. This report has been prepared for the exclusive use of North American Tungsten Corporation Limited for the specific application described in Section 1.0 of this report. It has been prepared in accordance with generally accepted environmental practices. No other warranty is made, either expressed or implied.

For further limitations, reference should be made to Appendix A – EBA’s General Conditions for Environmental Reports.

7.0 CLOSURE

We trust this report meets your present requirements. Should you have any questions or comments, please contact the undersigned at your convenience.

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TABLE

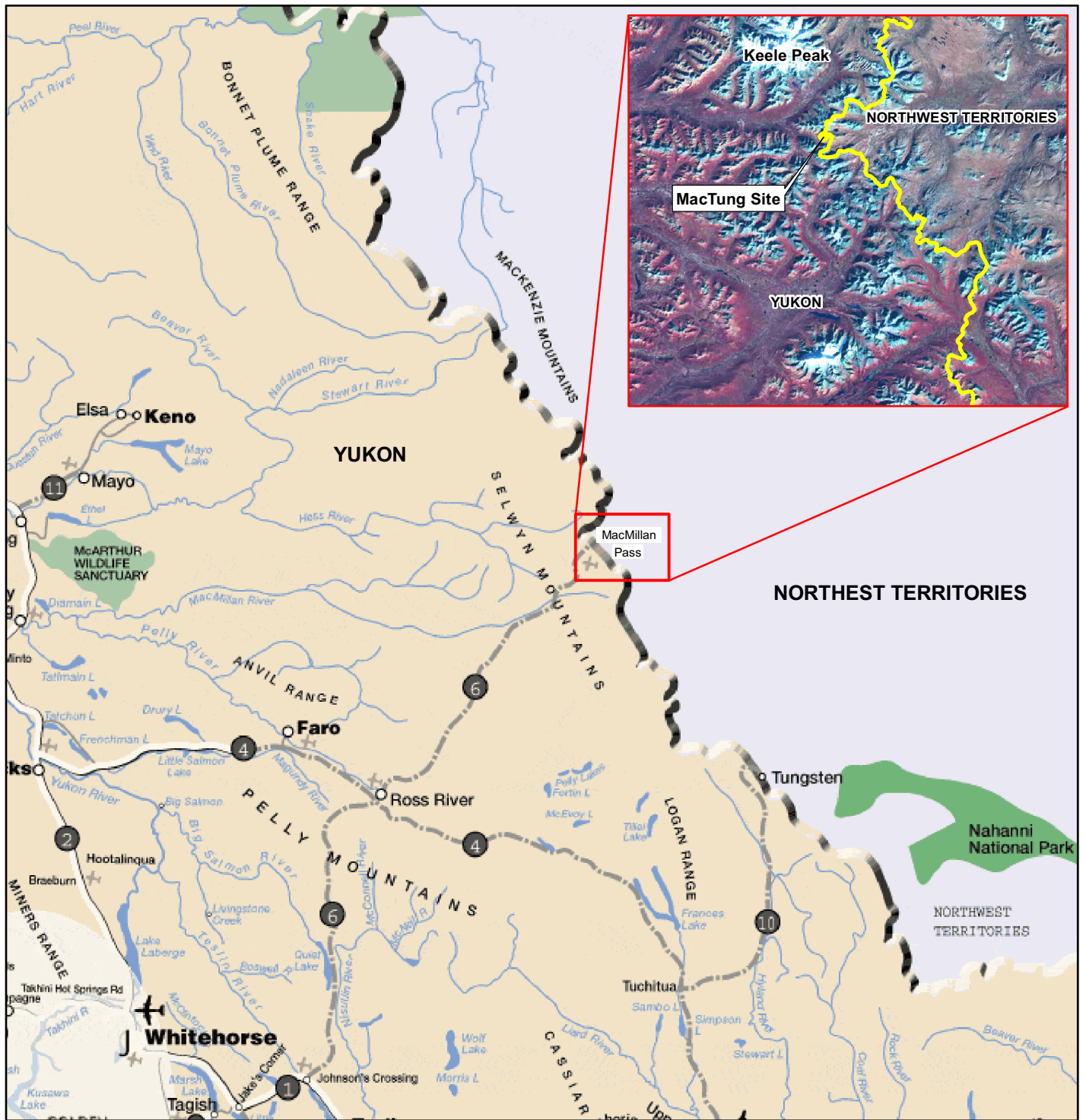
TABLE 1. WILDLIFE SPECIES OBSERVED DURING THE OCTOBER 2005 AERIAL SURVEY

Common Name	Scientific Name
Mammals	
Moose	<i>Alces alces</i> ¹
Woodland Caribou	<i>Rangifer tarandus caribou</i>
Grizzly Bear	<i>Ursus arctos</i>
Wolf	<i>Canis lupus</i>
Red Fox	<i>Vulpes vulpes</i>
Beaver	<i>Castor canadensis</i>
Birds	
Common Raven	<i>Corvus corax</i>
Ptarmigan	<i>Lagopus species</i>

1. Alaska Yukon moose (*Alces alces gigas*) and woodland moose (*Alces alces andersonii*) from the NWT and British Columbia may occupy the study area and interbreed.



FIGURES



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Site Location



MacTung Project

Location of Study Area

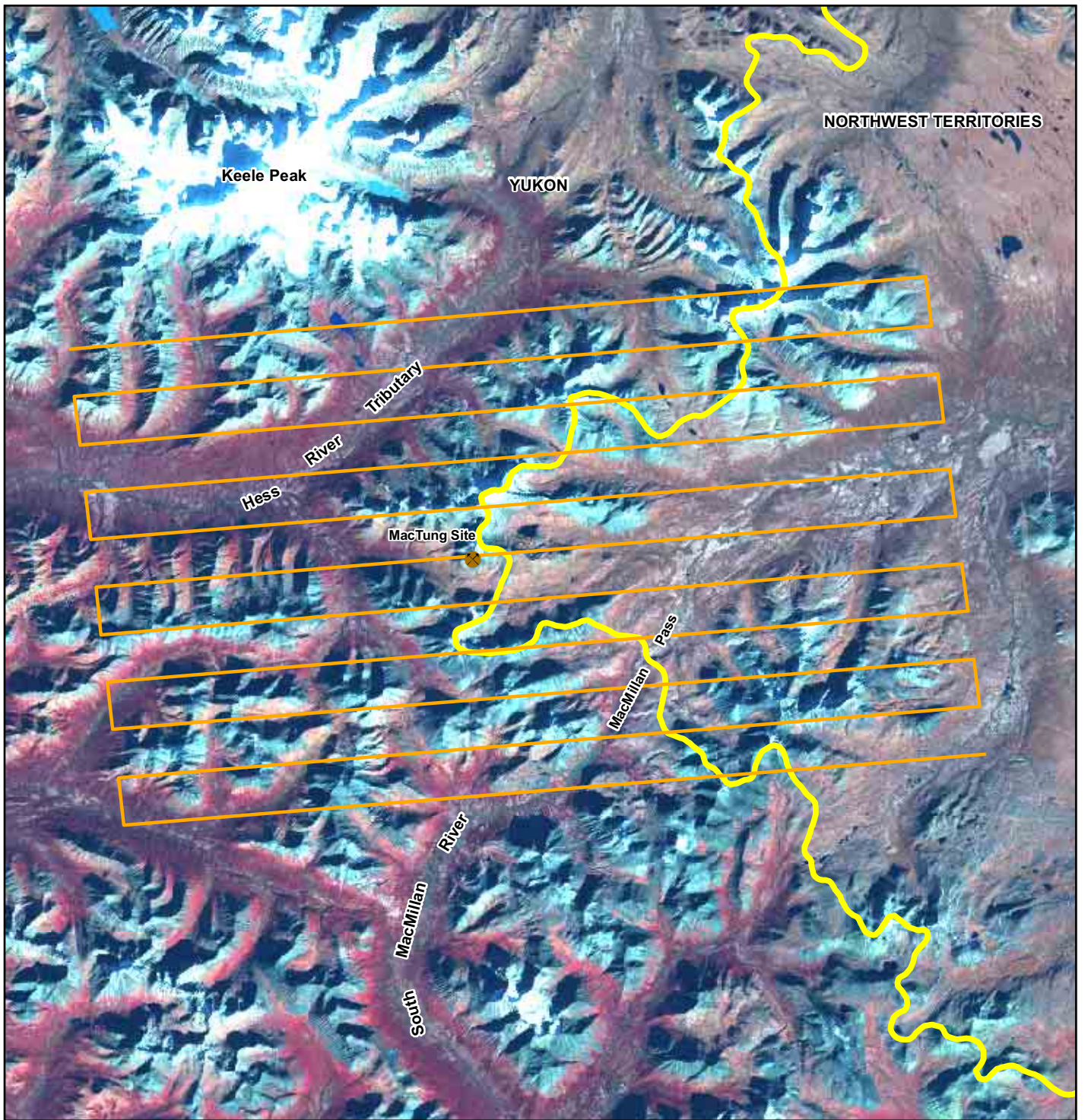
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


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NOTES Landsat TM imagery Earthsat acquired Sept.17, 1995
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Legend

-  Territorial Boundary
-  Transect
-  MacTung Site



MacTung Project

Location of Study Area and Survey Transects

PROJECTION: UTM Zone 08	DATUM: WGS84	EBA ENGINEERING CONSULTANTS LTD. 
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Scale: 1:239,995



FILE No: 1200163-Figure2_transects.mxd	DATE: February 2006
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JOB NO: 1200163	REVISION NO: 2	Figure 2
OFFICE: EBA-VANC	DRAWN: TJS CHECK: RH	

NOTES Landsat TM imagery Earthsat acquired Sept, 17, 1995
Bands 432 enhanced



PHOTOGRAPHS



Photograph 1

Typical wildlife habitat occurring in large valley systems in the Yukon Territory. This photograph was taken along an unnamed tributary of the Hess River.



Photograph 2

Typical wildlife habitat occurring in small tributary valleys in the Yukon Territory. This photograph was taken along an unnamed tributary of the South MacMillan River.



Photograph 3

Woodland caribou trails heading east towards the Keele River watershed. This photograph was taken along an unnamed tributary of the South MacMillan River.



Photograph 4

A single caribou trail above timberline. This photograph was taken along an unnamed tributary of the South MacMillan River.



APPENDIX

APPENDIX A EBA'S GENERAL CONDITIONS FOR ENVIRONMENTAL REPORTS

ENVIRONMENTAL REPORT – GENERAL CONDITIONS

This report incorporates and is subject to these “General Conditions”.

1.0 USE OF REPORT

This report pertains to a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would necessitate a supplementary investigation and assessment.

This report and the assessments and recommendations contained in it are intended for the sole use of EBA’s client. EBA does not accept any responsibility for the accuracy of any of the data, the analysis or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA’s client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of EBA. Additional copies of the report, if required, may be obtained upon request.

2.0 LIMITATIONS OF REPORT

This report is based solely on the conditions which existed on site at the time of EBA’s investigation. The client, and any other parties using this report with the express written consent of the client and EBA, acknowledge that conditions affecting the environmental assessment of the site can vary with time and that the conclusions and recommendations set out in this report are time sensitive.

The client, and any other party using this report with the express written consent of the client and EBA, also acknowledge that the conclusions and recommendations set out in this report are based on limited observations and testing on the subject site and that conditions may vary across the site which, in turn, could affect the conclusions and recommendations made.

The client acknowledges that EBA is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the client.

2.1 INFORMATION PROVIDED TO EBA BY OTHERS

During the performance of the work and the preparation of this report, EBA may have relied on information provided by persons other than the client. While EBA endeavours to verify the accuracy of such information when instructed to do so by the client, EBA accepts no responsibility for the accuracy or the reliability of such information which may affect the report.

3.0 LIMITATION OF LIABILITY

The client recognizes that property containing contaminants and hazardous wastes creates a high risk of claims brought by third parties arising out of the presence of those materials. In consideration of these risks, and in consideration of EBA providing the services requested, the client agrees that EBA’s liability to the client, with respect to any issues relating to contaminants or other hazardous wastes located on the subject site shall be limited as follows:

1. With respect to any claims brought against EBA by the client arising out of the provision or failure to provide services hereunder shall be limited to the amount of fees paid by the client to EBA under this Agreement, whether the action is based on breach of contract or tort;
2. With respect to claims brought by third parties arising out of the presence of contaminants or hazardous wastes on the subject site, the client agrees to indemnify, defend and hold harmless EBA from and against any and all claim or claims, action or actions, demands, damages, penalties, fines, losses, costs and expenses of every nature and kind whatsoever, including solicitor-client costs, arising or alleged to arise either in whole or part out of services provided by EBA, whether the claim be brought against EBA for breach of contract or tort.

4.0 JOB SITE SAFETY

EBA is only responsible for the activities of its employees on the job site and is not responsible for the supervision of any other persons whatsoever. The presence of EBA personnel on site shall not be construed in any way to relieve the client or any other persons on site from their responsibility for job site safety.

5.0 DISCLOSURE OF INFORMATION BY CLIENT

The client agrees to fully cooperate with EBA with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The client acknowledges that in order for EBA to properly provide the service, EBA is relying upon the full disclosure and accuracy of any such information.

6.0 STANDARD OF CARE

Services performed by EBA for this report have been conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Engineering judgement has been applied in developing the conclusions and/or recommendations provided in this report. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of this report.

7.0 EMERGENCY PROCEDURES

The client undertakes to inform EBA of all hazardous conditions, or possible hazardous conditions which are known to it. The client recognizes that the activities of EBA may uncover previously unknown hazardous materials or conditions and that such discovery may result in the necessity to undertake emergency procedures to protect EBA employees, other persons and the environment. These procedures may involve additional costs outside of any budgets previously agreed upon. The client agrees to pay EBA for any expenses incurred as a result of such discoveries and to compensate EBA through payment of additional fees and expenses for time spent by EBA to deal with the consequences of such discoveries.

8.0 NOTIFICATION OF AUTHORITIES

The client acknowledges that in certain instances the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by EBA in its reasonably exercised discretion.

9.0 OWNERSHIP OF INSTRUMENTS OF SERVICE

The client acknowledges that all reports, plans, and data generated by EBA during the performance of the work and other documents prepared by EBA are considered its professional work product and shall remain the copyright property of EBA.

10.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), the Client agrees that only the signed and sealed hard copy versions shall be considered final and legally binding. The hard copy versions submitted by EBA shall be the original documents for record and working purposes, and, in the event of a dispute or discrepancies, the hard copy versions shall govern over the electronic versions. Furthermore, the Client agrees and waives all future right of dispute that the original hard copy signed version archived by EBA shall be deemed to be the overall original for the Project.

The Client agrees that both electronic file and hard copy versions of EBA's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except EBA. The Client warrants that EBA's instruments of professional service will be used only and exactly as submitted by EBA.

The Client recognizes and agrees that electronic files submitted by EBA have been prepared and submitted using specific software and hardware systems. EBA makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.