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DEVELOPER'S ASSESSMENT REPORT

SELWYN PROJECT MINERAL EXPLORATION

Submitted in support of an application for a Type B Land Use Permit (EA708-001)

SUBMITTED TO: Mackenzie Valley Environmental Impact Review Board Box 938, 5102-50th Avenue Yellowknife, NT X1A 2N7

> SUBMITTED BY Selwyn Resources Ltd. 701-475 Howe Street Vancouver, BC V6C 2B3

June 16 2008 - Draft Submission for Confirmation of Completeness -

Executive Summary

Selwyn Resources Ltd. is a publically traded, Canadian base metals exploration and development company holding mining claims and leases in the Howard's Pass area of the Yukon (YT) and Northwest Territories (NT). Selwyn is proposing to undertake a mineral exploration program in the Sahtu Settlement Area of the NT. In response to a request by the Mackenzie Valley Environmental Impact Review Board, Selwyn has prepared this Developers Assessment Report to outline development activities associated with the exploration program in the NT, the resulting changes these activities may bring to the environment, the potential impacts of the changes, and the proposed mitigation measures to be undertaken.

The Project area is located on the YT and NT border, approximately 350 km northeast of Whitehorse, YT, 80 km north-northwest of Tungsten NT, and 320 km southwest of Tulita, NT. In total, the Project encompasses 32,130 hectares of mineral claims and leases; of this total, 5,535 hectares (17%) is in the NT. The NT portions of the Project are in the two claim/lease "clusters"; one at the southeast end of the property, known as "XY Nose", and the other about midway up the property on the north side, known as "Anniv".

Previous exploration and development work has been undertaken on the NT portions of the Project area. The work, which occurred between 1972 and 1983, included road and trail construction, trenching, and drilling.

Development activities associated with Selwyn's proposed exploration program in the NT include drilling of up to 100 holes, clearing of vegetation for trails to drill sites, helicopter transportation of personnel, waste handling and disposal, and reclamation and closure activities.

Selwyn's proposed exploration program in the NT will be entirely supported by fullypermitted camps located in the YT, and will be an extension to an exploration program that Selwyn has been undertaking in the YT since 2005. Where possible, access to NT drilling areas will be gained using existing roads and trails. Development is planned for 2008-2013 and is estimated to cause about 3.5 ha of surface disturbance, or an average of 0.7 ha/yr.

The development work proposed by Selwyn is expected to effect land and water resources in a manner similar to that from previous road/trail/drill pad construction and drilling: there will be minor physical disturbances from new trails and drill pads. Effects on water resources will be limited to small volume water withdrawals from local creeks. Aesthetic effects from trail construction/use are expected to be of lesser magnitude and duration compared to previous development, owing to Selwyn's planned reclamation efforts. Ongoing environmental monitoring and application of environmental best practices are used to ensure environmental effects are minimized.

A number of wildlife species have been documented in the vicinity of the XY Nose and Anniv areas including but not limited to woodland caribou, moose, grizzly bear, wolverine, beaver, grey wolf, red fox, and golden eagle. While it is possible that these wildlife species may avoid the area during the drilling program, it is expected that this effect will be localized, intermittent and reversible. Wildlife may avoid areas of local activity and would likely return to the area once the work area is reclaimed and abandoned. Limited fisheries resources data is available for the XY Nose and Anniv areas. Wise Lake is a stream/lake/wetland complex located near the Anniv claim/lease area but no data has been collected to date in this area. Given the small magnitude of water-related effects associated with the exploration activity, fisheries resources are unlikely to be impacted.

Hunting, trapping, fishing and camping were identified as traditional activities that were historically carried out in the region. These activities were identified with areas north and east of the Project, and no traditional use sites were identified specifically within the bounds of the Project. In current times, the region to the north and east is rarely accessed for these traditional activities. There are no known archaeological sites in the project area.

Selwyn is committed to responsible exploration practices; with well planned development and a dedicated environmental staff the only expected enduring effect from exploration activities will be physical disturbance to the ground surface. These effects will be mitigated through ongoing reclamation efforts and natural processes.

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1.0 Introduction and Conformity to ToR

Selwyn Resources Ltd (Selwyn) is a publicly traded, Canadian base metals exploration and development company holding mining claims and leases in the Howard's Pass area of the Yukon (YT) and Northwest Territories (NT). The collective claim/lease areas are referred to as the Selwyn Project (the Project).

On April 2, 2007, Selwyn submitted a Land Use Permit application to the Sahtu Land and Water Board (SLWB) to conduct a mineral exploration program on the NT portions of the claims and leases (the Development). Shortly thereafter, the SLWB began a preliminary screening of the program under Section 124 of the Mackenzie Valley Resource Management Act (MVRMA).

On June 12, 2007, the Mackenzie Valley Environmental Impact Review Board (MVEIRB) received a letter from the Sahtu Secretariat Inc. referring the Development to Environmental Assessment (EA), citing public concern related to potential impacts to the area, located in a proposed conservation zone (in the draft Sahtu Land Use Plan) and proposed expansion of the Nahanni Park. On June 18, 2007 the MVEIRB initiated the EA process under Section 126 (2) of the MVRMA.

Following public consultation, the MVEIRB finalized a Work Plan and Terms of Reference (ToR) for this Developer's Assessment Report (DAR). In the ToR, the Development is defined as:

- Drilling of up to 100 drill holes in alpine and sub-alpine terrain using diamond drill rigs (some heli-portable, some land-based) within identified claim and lease blocks;
- Clearing of vegetation for new bulldozer trails for access to drill sites at a rate of up to 2 km/year for 5 years¹;
- Helicopter transportation of personnel and equipment from the Yukon to work sites in the NT²;
- Off-site waste disposal from work sites in the NT to disposal facilities in the YT, as well as on site waste disposal in the NT.
- Reclamation and closure activities at drill sites and trails.

Developers notes:

1. Clearing of vegetation for new bulldozer trails will not exceed <u>an average</u> of 2 km per year over a 5-year period.

2. Transportation of personnel and equipment will occur between Selwyn's established camps in the Yukon and work sites in the NT.

The ToR requires a table that cross-references the items in the TOR with the relevant section of the DAR. Table 1, below, provides that required information.

| Specific Items Required in ToR | Location in DAR |
|--|------------------|
| 1. Conformity Table | DAR Section 1.0 |
| 2. Developer | DAR Section 2.0 |
| 3. Development Description | DAR Section 3.0 |
| 4. Regulatory Regime | DAR Section 4.0 |
| 5. Public Consultation | DAR Section 5.0 |
| 6. Effects of the Environment on the Development | DAR Section 6.0 |
| 7. Alternatives | DAR Section 7.0 |
| 8. Boundaries | DAR Section 8.0 |
| 9. Subsistence Activities & Traditional Land Use | DAR Section 9.0 |
| 10. Fish & Wildlife Resources | DAR Section 10.0 |
| 11. Cultural & Heritage Use | DAR Section 11.0 |
| 12. Land Use Conflict | DAR Section 12.0 |
| 13. Cumulative impacts | DAR Section 13.0 |

Table 1: Conformity Table

2.0 Developer and Site Information

2.1 Corporate History

The ToR asks Selwyn to provide a chronology of work done in Canada and the north, including a history of any project partners and former corporate entities.

Selwyn was established through the growth and restructuring of its parent company, Expatriate Resources Ltd. Expatriate was formed in 1993 and over time amassed mineral rights to properties around the world. In 2003-2004 Expatriate was restructured into three distinct entities, each with a specific focus; Yukon Zinc Corporation, Strata Gold Corporation, and Pacifica Resources Ltd (Pacifica).

Pacifica was formed to hold properties on the Pacific Rim, and had a portfolio of properties in Canada, the United States and Chile. Expatriate and then Pacifica acquired interests in the Howard's Pass property between 1999 and 2006 through purchases and claim staking, and through an August 2005 option agreement to take over Joint Venture claims held by Terrane Metals Corp.

Early in 2007 Pacifica was restructured, resulting in the formation of Selwyn and Savant Explorations Ltd. Selwyn retained the Selwyn Project as its sole asset; all other properties held by Pacifica were transferred to Savant. Consistent with requirements of the Business Corporations Act of British Columbia, Pacifica was subsequently dissolved as a corporate entity and the company name extinguished from further use.

2.2 Site Description

The Project is located on the Yukon Territory and Northwest Territories border, approximately 350 km northeast of Whitehorse, YT, 80 kilometers north-northwest of

Tungsten, NT, and 320 km southwest of Tulita, NT, as shown in the inset on Figure 1.

In its entirety, the Project is comprised of claims and leases covering 32,130 hectares. The claims/leases form a roughly rectangular northwest-trending block measuring approximately 60 km long by 5 km wide. The majority of the claims/leases are in the YT, (26,595 hectares or 83%), and the minority in the NT (5,535 hectares or 17%).

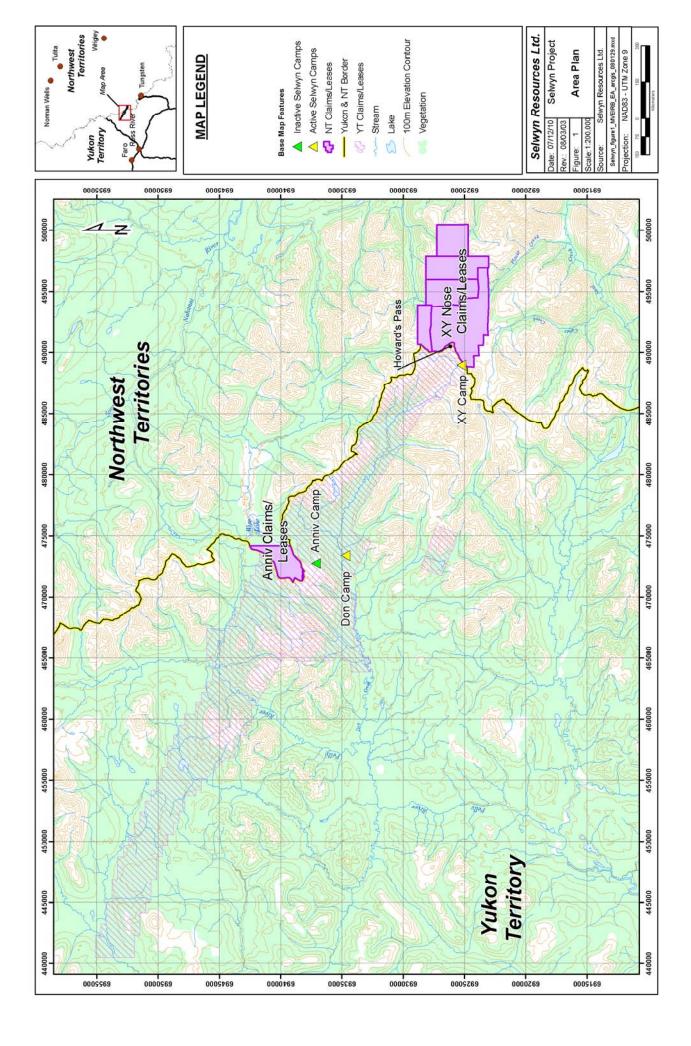
In the project area, the YT-NT border is defined by the watershed divide between the Yukon and Mackenzie Rivers. Portions of the Project in the YT drain generally westward via Don Creek to the Pelly River, whereas portions on the NT drain generally eastward via Silver, Placer, Canex, and Steel Creeks to the South Nahanni River which is connected to the Mackenzie River watershed.

The physiography of the area consists of U-shaped glaciated valleys with steep talus-covered slopes culminating in rounded peaks. Howard's Pass proper is located on the YT-NT border at the southeast end of the claims/leases, as noted on Figure 1. Elevation on the property ranges from 1,080 m near the confluence of Don Creek and Pelly River to 2,030 m at the top of an unnamed peak located in the southeast end of the claims/leases.

The property is situated in the Selwyn Mountain Ecoregion of the Taiga Cordillera Ecozone. The climate is typical of an area with high mountain valleys and passes with warm, wet summers and cold, dry winters. Mean annual temperatures range from -5°C to -8°C, with monthly ranges between -20°C in January to 10°C in July (Yukon Ecoregions Working Group, 2004 and Scudder, 1997). Permafrost is discontinuous but present throughout the area.

Precipitation in the area is moderate to heavy, with annual amounts of 600-700 mm (Yukon Ecoregions Working Group, 2004). The snow free period is from June until the middle of September. January to late April is generally the driest time of the year; July, August and September are usually the wettest (Scudder, 1997). Snow melt and ice break up in the streams usually occurs between May and June.

The NT portions of the Project are in two claim/lease "clusters"; one at the southeast end of the property, known as "XY Nose", and the other about midway up the property on the north side, known as "Anniv". Both clusters are in upland areas, and are dominated by large undulating alpine plateaus with alpine tundra vegetation. Forb-grass meadows are typical on moist sites. Occasional open mixed subalpine fir and spruce stands are found at some mid- to lower-slope locations, and at valley bottoms. Based on a review of vegetation mapping from the Government of Northwest Territories (GNWT) Spatial Data Warehouse (http://maps.gnwtgeomatics.nt.ca), about 10% of the XY Nose area is treed, as is about 60% of the Anniv area.



2.3 Site Development History

Mineralization at Howard's Pass was first discovered in 1972 by Placer Development Ltd (Placer) while following up on strong lead/zinc anomalies from a 1968-69 regional stream sediment sampling program. Subsequent to the discovery, Placer Development and United States Steel Corporation (US Steel) formed the Howard's Pass Joint Venture partnership (HP Joint Venture) and were the primary developers at the site from 1972 through 1981.

In 1973, Cominco Ltd (Cominco) staked areas in the NT to the east of claims held by Placer at Howard's Pass. Later that same year, Cominco completed a hand-trenching and soil geochemistry program on their new claims. Then in 1983, Cominco built bulldozer trails from Placer's facilities at Howard's Pass into the area and undertook a trenching program to collect both soil and rock samples. The claims were not maintained in good sanding and expired in 2003, and were subsequently staked by Pacifica Resources (Selwyn's predecessor company) in 2006. They now form part of the XY Nose claims/lease area.

Between 1983 and 1999, a period when zinc prices were at historic lows, no appreciable development work was done on the property. In 2000, Copper Ridge Development entered into an agreement to acquire the rights to the YT portion of the property from the HP Joint Venture. Eight holes were drilled by Copper Ridge as due diligence related to the property acquisition. Drill results were favorable but Copper Ridge did not make the payment required to complete the purchase; subsequently the properties reverted to the HP Joint Venture.

Development work undertaken at the site by Placer, US Steel, Cominco, and Copper Ridge Developments between 1972 and 2000 occurred on both the YT and NT portions of the property, and included approximately 5,700 m of surface trenching, the collection of over 9,000 soil samples, drilling at 218 locations (over 36,000 m of diamond drilling), establishment of XY and Anniv camps and airstrips, construction of an all-weather access road from Tungsten, NT, construction of roads and exploration trails on mineral claims/leases, and underground development at XY which included 1,235 m of drifting and bulk sampling. Of the aforementioned development work, the following occurred in the NT portions of the claims/leases in the period 1972 - 1983:

- Approximately 2,500 m of surface trenching;
- Drilling at ~34 locations;
- Construction of a 78 km long all-weather access road from Tungsten, NT to the XY area
- Construction of ~29 kms of on-claim roads and exploration trails.

Selwyn announced a letter of intent to acquire 100% interest in the Howard's Pass Joint Venture properties from the HP Joint Venture in May 2005. The formal acquisition agreement was completed in August. Subsequently, the HP Joint Venture's interest was transferred to Terrane Metals Corp.

Selwyn has been conducting advanced exploration work exclusively on the YT portions of the Project site since 2005. The exploration activities have been

conducted under Yukon Mining Land Use Permit LQ00017. A year-by-year summary of YT development activities follows.

2005

In June of 2005, Selwyn established an initial base of operations at the location of Placer's original Anniv Camp. Crews, equipment and supplies were flown to the existing Anniv airstrip by fixed-wing aircraft and helicopter. The camp was set up to accommodate 40 people, and included sleeping quarters, a kitchen/eating area, showers, pit latrines, a dry room, a first aid room and an office. Electricity for the camp was produced by a diesel generator. The camp served as a support base for geological staff, drilling contractors, and pad builders. A helicopter was stationed at Anniv Camp throughout the 2005 field season.

Three portable drill rigs operated at the Project site during the summer of 2005. A helicopter and a D-3 bulldozer were used to support the drilling; the bulldozer also was used to keep trails and the airstrip clear from snow in early fall. Drilling work started mid-July, and continued until October. A total of 8,317 m of diamond drilling was completed at 53 holes. All drill core from the holes was transported to Anniv Camp for analysis, cataloging and storage.

2006

In early June of 2006, Selwyn established a second base of operations at the southeast end of the property, at the location of the original Placer XY Camp near the YT/NT border. Crews and supplies were flown in to the existing airstrip by fixed-wing aircraft and helicopter. In addition, two D-7 bulldozers were driven up to the site via a newly established 144 km long winter trail in the YT.

The XY Camp was set up to accommodate 50 people, with facilities including sleeping quarters, a kitchen/eating area, showers, a dry room, pit latrines, a first aid room, and offices. An existing equipment maintenance shop, built in the 1970's by Placer, was put to use. A Yukon Government permitted solid waste disposal facility was established at the XY Camp. Electricity for the camp is produced by a diesel generator. Photo 1 shows the XY Camp in late 2006.



Photo 1 – XY Camp

In October of 2006, the Anniv camp was decommissioned and moved to a new location in the Don Valley to support exploration activities that were becoming increasingly focused in that area. Photo 2 shows Don Camp, with Don Creek in the background. Don Camp has similar accommodations and facilities as XY Camp, and can accommodate up to 50 people. Don Camp also has a Yukon Government permitted solid waste disposal facility.



Photo 2 – Don Camp

Eight portable diamond drill rigs operated at the Project site during 2006. Drilling work started June, and continued until December. A total of 41,658 m of diamond

drilling was completed at 191 holes. All drill core from the holes was transported to Anniv or XY Camp for analysis, cataloging and storage.

2007

In February and March of 2007, small crews were mobilized to Don and XY Camps to clear snow, erect tents and establish infrastructure. In April, a heavy-lift Mi-26 helicopter transported large equipment and bulk supplies to Don Camp over a five day period. Additional material, supplies, and crews were flown to site by fixed-wing aircraft and helicopters.

Don and XY Camps served as a support base for geological staff, drilling contractors, heavy equipment operators, environmental crews and pad builders. Two helicopters were stationed at site during the field season. Several bulldozers, an excavator, two backhoe loaders and two Kenworth dump trucks were used to support the drilling, build an airstrip near Don Camp, build trails, and to keep the trails and airstrips clear from snow.

Eight portable diamond drill rigs worked at the site from April through December of 2007. A total of 37,208 m of drilling was completed at 106 holes. Drill core from the holes was transported to Don or XY Camp for analysis, cataloging and storage.

Figure 2 shows the location of historic development work on the property, as well as the more recent work undertaken by Selwyn. Additional details on development work that has been undertaken by Selwyn can be found in Company news releases and annual reports at <u>http://www.selwynresources.com/</u>.

2.4 Ownership of Proposed Development

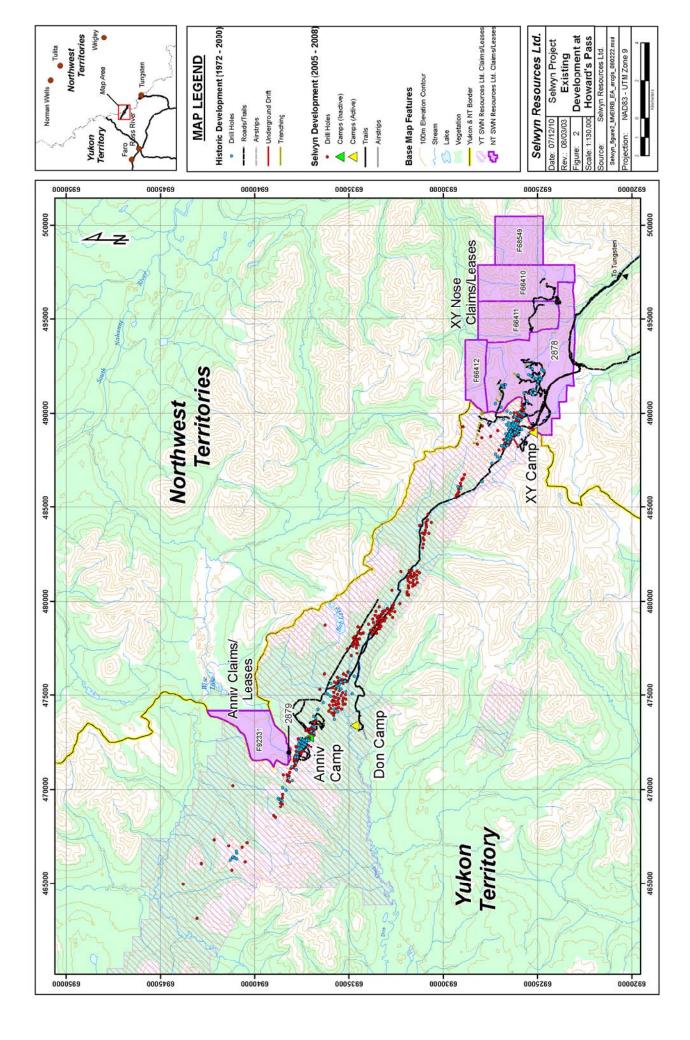
The ToR asks for a description of the Project leases/claims, and for ownership of same. Selwyn is a Canadian company with a corporate office in Vancouver, British Columbia. Selwyn is publicly traded company, with shares listed on the TSX Venture Exchange. Further corporate details, including current share structure, can be found at http://www.selwynresources.com/investors_overview.cfm.

The proposed Development in the NT will occur on mineral claims and leases that are 100% owned or controlled by Selwyn Resources. Table 2 below provided details on the NT claims and leases.

| Claim / Lease | Location | Owner | Ownership % | Area (hectares) |
|---------------|----------|-----------------|-------------|-----------------|
| F92331 | Anniv | Selwyn | 100 | 625.8 |
| F66412 | XY Nose | Selwyn | 100 | 370.0 |
| F66411 | XY Nose | Selwyn | 100 | 821.1 |
| F66410 | XY Nose | Selwyn | 100 | 899.7 |
| F68549 | XY Nose | Selwyn | 100 | 656.3 |
| 2879 | Anniv | Terrane Metals* | 100 | 100.2 |
| 2878 | XY Nose | Terrane Metals* | 100 | <u>2,061.3</u> |
| | | Total | | 5,534.4 |

Table 2: Selwyn's NT Mineral Tenures

*Selwyn, through a purchase option agreement with Terrane Metals, has 100% control of these leases (agreement filed with NT Mining Recorder in Yellowknife).



2.5 Organizational Structure

The ToR asks Selwyn to identify corporate and individual responsibilities for the proposed Development and associated operations. Selwyn's senior management team and responsibilities follow.

Dr. Harlan Meade, PhD, P. Geo, is President and Chief Executive Officer of Selwyn. Dr. Meade is a graduate of University of British Columbia, University of Western Ontario and Simon Fraser University with degrees in Geology and Business Administration.

Mr. Robert McKnight, P. Eng, is Vice President of Corporate Development. Mr. McKnight is a graduate of the University of British Columbia and Simon Fraser University with degrees in Geological Engineering and Business Administration.

Mr. Jason Dunning, P.Geo, is Vice President of Exploration for Selwyn. Mr. Dunning is a graduate of Carleton (Hon. BSc. Geology 1994) and Laurentian (MSc. Geology 1998) universities.

Mr. Justin Himmelright, is Vice President of Environment and Community Affairs. Mr. Himmelright is a graduate of Simon Fraser University (B.Sc. Biology) and brings 11 years of environmental, mining, and exploration-related experience to Selwyn Resources.

Mr. David Kwong, CA, is Chief Financial Officer of Selwyn. Mr. Kwong is a member of the Canadian Institute of Chartered Accountants and the Illinois Certified Public Accountants Society.

Mr. John J. O'Donnell, P.Geo, is Manager of Exploration. Mr. O'Donnell is a geologist with a BSc. from Brandon University and a member of the Association of Professional Engineers and Geoscientists of Manitoba and Saskatchewan.

2.6 Environmental Record

The ToR asks for a record of the environmental performance of the Selwyn and its contractors as well as project partners for any work done in Canada and the north.

Selwyn is committed to the responsible exploration and development of mineral resources. In accordance with the Mining Association of Canada, Selwyn believes in a responsible approach to social, economic, and environmental performance that is aligned with the evolving priorities of our communities of interest.

We are committed to:

- Seeking to minimize the impact of our operations on the environment through all stages of exploration and development;
- Seeking to minimize any adverse affects caused by the accidental release of pollutants into the environment; and
- Practicing continuous improvement through the application of new technology, innovation and reasonable best practices in all facets of our operation.

Selwyn has established Standard Operating Procedures (SOPs) to manage environmental risks associated with development activities. These procedures are developed and reviewed by in-house specialists, including professional biologists and geologists, and are often based on accepted industry best practices and regulatory guidance documents such as DFO Operating Statements. Selwyn's SOPs that are applicable to the Development are included in Appendix I.

SOP adequacy and performance are monitored throughout field operations by company staff from the Exploration and Environment Departments. SOPs are reviewed and amended periodically based on a continual improvement process.

Crew and contractors are educated on SOP contents through appropriate communication vehicles such as contract terms and conditions and on-site orientations. Selwyn staff are present and available throughout all aspects of operations to monitor crew and contractor performance and provide guidance where needed.

Bulk fuel handling and storage represents the highest environmental risk associated with operations at the Project site. Consistent with our commitment to environmental responsibility, Selwyn has taken significant steps to minimize this risk. The primary method of risk reduction for bulk fuel storage is through secondary containment. All bulk fuel storage containers (those over 4,000 litres) are backed up by secondary containment.

As an example, bulk diesel for our YT camp operations is stored in Arctic Guard® tanks, which are made from high-strength industrial fabric that exceed US military specifications. These tanks are housed within secondary containment berms designed to hold 110% of the tank capacity, ensuring that even in the unlikely event of a catastrophic tank failure, diesel is unlikely to be released to the environment. Rainwater is continuously discharged from the berms through RainDrain® filters, which block hydrocarbons but allow water to pass. Photo 3 shows a diesel tank and containment berm near the XY Camp.



Photo 3 – Arctic Guard tank with secondary containment

Reportable Environmental incidents in the Yukon

Our commitment to environmental responsibility is reflected in our record. Over a three-year period, Selwyn has completed a substantial amount of exploration work on YT portions of the Project site. During this time, we have had one reportable fuel spill and one wildlife incident.

The fuel spill occurred on March 16, 2006 during mobilization of heavy equipment on a winter trail between the Robert Campbell Highway and the Project site. Trans North Helicopters (a contractor out of Whitehorse) was slinging fuel to the advancing equipment when a belly hook failure caused two drums of fuel to be dropped during flight. The drums landed on Ptarmigan Creek, which was frozen at the time; the drums ruptured on impact and diesel spilled into the creek through holes in the ice. Selwyn staff members were mobilized to the spill site and cleaned much of the residual spill through direct collection using shovels and sorbent pads. The spill was immediately reported to YT authorities. Subsequent site and water quality monitoring confirmed there were negligible residual impacts to the environment.

On October 10, 2007, a grizzly sow and cub entered Don Camp, posing an immediate and significant safety risk to people in camp. As a result, the bears were destroyed by company personnel. This action was taken as a last resort after several days of attempts to deter the bears from the area and entering camp. The incident was immediately reported to Yukon Department of Environment Conservation Officer in Ross River, YT.

3.0 Development Description

3.1 Context

The ToR asks Selwyn to describe the purpose of the exploration program, including consideration of activities on both the Yukon and NT side of the border.

To understand the Development described in this DAR, it is important to keep in mind that the planned activities in the NT are an extension of an exploration program that Selwyn has been undertaking on the YT portion of the Project site since 2005. Any Development in the NT will be supported from existing, fully-permitted infrastructure on the YT portions of the property.

Work completed by Selwyn in the YT since 2005, along with historic work in both the YT and NT claim/lease areas, has allowed for the definition of a substantial zinc/lead mineral resource over a length of 37.5 km. The resource is represented in the near surface expression of one continuous, large zinc/lead bearing Sedimentary Exhalative (SEDEX) strata. The strata remain largely open for expansion, including to areas covered by Selwyn's claims and leases on the NT portions of the Project property.

The specific purpose of the Development described in this report is to further explore and define sub-surface mineral resources on Selwyn's claims and leases on the NT portions of the Project property.

3.2 Timing

The ToR asks for a schedule of proposed work, including an identification of any time constraints. Selwyn has applied to the Sahtu Land and Water Board for a Type B Land Use Permit for mineral exploration activities with a term of five years. The Development work will occur over the five year term of the permit.

The primary development activity will be diamond drilling. This activity is typically restricted to months where local mean daily temperatures are above -15°C, and when snow depths are not overly restrictive. These conditions usually occur at the Project site from June through to November. Some of the ancillary activities, such as development of trails and drill pads and reclamation work, may occur outside this time frame if climatic conditions are favorable.

3.3 Access Routes and Drill Sites

The ToR asks Selwyn to provide detailed project maps with identifiable features named that locates as specifically as possible proposed drill sites, access routes and stream crossings.

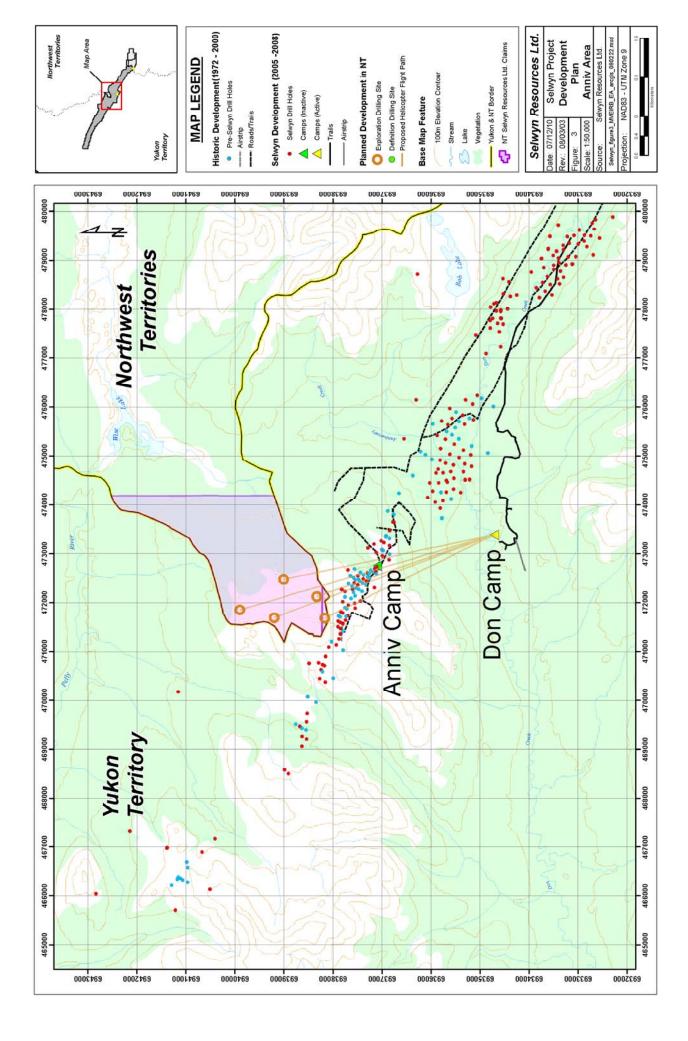
Two categories of drilling work are planned for NT sites; exploration drilling and definition drilling. Exploration drilling sites tend to be widely dispersed across the landscape, and will typically be helicopter supported operations. They are undertaken to collect samples of bedrock where subsurface mineralogy is not well understood. Selection of exploration drilling sites is based on some or all of field reconnaissance, sediment sampling, geological mapping and geochemistry work. Definition drilling is undertaken where there is an identified resource, but more information is needed to provide a clear understanding of the depth, thickness,

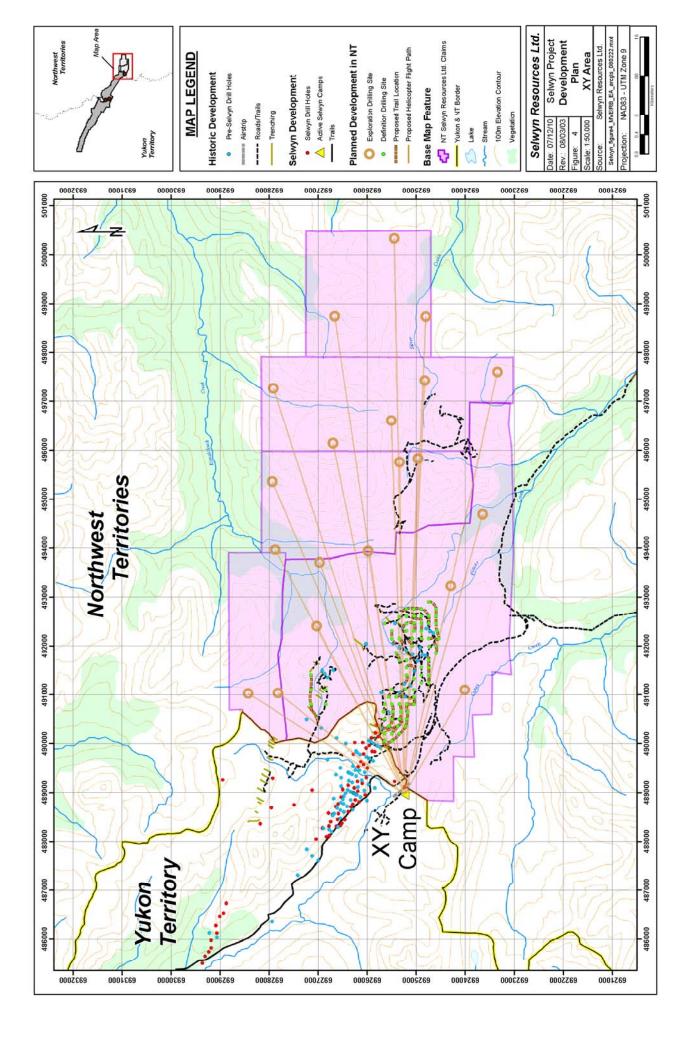
lateral extent and grade of the deposit. Definition drill sites are clustered at known deposits, and are usually ground-supported operations.

A total of 100 potential drilling sites have been identified in the NT; 25 are exploration targets (5 at Anniv and 20 at XY Nose), and 75 are resource definition holes (all at XY Nose). The Anniv sites are shown on Figure 3, the XY Nose sites on Figure 4. The location of the drilling sites is purely conceptual in nature; actual drilling locations are likely to change as Selwyn's knowledge of the extent and character of the mineralized strata evolves.

As noted earlier, equipment, manpower and supplies for the 25 exploration drilling targets at Anniv and XY Nose in the NT will typically be transported by helicopter because these targets are at remote sites that are largely inaccessible via existing roads or trails. Primary flight paths to be used by helicopters, as depicted on Figures 3 and 4, are shown as a direct line between the drill locations and the nearest active camp. Variation to these flight paths will occur, as dictated by safety considerations, wildlife disturbance concerns, weather conditions (such as low cloud), and concurrent helicopter-supported efforts at sites in the YT and/or NT. The frequency of flights is discussed in Section 3.4

Definition drilling will be focused on the XY Nose area explored by Placer Development Ltd between 1972 and 1981. As noted earlier, Placer undertook road and trail construction, trenching and diamond drilling in the area. Their work resulted in the identification of a mineralized resource at the XY Nose location; however, additional drilling is necessary to more clearly define this resource. The planned definition drilling will be ground-supported, and existing roads and trails will be used wherever feasible. As shown on Figure 4, some additional trail construction (between 9 and 10 kms) will be required to access some drill sites. Additional information on trail construction can be found in Section 3.8. No stream crossings are planned as part of the development in the NT.





3.4 Operations

The ToR asks for a description of operations in terms of staff and equipment requirements, with operational and transportation timelines and volumes. Detailed information on the frequency of helicopter travel and description of any structures (for example, emergency shelters) to be erected during the development activities is also requested.

The NT operations will consist of up to four portable diamond drills operating up to 24 hours a day, seven days per week for about 24 weeks per season (June through November). All support for the program (helicopters, excavators and bulldozers, trucks and ATVs, technical staff, fuel supply, etc) will be based out of established camps in the YT. Staff and equipment requirements for development in the NT, along with operational and transportation timelines and volumes are described below.

Portable Diamond Drills

- Up to four portable diamond drills will be working on the NT claims and leases. The drills are Boyles 25A/37 or equivalent (in all cases not exceeding 2.5 t gross weight). The drills can be transported to drill sites in pieces by a helicopter or dragged on skids by a bulldozer.
- Drill moves can be completed in a few hours to a few days, depending on distance, site conditions, and whether it is a helicopter or ground supported move.
- Level pads are built prior to drill placements. Pads for ground-supported sites are built by leveling a small area (about 100 m²) with a bulldozer. At heli-supported sites, a temporary timber pad is constructed and the drill is set on it.
- Each drill requires a two-person crew per shift to operate a lead driller and a driller's helper. The drills typically operate 24 hours per day, seven days per week, with two crews working 12 hour shifts each. The maximum number of drillers and helpers that will be working on the NT claims/leases at any one time is eight.
- The drills use hydraulic drives, which are powered by diesel engines. Fuel consumption varies by drill, the type of material being drilled through, and drilling depth. Typical fuel use is in the range of 200 to 400 litres per day.
- To protect the crew from the elements during inclement weather, the drills are sometimes enclosed using plywood and/or polyethylene tarps.
- Drilling also involves the use of drilling additives and water. These are discussed in Sections 3.5 and 3.7 respectively.

Photos 4 and 5 show helicopter and ground supported drilling operations on the YT portions of the Project property. Note the timber-framed pad supporting the drill in Photo 4.



Photo 4 – Helicopter supported drilling operation



Photo 5 – Ground supported drilling operation

Helicopters

- Up to two helicopters will be stationed at Camps in the YT for the duration of the field season; one for heavier lift tasks such as drill moves (e.g. A-Star or Bell 407) and one for general use such as crew transport and light lifting (e.g. a Bell 206). Both helicopters can also serve as emergency transport vehicles for injured workers.
- Helicopters will be on site in the NT as required to support heli access drill sites. This will involve flights to support drill set up, operation and take down, drill crew shift changes (typically at 7 AM and 7 PM), and fuel deliveries (one or two 205 litre barrels per site, per day).
- The helicopters run on Jet-B fuel, which is stored in bulk in the YT at both Don and XY Camps (see Photo 3). Small caches of Jet-B (one or two 205 litre barrels) may be kept at the most remote of the NT exploration drilling sites, but only while drilling is active at the site.
- The number of pilots stationed at the Camps varies with the level of activity at site, and is typically between one and three. The maximum number of helicopters/pilots working on the NT claims/leases at any given time will be one.
- One or two helicopter engineers are typically stationed at Don Camp during the field season.

Photo 6 shows the helicopters stationed at the Project site (at Don and XY Camps) during the 2006 field season.



Photo 6 – Helicopters stationed near XY Camp

Excavators and Bulldozers

- Selwyn maintains several pieces of heavy equipment at the Project site to support ongoing infrastructure development and exploration work on the YT portions of the claims/leases. The equipment includes two D7 bulldozers, one D5 bulldozer, one D3 bulldozer, one 24-tonne excavator, two backhoe loaders and two Kenworth dump trucks.
- The equipment is all diesel-powered, and the fuel supply is stored at Don and XY Camps in the YT. Regular maintenance of the equipment is also undertaken at the Camps.
- The primary use of the heavy equipment on the NT portions of the property will be to build/upgrade/reclaim bulldozer trails and drill pads, and to transport skid-mounted drilling equipment. This will likely involve the use of the D5 bulldozer.
- The typical number of pieces of heavy equipment operating in the NT portions of the Project site during the field season (June through November) will be one.

Trucks and ATVs

- Selwyn maintains a number of trucks and All-Terrain Vehicles (ATV's) at the Don and XY Camps in the YT. The trucks are ½ and ¾ ton four-wheel drives, and the ATV's are single-passenger quads and two-passenger utility buggies (as shown in Photo 5).
- The trucks and ATV's are used to support Camp operations, and to transport crews and supplies to ground-accessible drill sites.
- The trucks and ATV's run on regular gasoline, which is stored on site at both Don and XY Camps.
- The number of trucks and ATV's operating in the NT portions of the Project site during the field season will vary based on the number of ground-accessible drill sites that are active there, but will typically not exceed four.

Technical Staff

- Teams of geologists and geological technicians are stationed at the Don and XY Camps each field season. These technical people direct the drilling activity, and attend sites as needed to inspect the drill core and organize drill moves.
- An Environmental Compliance Coordinator (ECC) is stationed at either the Don or XY Camp as required during the field season. The ECC reviews closed drill sites to document that proper closure and reclamation have been carried out. The ECC may occasionally respond to drill sites to assist drill crews with environmental tasks.
- The number of technical staff working on the NT portions of the Project site during the field season will vary based on the number of active drill sites, but will typically not exceed four.

3.5 Drilling Activities

The ToR asks Selwyn to provide a description of how drilling is undertaken, including a description of additives used, their potential to create impacts and any mitigation strategies. The ToR also asks for a description of how drill core will be transported from the drill site and the manner and location of storage, both on and off site. Drilling is undertaken to extract samples of bedrock from below the ground surface. The samples, referred to as "core samples", are used by geologists to determine the presence, thickness and grade of mineralized strata for a specific location.

Drilling is accomplished by advancing a diamond drill bit mounted at the leading end of a hollow drill pipe through bedrock using a combination of rotary action and downward force. The diamond bit wears away a ring of bedrock as it advances, leaving a cylindrical core of bedrock inside of the hollow drill stem. The diameter of the resulting hole ranges between 7 and 9 cm, depending on the bit/drill pipe type being used. The images below show a typical diamond drill bit and drill bit/pipe arrangement.



Image source: Atlas Copco.

Water is injected down the drill pipe as the bit advances through the bedrock. The circulating water flushes drill cuttings (finely ground rock) from around the drill bit and carries them back to the surface. Water also helps to keep the rotating drill bit cool.

Additives are often mixed with the water and/or applied directly to the drill pipe to aid in the drilling process. The primary purpose of these additives are to improve water circulation through the drill hole, reduce friction between the rotating drill pipe and drill hole walls, and to stabilize fractured or unconsolidated drill hole zones (such as faults). Additives to be injected into the drill pipe are mixed with water in a holding tank at the drill site. This mixture is referred to as "drilling mud".

Additives used by Selwyn are sourced from Extreme Drilling Products & Drilling Supplies Inc of Surrey, British Columbia. The different additives and their uses are as follows:

- Extreme Gel (bentonite) is a clay-based, granular drilling mud additive that increases the density of water. It reduces friction between the drill pipe and drill hole walls, improves drill hole wall stability, and keeps drill cuttings in suspension so they can be more effectively flushed from the hole.
- Extreme Number One is a powdered drilling mud additive that reduces friction and helps with flushing.
- Extreme Super-G Gold is a biodegradable liquid drilling mud additive that reduces friction, improves drill hole wall stability, helps with flushing, and eases drill core recovery.

- Extreme Super-G Blue is a liquid drilling mud additive that is used in conjunction with, and enhances the effectiveness of, Super-G Gold.
- Extreme Linseed Lube is a lubricating compound (100% linseed soap) in a thick paste form that is applied to drill pipe to reduce friction.
- Extreme Rod Grease is a petroleum hydrocarbon-based lubricant that is applied to drill pipe to reduce friction and wear.
- Extreme Stop is a granular additive used to fill down-hole cracks, fractures and voids where circulating water is prone to escape. It is poured directly down the drill hole, and expands when in contact with water.

The drilling additives are all low toxicity, having ratings of 0 or 1 (least or slight) out of 5 on the Federal Workplace Hazardous Materials Information System (WHIMIS) Health Hazard Index. To put this in perspective, automotive diesel fuel has a rating of 2 (moderate). None of the drilling additives are considered Dangerous Goods under Federal TDG Regulations.

Table 3, below provides the WHIMIS Health Hazard Ratings for the drilling additives. Further details on these products, along with MSDS sheets for each, are included in Appendix II.

| _ | WHIMIS Health Hazard Rating | | | | |
|-------------------------|-----------------------------|----------|------------|--------|-----------|
| Extreme Product Name | 0 | 1 | 2 | 3 | 4 |
| | (least) | (slight) | (moderate) | (high) | (extreme) |
| Gel (bentonite) | | Х | | | |
| Number One | | х | | | |
| Super-G Gold | | х | | | |
| Super-G Blue | | х | | | |
| Linseed Lube | | х | | | |
| Rod Grease | х | | | | |
| Extreme Stop | х | | | | |

Table 3: Health Hazard Ratings for Drilling Additives

Drilling mud that is injected down a drill hole returns to the surface of the hole with the drill cuttings in suspension. This returning mud is directed to a sump where the cuttings can settle out. The sumps are either man-made or natural depressions, with a typical capacity of 2-3 m³. Sumps sites will be a minimum of 30 m from any water body.

The liquid content of drilling mud in the sump eventually filters into the ground, leaving behind the solids. These residual solids (cuttings and trace amounts of low-toxicity additives) have the appearance and texture of fine, grey to black sand. Given the nature of these residual materials, drilling sumps are not expected to pose any significant impacts to the environment. Sumps are reclaimed along with drill pads, as described in Section 3.9.

Drill core samples are brought up from the drill hole lengths up to 10 feet. As the core is retrieved, it is placed into a plywood core box. Each core box holds up to 16 feet of core. Core from NT drilling sites will be transported back to either the Don or XY Camp to be analyzed, cataloged and stored. The transport method for the core will vary with individual drill sites. For ground-supported drilling sites, the core will be transported back to camp by truck or utility buggy. For helicopter supported sites, it will be transported back to camp by helicopter. Photo 7 shows rock core sample collection at a drilling site.



Photo 7 - Core sample collection

3.6 Waste Management

The ToR asks for detailed waste management plans, considering all types and quantities of waste, and drill cuttings resulting from the Development.

Waste generated as part of the proposed development activities in the NT will be confined to that which is generated through on-site drilling activities. All other waste generating activities (camp-related operations and equipment maintenance) will occur in the YT, and are described later in this Section.

Waste from drilling activities can be broken into four categories; pad development waste, drill cuttings, fuel barrels, and general waste.

Pad development waste includes vegetation that is cleared (where necessary) ahead of pad construction, and lumber scraps from construction of wood-framed drill pads. Any vegetative waste will be laid flat at the site and left to decompose. Lumber scraps will be burned at site, either upon completion of pad construction or upon pad reclamation.

Drill cuttings, described in detail in Section 3.5, will be accumulated in natural or man made sumps adjacent to drill sites. The sumps will be reclaimed along with the drill pads, as described in Section 3.9.

Fuel for operation of drills will be transported to the drill sites in, and will be dispensed from, 205 litre barrels. Once emptied of fuel, serviceable barrels will be taken back to one of the YT camps for refilling. Barrels that are no longer fit for use will be taken to scrap metal caches at one of Selwyn's YT camps, and subsequently transported to recycling facilities in Whitehorse, YT.

General waste that will be produced through drilling activities may include additive containers (bags and plastic pails), motor lubricant containers, hydraulic drive fluid containers, broken or worn drill parts, used rags, and food or beverage containers. This general waste will be taken away from drill sites on a daily basis by crews at shift change, for disposal of at one of the YT camp dump facilities.

As noted earlier, all personnel and equipment involved in NT drilling activities will be based out of existing, fully permitted facilities on the YT portion of the Project site. Waste generated through a number of activities there, including general camp operations, equipment maintenance and drilling activities will be disposed of in the YT. A brief description of the wastes and how they are managed follows.

Waste from Camp Operations

- Food waste from kitchens
- Packaging materials from kitchens and offices
- Paper waste from offices
- Used consumer batteries (i.e. AA, 9v, etc)
- Construction scrap (i.e. wood, metal)

Waste from Equipment Maintenance

- Used engine oil
- Waste hydrocarbon fuels (diesel, gas, etc)
- Used sorbent pads and rags
- Empty motor lubricant and hydraulic drive fluid containers
- Used antifreeze
- Used vehicle batteries
- Scrap metal

Management of this waste is regulated by Yukon Department of Environment, and is handled accordingly at the site. Copies of relevant waste management permits are included in Appendix III. A brief description of the waste handling is described below.

Food wastes, packaging materials, waste paper, wood scraps, sorbent pads and rags are burned at permitted commercial dumps near the Don and XY Camps. The total quantity of this waste varies with the level of activity at each camp, but does not exceed 50 kg per camp on any given day.

Used batteries and antifreeze are considered special waste in the YT. These are shipped to disposal facilities in Whitehorse that are permitted by the Yukon government. Less than six used vehicle batteries and 100 litres of used antifreeze are generated per year, inclusive of both camps.

Used engine oil and waste hydrocarbon fuels (diesel, gas, etc) are also considered a special waste in the YT. Some waste diesel is used as an accelerant to aid in the burning of wastes at the dumps, particularly for food wastes which are typically quite wet. The remainder of the waste hydrocarbon products are incinerated in a YT-permitted waste oil burner, which provides heat for the Don Camp maintenance shop.

Scrap metal is cached near the active airstrips, and is shipped to Whitehorse, YT for recycling on an on-going basis when space is available on departing air freight planes.

3.7 Water Use

The ToR asks Selwyn to provide a brief discussion of water sources and water volumes to be used during drilling activities.

As noted earlier, portable diamond drills employed at the site will use water during the drilling process. Water will be mixed with additives at the drill site and then circulated down the drill hole to reduce friction, maintain integrity of the hole, cool the diamond bit, and to flush drill cuttings as the bit is advanced through bedrock. The water will be taken from a nearby source, usually a spring or creek. Specific sources for water withdrawals are determined at the time of drill setup, as water flows in streams and from springs at these high elevation sites vary considerably through the year.

Water will be drawn from the source using diesel-powered portable water pumps. Typically only one pump is needed at the water source, but when the distance and elevation difference between the water source and the drill site are great, a second pump, placed midway up the line, is sometimes necessary. Water will be drafted from the source using a 2" hardwall hose equipped with a screened intake to prevent entrainment of fish or debris. The water will be pumped to the drill site via 1" flexible line.

The volume of water used is highly variable; as the flow rates to the drills is constantly adjusted based on how quickly the drill is turning, the nature of material being drilled through, etc. Water use at each drill will be typically four to eight litres per minute. Using a scenario where four drills are operating 24 hours per day and are using water at a rate of eight litres per minute, maximum water use will be 46,080 litres, or about 46 m³, of water per day.

3.8 Clearing and Cutting Trails

The ToR asks for vegetation clearing requirements for drill pads. It also asks for a description of trail cutting activities, including rate per year, line widths and total trail lengths.

As noted earlier, two types of drill pads will be used in the Development; hand-built timber pads for sites to be accessed by helicopter, and bulldozer-built pads for sites that will be accessed by ground via new or existing trails. Vegetation clearing requirements vary by pad type, terrain conditions, and the extent of vegetation at the site. Much of the NT claims/leases at the Project site are in alpine or sub-alpine terrain dominated by forbs and grasses (90% for the XY Nose area and 40% for Anniv), so vegetation clearing requirements will be minimal.

For hand-built pads at helicopter access sites, vegetation immediately around the pad, if present, will be removed as required for drill clearance, worker safety and visibility. Little displacement of organic mat will occur at these sites. Typical hand-built timber drill pads are about $4 \times 4 \text{ m}$; where required, vegetation clearing around the pads can involve an area up to $20 \times 20 \text{ m}$. Photo 4 shows an example of helicopter supported drill set up in alpine conditions.

For bulldozer-built pads at ground supported sites, an area of about 10×10 m will be leveled, which requires clearing of vegetation and the organic mat (see cleared area in Photo 5). Vegetative material and organic soil will be stockpiled at one end of the cleared area for future site reclamation. The actual size of the pad will vary depending on the terrain, as the pad must be large enough to maneuver the drill into position and to accommodate drilling supplies (additives, drill pipe, etc). Additional vegetation clearing will be done as required for drill clearance, worker safety and visibility. Typical vegetation clearing for bulldozer-built pads will involve an area up to 20×20 m.

No new permanent roads will be built in the NT as part of the planned Development. The existing network of roads and trails (>29 kms) will be utilized as much as possible. Between 9 and 10 kms of new trails will be required to access definition drilling targets, as shown on Figure 4. Construction of new trails will occur over the duration of the permit, at an average of 2 km per year of operation. Trails will not exceed 2.5 m in width.

3.9 Reclamation

The ToR asks Selwyn to describe proposed reclamation plans and strategies for drill pads and trails constructed during Development activity.

In keeping with our commitment to environmental responsibility, Selwyn will carry out reclamation work on NT sites disturbed by exploration activity once the Company is confident that it has no further need for them. Reclamation activities will be undertaken throughout the field season in an effort to keep the cumulative amount of disturbed areas to a minimum.

This approach is consistent with reclamation work being undertaken by Selwyn on the YT portions of the Property. Selwyn's commitment to reclamation was recently recognized by the Yukon Government through an Honorable Mention at the 2007 Robert E. Leckie Awards. These awards are given for reclamation and site restoration efforts that go well beyond what is required by law, either by reclaiming land for which there is no obligation to rehabilitate, adding features to the land that have enhanced the area, or returning mined land to a condition that is not only structurally sound but aesthetically pleasing (Yukon Energy, Mines and Resources, 2008).

Selwyn will implement reclamation work in the NT using the following principles, process and resources:

- Full time on site environmental personnel Selwyn employs a qualified environmental technician who will take a lead role in implementation of NT reclamation work. The technician will assess disturbed areas and determine suitable reclamation treatments.
- Best practices guidance Selwyn will use the publication "Handbook of Reclamation Techniques in the Yukon" (1999, Indian and Northern Affairs Mineral Resources Directorate) as general guidance for reclamation activity.
- Local expertise Selwyn will use the services of local reclamation experts Arctic Alpine Seed as needed for prescribing site-specific treatments.
- Non-invasive species Selwyn will use native seed mixes and local plant cuttings to revegetate disturbed areas. Seed mixes, application rates and timing widows have been prescribed specifically for the Project area by Arctic Alpine Seed (Appendix IV).
- Ongoing monitoring The onsite environmental technician will monitor reclamation success in the YT and NT, and will use the information to guide future reclamation planning and activities.

Drill pad reclamation in the NT will occur in the following sequence:

- Drill demobilization from pad. As part of demobilization, the drill crew will conduct an initial clean up of site. Wastes will be taken to permitted disposal facilities at Selwyn's YT Camps.
- Salvageable lumber will be collected for reuse at other drill sites.
- Remnant lumber scraps, packaging wastes, etc will be burned on site.
- The drill pad will be recontoured if necessary, and displaced organic soils will be redistributed over cleared areas. A quad-towed harrow or similar equipment will scarify the pad if needed to establish a micro-environment suitable for revegetation (see Photo 8).
- Seed will be applied to exposed mineral soil where appropriate. The application will be carried out under favorable moisture conditions (late fall) to maximize seed germination.



Photo 8 – Drill pad scarification with quad-towed harrow

Any new or existing trails built or used as part of the Development will be reclaimed once Selwyn is confident that they are no longer needed. Reclamation for roads and trails will follow the same general procedure as drill pad reclamation; recontouring and scarification as necessary followed by seeding. Drainage patterns that have been modified by trail construction will be restored as required.

3.10 Future Development

The ToR asks Selwyn for a brief description of next steps in the development plan for the Howard's Pass area, considering both negative and positive results of the mineral exploration program.

The development of a mineral resource, from early exploration stages through to mine construction and resource extraction, is a complex process. There are multiple possible outcomes at any given point in the exploration cycle. Potential outcomes are shown below in Figure 5.

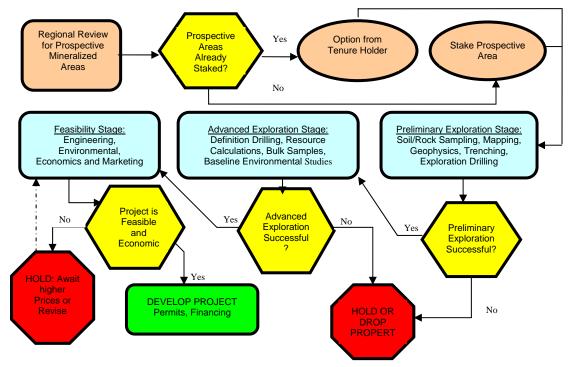


Figure 5: Possible Outcomes of the Exploration Cycle

Adapted from Mineral Exploration, BC Ministry of Sustainable Resources Management, 2003

The preliminary phase of the exploration cycle at the Project site, identifying a mineral resource, is complete. Historic exploration by Placer Development, US Steel Corporation, Cominco, and Copper Ridge Developments between 1972 and 2000, along with more recent work by Selwyn, has confirmed the existence of a zinc/lead deposit.

Advanced exploration work is underway in the YT and includes regional exploration drilling to help determine the extent of the mineral deposit, and definition drilling to characterize the quantity and grade of the deposit at specific locations. Other work underway includes collection of baseline environmental information, and calculation of mineral resource estimates. The work proposed in the NT, as described in Section 3.1, is a combination of preliminary and advanced exploration work.

The next steps in advancing the project are related to feasibility analysis, and include engineering designs and economic analysis. Assuming favorable economic analysis, subsequent steps include Environmental Assessment, permit applications, financing and a production decision.

Current information indicates that the zinc/lead mineralization is hosted in a 37.5 km long SEDEX deposit that is primarily on the Yukon side of the YT-NT border. Positive findings from the proposed advanced exploration work in the NT could be followed by development of a mineral resource estimate (in accordance with the

standards of the Canadian Institute of Mining, Metallurgy and Petroleum and National Instrument 43-101), economic evaluation, environmental assessment, and engineered mineral extraction plans. Negative findings could result in temporary or permanent cessation of exploration drilling on the Anniv and/or XY Nose claims/leases.

4.0 Regulatory Regime

4.1 Licenses, Permits & Authorizations

The ToR asks for a table of all necessary permits, licenses and other authorizations needed for the Development.

Permits and licenses necessary for the proposed Development in the NT, as described in Section 3.1, are listed below in Table 4.

Table 4: Permits Required for Proposed Development

| Permit/Licence Name | Issuing Agency | | |
|--------------------------|------------------------------------|--|--|
| Mining Leases and Claims | Indian and Northern Affairs Canada | | |
| Type B Land Use Permit | Sahtu Land and Water Board | | |
| WCB Exploration Permit | Workers Compensation Board | | |

5.0 Public Consultation

5.1 Consultation

The ToR asks Selwyn to provide a summary table of all consultation undertaken with the public, aboriginal organizations, land owners, federal, territorial and municipal governments. This summary is to include any consultation undertaken since the referral of the development to EA. The table is to list the date, manner and outcome of the consultation, along with a list of parties involved.

Information on consultation undertake by Selwyn for Development work in the NT is present below in Table 5.

Table 5: Summary of Consultation

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|---------------------|--|--|---|---|
| Nov. 24, 2005 | Sahtu Renewable Resources Board Sahtu Secretariat Inc. Norman Wells Land Corporation Sahtu Land Use Planning Board Norman Wells | Fax copy of Draft Land Use Permit Application | Geoff Newton – Selwyn Resources | |
| | Renewable Resources Council Norman Wells Town Council | | | |
| | Tulita Band Council Tulita Hamlet Office Tulita District Land Corporation | | | |
| | Tulita Land Corporation Fort Norman Metis Land Corporation Sahtu Land and Water | | | |
| Nov. 24, 2005 | Board Sahtu Land and Water Board | Fax | Jason Dunning – Selwyn Resources Ltd. | Notice to SLWB that Land Use Permit Application is draft and will be submitted at a later date pending TK study and community consultation with Tulita District stakeholders |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|--------------------|---|--------|--|---|
| Nov 28, 2005 | Tulita District Land Corporation | Fax | Jason Dunning – Selwyn Resources Ltd | Tulita suggests a community meeting to discuss permit issues after the holidays |
| | | | Louise Reindeer – Tulita District Land Corporation | |
| Dec 5, 2005 | Norman Wells town office | Letter | Alec Simpson (Town Manager) | Town advised that is does not have any comments to Selwyn plans |
| | | | Jason Dunning - Selwyn | |
| Dec 5, 2005 | Tulita District Land Corp | Fax | Jason Dunning – Selwyn Clarence Campbell - TDLC | Selwyn suggests dates in January 2006 for community meeting |
| Jan 13, 2006 | Tulita District Land Corp | Fax | Jason Dunning – Selwyn Clarence Campbell - TDLC | Selwyn suggests dates in February 2006 for community meeting |
| Jan 17, 2006 | Tulita Renewable Resources Council (TRRC) | Fax | Geoff Newton – Selwyn Wilfred Lennie - TRRC | Selwyn transmits draft LUP application to TRRC |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|-----------------|---|--|--|---------|
| Jan 18, 2006 | Fort Norman Metis Land Corporation Tulita District Land Corporation Sahtu Land and Water Board Tulita Dene Band Tulita Renewable Resources Council Sahtu Renewable Resources Council Sahtu Land Use Planning Board Hamlet of Tulita Norman Wells Land Corporation Tulita Land Corporation | Fax – invitation to attend public meeting in Tulita on Feb 3, 2007 | Jason Dunning – Selwyn Meriam Norwegian Clarence Campbell George Govier Frank Andrew Wilford Lennie Jody Snortland John T'Selie Edward McCauley Cathy Bjornson Gordon Yakalea | |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|-----------------|---|--|--|---|
| Jan 19, 2006 | Fort Norman Metis Land Corporation Tulita District Land Corporation Sahtu Land and Water Board Tulita Dene Band Tulita Renewable Resources Council Sahtu Renewable Resources Council Sahtu Land Use Planning Board Hamlet of Tulita Norman Wells Land Corporation Tulita Land Corporation | Fax – advising of date change of meeting from Feb 03, 2007 to Feb 08, 2007 | Jason Dunning – Selwyn Meriam Norwegian Clarence Campbell George Govier Frank Andrew Wilford Lennie Jody Snortland John T'Selie Edward McCauley Cathy Bjornson Gordon Yakalea | |
| Jan 20, 2006 | Tulita District Land Corp | Phone conversation | Louise Reindeer - TDLC Jason Dunning - Selwyn | TDLC Board may not be available on Feb 8. TDLC Board will meet with company on the evening of Feb 6th |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|--------------------|---|---|---|---|
| Feb 6, 2006 | Tulita | Public open house and meeting with Land Corporations | Jason Dunning - Selwyn Geoff Newton - Selwyn Land Corp reps. Mayor of Tulita Chief of Tulita Dene Band | A public open house scheduled for Feb. 8 was cancelled on Feb. 7 due to a death in the community. Selwyn reps were in the community and several impromptu and informal meetings were held with various community and Land Corp. reps to discuss Selwyn development plans. Concerns were raised about applicability of Access and Benefit agreements. |
| Feb 20, 2006 | Fort Norman Metis Land Corporation Tulita District Land Corporation Sahtu Land and Water Board Tulita Dene Band Tulita Renewable Resources Council Sahtu Renewable Resources Council Sahtu Land Use Planning Board Hamlet of Tulita Norman Wells Land Corporation Tulita Land Corporation | Fax – new meeting dates for community meeting suggested | Jason Dunning – Selwyn Rocky Norwegian Clarence Campbell Frank Andrew Cathy Bjornson Gordon Yakalea | Selwyn suggests meeting dates in March of 2006 |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|-----------------|--|--|--|---|
| Jul 26, 2006 | Tulita | Meeting to discuss exploration plans | Jason Dunning – Selwyn Justin Himmelright- Selwyn Land Corp. reps | An impromptu meeting was attempted following an MVLWB public hearing (access road related) to discuss exploration plans. Land Corp reps present at the public hearing were not available to meet regarding exploration plans. |
| Oct 02, 2006 | Tulita Renewable Resources Council Tulita District Land Corporation Sahtu Renewable Resources Board Hamlet of Tulita Tulita Dene Band Fort Norman Metis Land Corporation Sahtu Land and Water Board Sahtu Land Use Planning Board Mackenzie Valley Land and Water Board Norman Wells Land Corporation | Fax – invitation to attend community meeting, Oct 20, 2006 | Justin Himmelright – Selwyn Wilford Lennie Clarence Campbell Jody Snortland Gordon Yakaleya Frank Andrew Rocky Norwegian George Govier John T'Selie | |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|-----------------|-----------------------------|---|------------------------------------|--|
| Oct 15, 2006 | Tulita | Developer's Open House | Justin Himmelright - Selwyn | Attendants provided feed back on comment sheets. |
| | opennedee | Leon Andrew | | |
| | | | Jody Snortland | |
| | | | Wilfred Lennie | |
| | | | Brodie Thomas | |
| | | | Alvin Yallee | |
| | | Fred Clement | | |
| | | | Ethel Blondin- Andrew | |
| | | | Rocky Norwegian | |
| | | | Frank Andrew | |
| | | | Gabriel Horassi | |
| | | | John Hetchinelle | |
| | | | Maurice Mendo | |
| Jan 31, | Vancouver | Scheduled meeting with | Alvin Yallee - TDLC | Alvin got tied up and meeting did not proceed. |
| 2007 | | | Bob McKnight- Selwyn | |
| | | and Selwyn Executive | Justin Himmelright- Selwyn | |
| | | | Harlan Meade- Selwyn | |
| | | | Jason Dunning - Selwyn | |
| Feb 8 2007 | TDLC | Company Newsletter sent to Lands Coordinator at TDLC | Justin Himmelright Alvin Yallee | |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|---------------------|--|--|---------------------------------------|---|
| Feb 14, 2007 | TDLC | Email exchange with Lands Coordinator at Tulita District Land Corp regarding newsletter and negotiation of benefits agreements | Alvin Yallee Justin Himmelright | |
| March 2007 | Sahtu Land & Water Board | Land Use Application submitted to SLWB | n/a | Application deemed not complete. Require full disclosure of TK report. |
| Mar 13 2007 | Mackay Range Dev. Corp | Email exchange regarding full release of TK report as part of the LUP application | Wilbert Menacho Justin Himmelright | Full TK report added to amended LUP application |
| April 13 2007 | Sahtu Land & Water Board | Revised Land Use Application submitted to SLWB | n/a | Application deemed complete. Land Use Application circulated to referral organizations |
| April 17 2007 | Tulita District Land Corporation (TDLC) | Email of company newsletter sent to Lands Coordinator at Tulita District Land Corp. | Alvin Yalle Justin Himmelright | |
| April 18 2007 | Tulita District Land Corporation (TDLC) | Email to TDLC Lands Coordinator requesting meeting date with Land Corps at the beginning of May | Alvin Yallee Justin Himmelright | Alvin to confirm with Land Corp ED's |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|---------------------|---|--|------------------------------------|---|
| April 26 2007 | community visit 7 planning for alternative | Phone calls: Hamlet office to confirm availability of hall | Justin Himmelright | Justin to follow up with Alvin and lock down the actual date. |
| | dates of April 30 th – June 2 nd | Wilfred Lennie (TRRC) – could be available evening of the 1 st of June | | |
| | | Jody Snortland (SRRB) – available in evening after 7pm | | |
| | | Nicole Lights (SRRB) – available | | |
| | | Gordon Yakaleya (Hamlet) – left a message | | |
| | | Frank Andrew (Tulita Band) – left a message | | |
| | | Rockey Norwegian (Fort Norman Metis Land Corp) – available on the 1 st . | | |
| April 27 2007 | TDLC | Email to TDLC Lands Coordinator regarding meeting dates | Alvin Yallee Justin Himmelright | With no date confirmed, suggestion to defer to later date |
| May 23 2007 | TDLC | Email to TDLC Lands Coordinator requesting meeting date with Land Corps at the beginning of June | Alvin Yallee Justin Himmelright | Alvin to confirm with Land Corp ED's |
| May 30 2007 | TDLC | Email to TDLC Lands Coordinator regarding meeting dates | Alvin Yallee Justin Himmelright | No date yet confirmed with Land Corp ED's |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|----------------------|-----------------------------|---|--|--|
| May- June 2007 | Sahtu Land & Water Board | Comments from referral organizations to the Land Use Permit Application | Comments received from: Tulita District Land Corporation Sahtu Renewable Resource Board Prince of Wales Northern Heritage Center Parks Canada | Land Use Application referred to EA by Sahtu Secretariat Inc. |
| | | | Fisheries and Oceans Canada NT Environment and Natural Resources | |
| | | | Environment Canada – Environmental Protection Operations Environment Canada – Canadian | |
| | | | Wildlife Service Fort Norman Metis Land Corporation Norman Wells Land Corp. | |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|---------------------|---|---|--|--|
| June 15, 2007 | Sahtu Land & Water Board | Developer's response to comments from referral organizations. | n/a | n/a |
| Jul 5 2007 | Selwyn Resources- planning for community visit and meeting | Calls to: Wilbert Menacho Nicole Lights Alvin Yallee | Justin Himmelright | Community is pretty busy through the summer. Try again in the fall. |
| Oct 9 2007 | Tulita – Land Corps reps and Selwyn reps | Meeting between Selwyn reps and Tulita District Land Corp reps re referral of LUP application to EA and future relationship | Justin Himmelright – Selwyn Doug Reeve- Selwyn Rocky Norwegian Clarence Campbell Leon Andrew Ethel Blondin- Andrew Rick Hardy Frieda Taniton | Agreement to move forward on development of a co-operation agreement between the parties |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|-----------------|-----------------------------|--|--------------------------------|--|
| Oct 10, 2007 | Tulita | Developers Presentation at EA Scoping Session | Justin Himmelright – Selwyn | Selected issues carried forward to ToR for DAR |
| | | | Doug Reeve – Selwyn | |
| | | | Tawanis Testart – MVEIRB | |
| | | | Jessica Simpson - MVEIRB | |
| | | | Rick Hardy | |
| | | | Leon Andrew | |
| | | | Ethel Blondin- Andrew | |
| | | | Wilfred Lennie | |
| | | | Nicole Lights | |
| | | | Rocky Norwegian | |
| | | | Clarence Campbell | |
| | | | Joel Holder | |
| | | | Kris Vascotto | |
| | | | Katherine Cummins | |
| | | | (incomplete listing) | |
| Nov 16, | Norman Wells | Developers Presentation at EA Scoping Session | Justin Himmelright – Selwyn | Selected issues carried forward to ToR for DAR |
| 2007 | | | Tawanis Testart – MVEIRB | |
| | | | Jessica Simpson – MVEIRB | |
| | | | Roger Odgard | |
| | | | (incomplete listing) | |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|--------------------|-----------------------------|---|--|--|
| Nov 26, 2007 | Whitehorse | Meeting between Tulita District Land Corp reps and Selwyn Resources | Justin Himmelright Rick Hardy Ethel Blondin- Andrews Frank Andrews Clarence Campbell Rocky Norwegian | Meeting to discuss initiation of co-operation agreement between Selwyn and the Land Corps. |
| Jan 10, 2008 | Tulita | Email – transmission of draft Co-operation agreement | Justin Himmelright – Selwyn Rick Hardy - TDLC | TDLC sends draft co-operation agreement to Selwyn for review |
| Jan 14, 2008 | Tulita | Email | Justin Himmelright – Selwyn Rick Hardy - TDLC | Selwyn offers to meet with TDLC reps regarding applications for wildlife and fisheries investigations permits. Rick Hardy to check with TDLC reps and provide response |
| Jan 31, 2008 | Tulita | Email | Justin Himmelright – Selwyn Rick Hardy - TDLC | TDLC communicates change of representation on Co-operation Agreement file, Selwyn Referred to Daryn Leas, Boughton Law Corporation, based in Whitehorse and Vancouver. Selwyn enquires regarding Land Corp interest in meeting with the company regarding baseline investigation permit applications |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|----------------------|--|---|---|---|
| April 2, 2008 | Norman Wells Renewable Resource Council Tulita Renewable Resource Council Tulita District Land Corporation Sahtu Renewable Resources Board | Fax – transmittal of proposed wildlife and fisheries baseline study permit applications | Natashar Essar – Selwyn Norman Wells Renewable Resource Council Wilfred Lennie – TRRC Rocky Norwegian – TDLC Jody Snortland- SRRB | Selwyn provides draft permit applications for wildlife and fisheries investigations for review and comment |
| April 11, 2008 | Sahtu Renewable Resources Board | Phone conversation | Justin Himmelright - Selwyn Nicole Lights - SRRB | Confirming support letter for baseline studies permit applications will be provided. Suggested contact with Rosa at TRRC |
| April 11, 2008 | Tulita Renewable Resources Board | Phone conversation | Natasha Essar – Selwyn Rosa - TRRC | Confirmed that draft permit applications have been received. Will review and discuss on April 14 |
| April 14, 2008 | Tulita Renewable Resources Board | Phone conversation | Natasha Essar – Selwyn Rosa - TRRC | TRRC has no comments to permit applications at this time but has not initiated a review at this time |
| May 1, 2008 | Whitehorse | Meeting – TDLC Legal Counsel and Selwyn rep | Justin Himmelright – Selwyn Daryn Leas - TDLC | Selwyn provides comments to draft co-operation agreement |
| May 15, 2008 | Tulita Renewable Resources Council | Phone conversation- re baseline investigation permit for wildlife | Natasha Essar – Selwyn Rosa Ginelli - TRRC | Rosa advised that she would bring application to committee |

| Date | Location or Organization | Manner | Attendees or Comments | Outcome |
|-----------------|-----------------------------|--|---|---|
| June 2, 2008 | Tulita | Email – Selwyn contact Daryn Leas (Boughton Law Corp.) regarding comments to Co-operation Agreement | Justin Himmelright – Selwyn Daryn Leas – TDLC (Bought Law Corp.) | Selwyn inquiring regarding progress on review of Co-operation Agreement |

Summary information from the October 2006 Developer's Open House in Tulita is included in Appendix V. A copy of the presentation given in Norman Wells (October 2007) and Tulita (November 2007) as part of the MVEIRB community consultation sessions is also included in Appendix V.

Exploration activities on the YT portions of the Project site are covered under Yukon Energy, Mines and Resources (EMR) Permit LQ00017. This permit was originally issued in June 1999, and has been amended four times since that date. As part of a June 2005 amendment, the Project underwent a screening under the Yukon Environmental Assessment Act. This screening included consultation with a number of organizations. The Yukon EA Screening Report, along with the record of consultation, is also included in Appendix V.

5.2 Issues Resolution

The ToR asks Selwyn to provide a summary table of any issues raised during consultation efforts and to identify whether the issue has been resolved or is outstanding. Issues identified by interested parties were collected by the MVEIRB at EA scoping sessions at Tulita and Norman Wells on October 10 and November 16, 2007 respectively. The MVEIRB carried some of these issues forward in the ToR for this DAR. The content of this report is intended to assist in resolving these issues.

6.0 Effects of the Environment on the Development

6.1 Timing

The ToR asks Selwyn to describe any impacts the local environment may have on the Development that will impact the proposed timing. Heavy snow cover, fog, high winds, very cold temperatures, and forest fires have the potential to cause temporary work disruptions at the Project site. Given the multi-year scope of the Development, these potential disruptions should not affect the Selwyn's ability to complete all planned drilling activity within the 5-year term of the Land Use Permit.

6.2 Operations

The ToR asks for a description of any impacts the local environment may have on the Development that will impact the proposed manner of operations.

Exploration operations can be impacted by the local environment. Owing to the geographic location and mountainous terrain of the Project site, weather conditions are highly variable; the primary issues for operations are fog, extreme cold and deep snow. By necessity, the timing of operations is adjusted to deal with these impacts.

Fog can reduce visibility to the point where air operations cannot be conducted safely. When this occurs, resupply shipments (food, fuel, supplies, etc) to the site via fixed-wing aircraft are halted. Helicopter flights to support drilling operations can be likewise affected, resulting in the shutdown of air-supported drill sites. In these cases the only option is to wait until visibility improves to a level where air operations can be safely resumed.

Extreme cold, when mean daily temperatures are below -15° C for extended periods, can shut down drilling operations. Diamond drilling typically occurs from June to

November to avoid these conditions. However, extremely cold temperatures can occur in October and November. The primary issues are drill crew exposure to cold and the freezing of water supply lines. To protect the crew from the elements during very cold weather, shelters are built to enclose the drills using plywood and/or polyethylene tarps. Heat radiating from the drill motors helps to keep crews warm. To overcome freezing water lines, portable in-line water heaters are used.

Snow can impact the startup of operations in June, particularly if there is a very deep snowpack and a late spring melt. This can result in restricted access to sites at higher elevations, and to northern-aspect slopes. These conditions are managed by delaying the startup of operations and/or by drilling on lower elevation and southaspect sites.

7.0 Alternatives

7.1 Project Alternatives

The ToR asks Selwyn to identify potential alternatives to project components that may potentially mitigate adverse environmental impacts described in the DAR. It also asks for alternatives program designs considered.

As noted earlier, the specific purpose of the Development is to further explore and characterize sub-surface mineral resources on Selwyn's claims and leases on the NT portion of the Project property.

There are no known alternatives to sub-surface exploration drilling at the Project site. Airborne geophysics is a possible alternative for exploration of some types of mineral deposits, but is not effective for zinc/lead deposits, particularly the SEDEX type found at the Project site. Further, it does not produce results that allow for quantification of mineral resources and subsequent steps of economic, engineering and environmental assessment.

Reclamation activities at drill pads and trails will include revegetation work involving the use of native grass seed. Revegetation is an important factor in reducing the potential for surface soil erosion at disturbed sites. An alternative method of revegetation considered was to simply allow natural ingression of local vegetation to occur. While this method allows for potential colonization of site by all types of indigenous plants, rather than just grasses, the time lag for colonization can sometimes be several seasons. Seeding with native grass species was selected because it provides for timelier revegetation of disturbed sites. Further, revegetation with native grasses does not preclude ongoing ingression of other native plant species.

8.0 Boundaries

8.1 Spatial

The ToR asks for a rationale for the determination of spatial boundaries used in the DAR. The spatial bounds of the Development are clearly defined by the location of the NT claims and leases held by Selwyn Resources Ltd. All NT exploration work will occur within the bounds of these tenures. Given the low-impact nature of the Development (i.e. no permanent infrastructure development, no stream crossings, the use of existing trails and use of small, portable drills), there is little chance for impacts to extend beyond the bound of the claims/leases.

8.2 Temporal

The ToR asks Selwyn to provide a rationale for the determination of temporal boundaries used in the DAR. The Type B Land Use Permit that Selwyn has applied would have a term of five years. All development activities associated with the permit (inclusive of trail/pad building, drilling and reclamation activities) will occur within this time frame; therefore, a five year temporal boundary has been assumed for this DAR.

9.0 Subsistence Activities & Traditional Land Use

9.1 Compatibility

The ToR asks for a map and a description of any subsistence or traditional land use activities within the vicinity of the proposed Development, including historical information.

Selwyn commissioned a Traditional Ecological Knowledge (TEK) survey for the Project site. The survey was conducted by Leon Andrew in the fall of 2006, and included interviews with nine individuals from Tulita whose families have links to the region around the Selwyn Project. Hunting, trapping, fishing and camping were identified as traditional activities that were historically carried out in the general region. These activities were identified with areas north and east of the Project, and no traditional use sites were identified specifically within the bounds of the project. The report identifies that the region to the north and east is rarely accessed for sustenance activities in current times. The TEK survey report, along with maps, is included in Appendix VI.

9.2 Timing

The ToR asks Selwyn to provide a general description of the timing of any subsistence or traditional land use activities, focusing on potential conflicts with these activities and the proposed Development.

Selwyn's mineral tenures in the NT are at remote (about 320 kms southeast of Tulita), high elevation locations typified by short summers, long cold winters, and significant snow accumulations. Primary access is via fixed-wing aircraft that set down at Selwyn-owned airstrips in the YT. The only ground access to the NT claims/leases is via an approximately 78 km long road linking Tungsten, NT and the XY Camp, which is not currently in serviceable condition and cannot be passed by truck.

Interviewees in the TEK survey stated that "in the Howard's Pass area, and more specifically the Nahanni River, the Tulit'a Dene rarely access this area for subsistence activities, such as hunting, trapping or fishing" (Andrew, 2006).

Big game harvesting (inclusive of subsistence and trophy harvesting) in the Anniv and XY Nose areas is regulated by the NT Government. The claims/leases fall within NT Wildlife Management Unit S, and Outfitter Management Area S/OT/03. There are defined hunting seasons for popular big game species, including woodland caribou (open July 15 to Jan 31 for residents and July 25 to Oct 31 for non-resident), moose (open Sept 1 to Jan 31 for residents and Sept 1 to Oct 31 for non-resident), and grizzly bear (open to residents only Aug 15 to Oct 31). Harvest levels in the area are believed to be low or non-existent, and are further discussed in Section 10.2.

Owing to the remoteness of Selwyn's mineral tenures in the NT, and climate-related constraints, it appears there a low likelihood of the Development being in conflict with traditional, subsistence, or economic land use activities in the area.

10.0 Fish & Wildlife Resources

10.1 Local Resources

The ToR asks for a table of all fish & wildlife that use the area that are (a) important to traditional harvesting or (b) species of biological concern. A number of wildlife species have been documented in the vicinity of the XY Nose and Anniv areas. A summary of common species known or suspected to occur in the Project area are provided below in Table 6.

| Species | Occurrence: Known (X) Suspected (?) | | Traditional Harvest ¹ | Biological / Conservation |
|--|---|-------|-------------------------------------|------------------------------|
| | XY Nose | Anniv | | Concern |
| Woodland caribou (<i>Rangifer tarandus</i>) | Х | х | х | х |
| Moose (<i>Alces alces</i>) | х | Х | х | |
| Grizzly Bear (<i>Ursus arctos</i>) | х | Х | х | х |
| Wolverine (<i>Gulo gulo</i>) | х | Х | х | Х |
| Beaver (Castor canadensis) | | Х | х | |
| Grey Wolf (<i>Canis lupus</i>) | х | Х | х | |
| Red Fox (<i>Vulpes vulpes</i>) | х | ? | х | |
| Hoary Marmot (<i>Marmota caligata</i>) | х | ? | х | |
| Arctic Ground Squirrel (Spermophilus parryii) | х | ? | х | |
| Golden Eagle (<i>Aquila chrysaetos</i>) | х | Х | | |
| Trumpeter Swan (<i>Cygnus buccinator</i>) | | х | | Х |
| Willow Ptarmigan (<i>Lagopus lagopus</i>) | х | ? | Х | |

| Table 6: Wildlife Occurrence in the Project Area | Table 6: | Wildlife | Occurrence | in the | Project Area |
|--|----------|----------|------------|--------|--------------|
|--|----------|----------|------------|--------|--------------|

Note: ¹Traditional Harvest includes fishing, hunting and trapping

10.2 Key Species

The ToR asks Selwyn to provide basic information for the species identified in Section 10.1. In addition, the MVEIRB has identified woodland caribou as the primary species of concern in the study area.

Information on caribou species, status, diet, ranges, seasonal movements, and population trends is provided below. A summary of other species known or suspected to occur in the study area follows.

Woodland Caribou

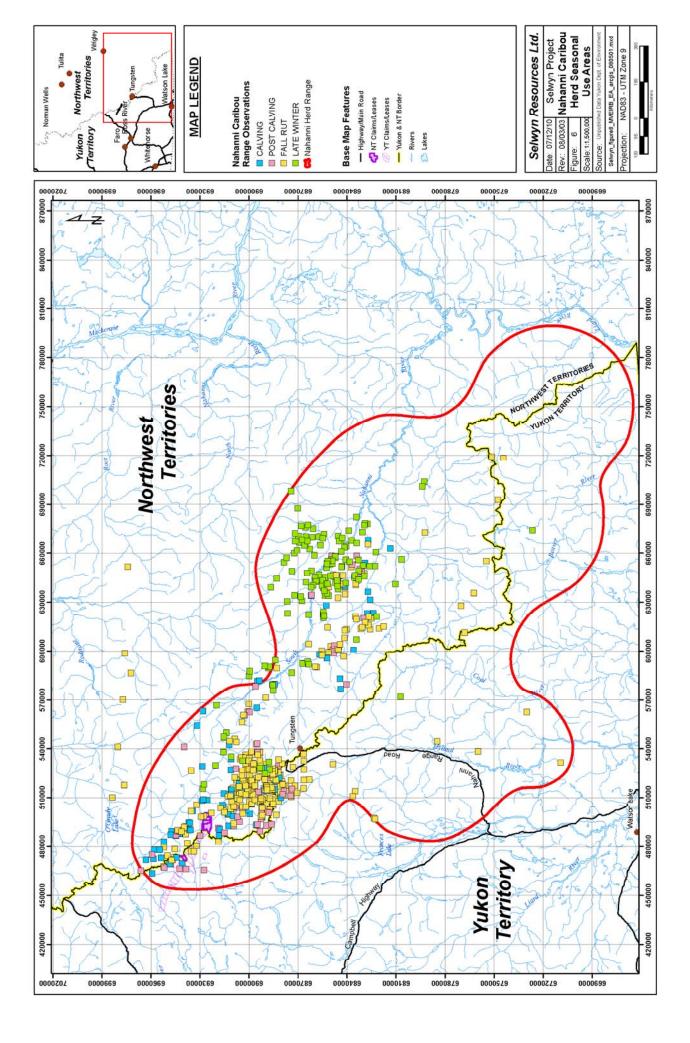
Woodland caribou that occur in the Project area are part of the Northern Mountain Population and are designated as Special Concern under Committee on the Status of Endangered Wildlife in Canada (COSEWIC, 2002a). The Northern Mountain Population is comprised of about 38 relatively discreet herds that range across central and southern Yukon, the Mackenzie Mountains of the Northwest Territories, and northern British Columbia. As shown on Figures 6 and 7, the Selwyn Project is situated at the northern extent of the Nahanni and Finlayson Caribou Herd ranges. The Redstone Caribou Herd range is further north and outside the Project's area of influence.

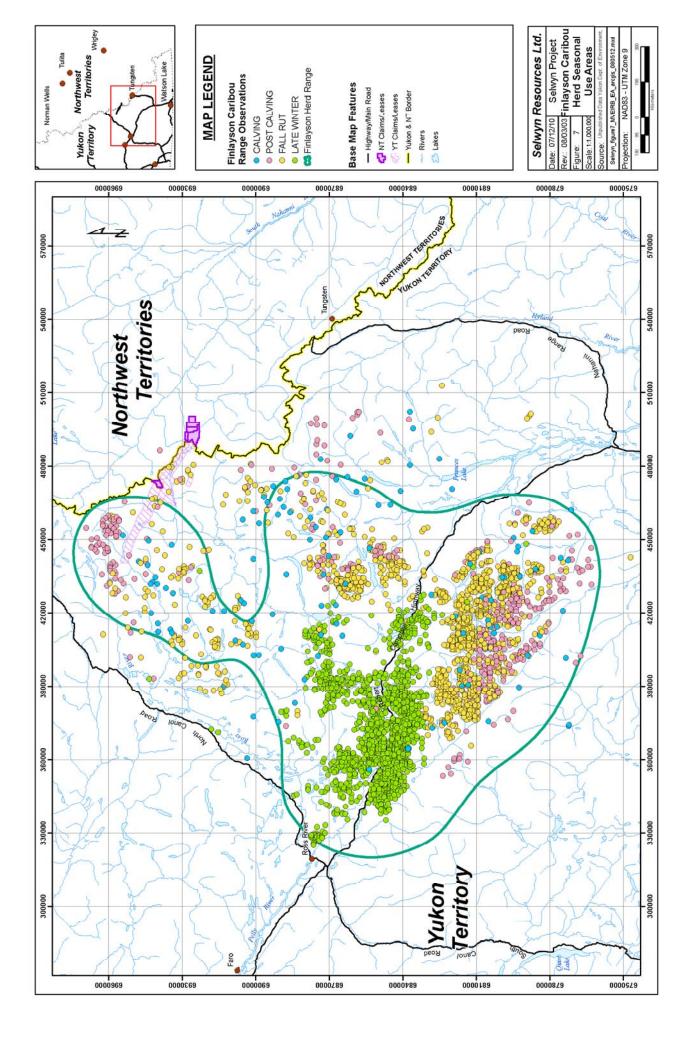
The diet of woodland caribou is comprised primarily of terrestrial lichens for most of the year with other forage resources being consumed incidentally. Between 1982 and 1999, studies examining the late winter diet of the Finlayson Caribou Herd were completed. Terrestrial lichens were found to comprise about 74 % of the winter diet with other vegetation species such as horsetails, evergreen shrubs and graminoids also being consumed (Unpublished data, Yukon Department of Environment). A description of the range, seasonal movements and population trends for the Finlayson and Nahanni caribou herds are provided in the sections below. A discussion of habitat use is provided in Section 10.3.

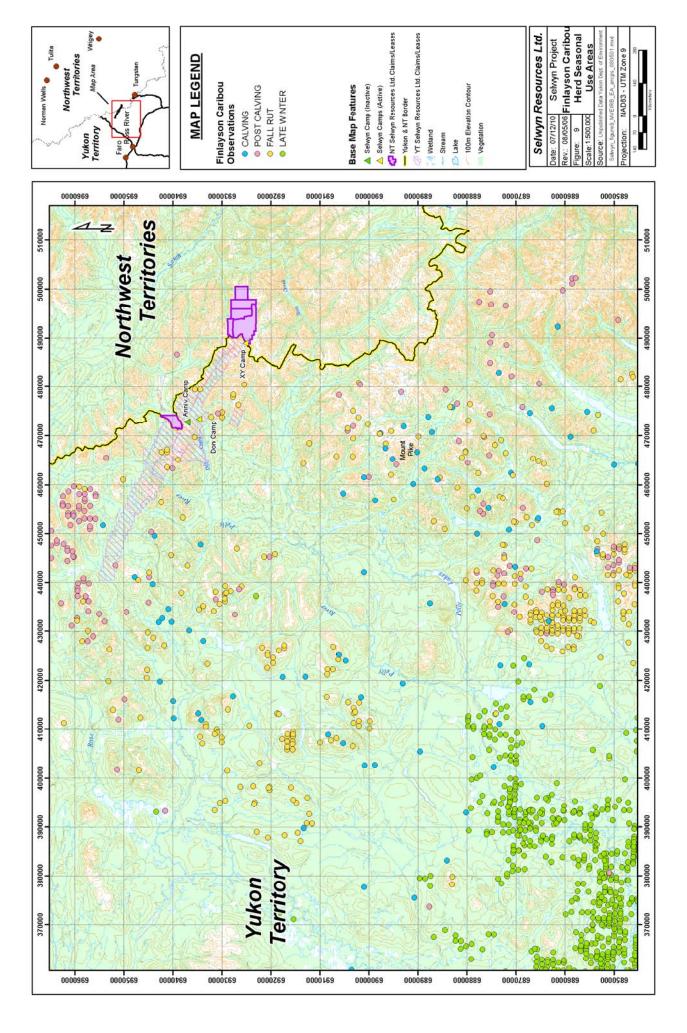
Nahanni Caribou Herd

The Nahanni Caribou Herd ranges over an area of about 18,000 km² in the Selwyn-Logan-Mackenzie Mountains (Gullickson and Manseau, 2000; Gunn et al., 2002), as shown on Figure 6. Information on range use by the Nahanni Caribou Herd originates primarily from telemetry studies. The data show that this herd primarily uses habitats along the South Nahanni River and its tributaries during the spring calving (mid-May to early-June) season. During the post-calving period (late-June and July) the Nahanni Caribou Herd are generally found in upland habitats of the South Nahanni and Little Nahanni watersheds, upper Steel Creek and along the upper Hyland River to north of Howard's Pass (Gullickson and Manseau, 2000), as shown on Figure 8. The alpine and subalpine plateaus in this area tend to be used extensively by the herd during the snow-free months. The herd winters in the forested lowlands of the lower South Nahanni River above Virginia Falls. The South Nahanni River provides the primary movement corridor between summer and winter ranges of the Nahanni Caribou Herd (Weaver, 2006).

Fall composition counts for the Nahanni Caribou herd were conducted in 1995 to 1999, 2001, 2004 and 2007, and a population survey was conducted in September 2001. The 2001 survey resulted in a population estimate for the herd of 1,140 animals (Gunn et al, 2002). Data from fall composition counts indicate that calf recruitment (number calves/100 cows) and sex ratios (number bulls/100 cows) for the herd are low (Hayes et al, 2002; Gunn et al 2002; Gullickson and Manseau, 2000). A similar trend was seen in data collected in 2007 (Unpublished data, Yukon Department of Environment). Studies have shown that a continuous trend of poor calf recruitment can result in uneven distribution of males and females in the population even when it is only lightly hunted. Hunter harvest has been found to contribute additionally to the mortality of woodland caribou (Farnell and McDonald, 1989).







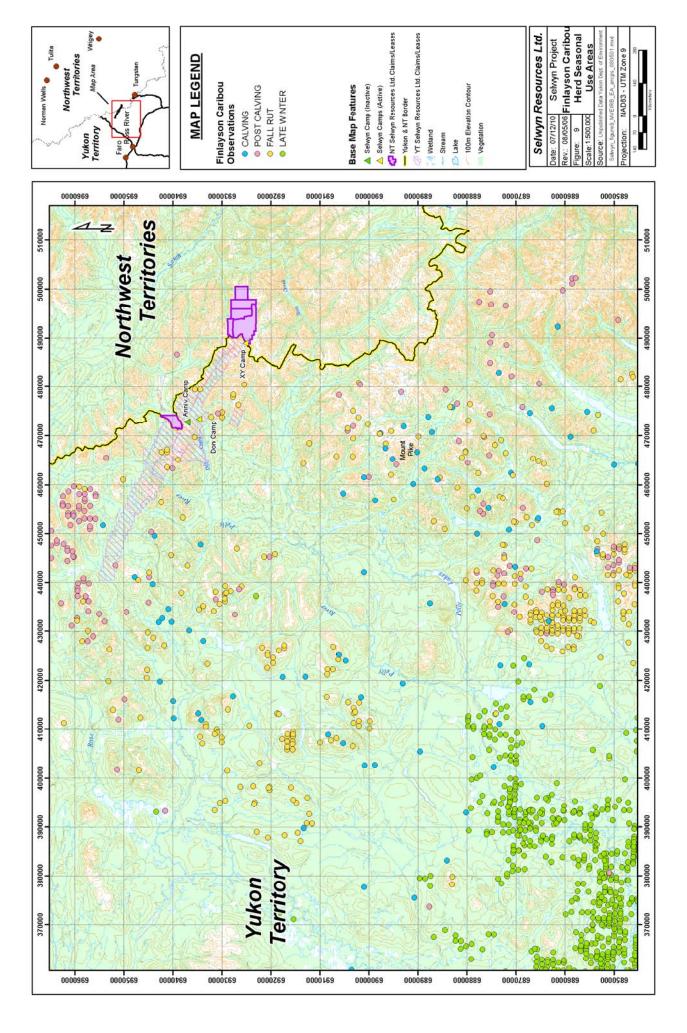
Finlayson Caribou Herd

The total range of the Finlayson Caribou Herd covers an area of about 23,000 km². The summer and fall ranges of the herd are located primarily in the alpine habitats south of the Robert Campbell Highway in the St. Cyr Rage of the Pelly Mountains. About one-third of the herd ranges north of the Robert Campbell Highway in the Logan and Selwyn Mountains to near the Northwest Territories border (Adamczewski et al, 2007), as shown on Figure 9. The winter range is a confined habitat comprising an area of about 6,600 km² located in the Pelly River lowlands east of Ross River and distant from the Project site (Adamczewski et al, 2007; Farnell & McDonald, 1989). Terrestrial lichens, which are an important forage resource for caribou, are abundant throughout this area.

Population estimate surveys have been conducted for the Finalyson Caribou Herd in late winter since the early 1980s. The most recent survey, completed in fall 2007, reported a population size of about 3,077 animals. Calf recruitment (calves/100 cows) and sex ratios (bulls/100 cows) were found to be above known stable points for Yukon caribou herds (Hayes et al, 2002). Despite stable calf recruitment and sex ratios for the herd, the Finalyson Caribou Herd has been showing a declining trend that is likely attributed to predation combined with human harvest (Farnell, 2008).



Photo 9 – Woodland Caribou Post-Calving Aggregation (15 July 2007)



Moose

Moose are the only other ungulate species that occur in the Project area. Moose are valued as a traditional harvest species for First Nations, and are also important subsistence and economic species. The total harvest for this species is estimated between 1,000 and 2,000 animals per year across the NT; of which about 45 of these are taken from the Mackenzie Mountains by non-resident trophy hunters (GNWT, 2008b). Moose were documented incidentally in the vicinity of XY Nose and Anniv in 2006 and 2007. Moose observed near XY Nose were likely migrating through the area between suitable habitats in the Don Creek and Steel Creek catchments. The Anniv area provides suitable habitat for moose, in particular the Wise Lake complex tributary to the South Nahanni River watershed. Moose were observed in Wise Lake in 2007.

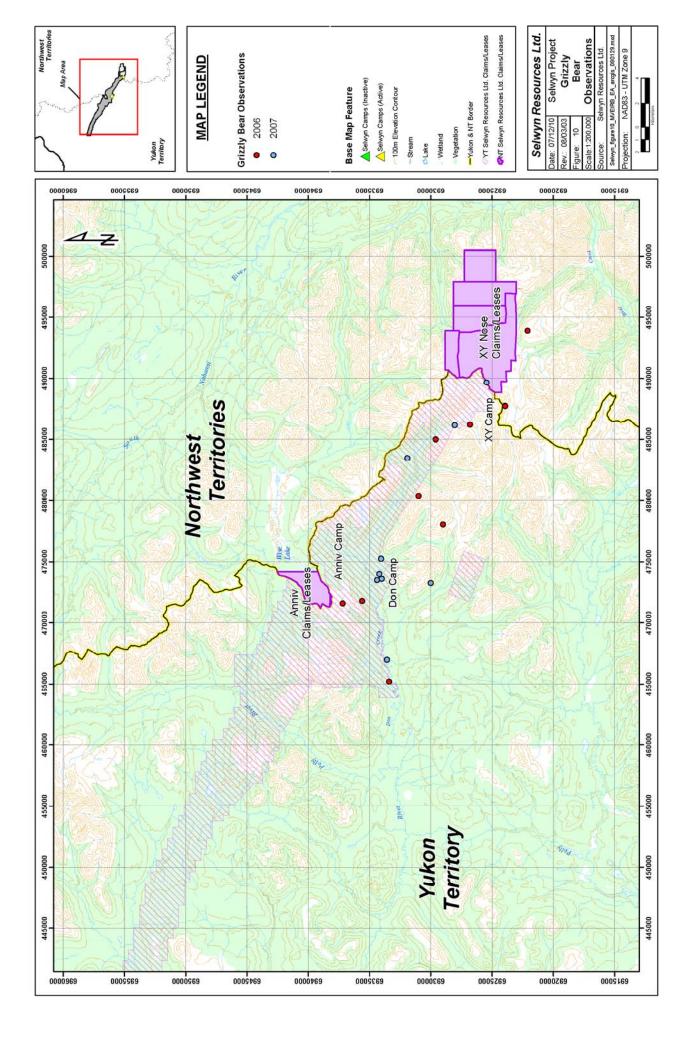
Grizzly Bear

Grizzly bears in the vicinity of the project area are part of the northwestern population and are designated as Special Concern under COSEWIC, listed under Appendix II of the Convention on the International Trade in Endangered Species of Wildlife Fauna and Flora (CITES), listed as Lower Risk Least Concern by the World Conservation Union (COSEWIC, 2002b) and Sensitive under the NT general status ranking (GNWT, 2000).

Limited data on bears is available for the Project area. Weaver (2006) conducted a study to determine bear occurrence in the South Nahanni River watershed and included a survey grid – Little Nahanni - near to XY Nose claim/lease area. The study reported that expected bear density in this area was low to moderate (10 to 17 bears/1000 km2) and moderate (17 bears/1000 km2) for the Anniv claim/lease areas. As a note, samples collected from 8 sites in the Little Nahanni grid were inadvertently destroyed prior to analysis (Weaver, 2006).

Comparatively, a pilot study evaluating grizzly bear occurrence at the Project site, in the Yukon portion of the study area only, was conducted from late July to early August 2007. A survey grid was established (5 x 5 km grid cells) comprised of 22 stations across the study area. From these, seven individual bears were identified during this period and represented five females and two males. It is suspected that grizzly bear densities in the Selwyn Project area, similar to areas adjacent to the Project in the NT, are low to moderate as suggested by Weaver (2006). Because a wildlife research permit was not granted to Selwyn by GNT (Department of Environment and Natural Resources) the NT portion of the study area was not evaluated in the pilot study.

Grizzly bears were documented through incidental observations in the vicinity of XY Nose and Anniv in 2006 and 2007, as shown in Figure 10. It has been reported that bears typically emerge from den sites in early to mid May, use the area through the spring, summer and fall months then move back into the dens in late fall. Incidental observations made during surveys for other species in spring suggest that some bears are denning at high elevation sites over the winter. None were noted at the XY Nose and Anniv claim/lease areas.



Furbearers

Six furbearer species have been documented as occurring in the Project area including wolverine, grey wolf, red fox, beaver, hoary marmot and arctic ground squirrel. Wolverine are designated as Special Concern under COSEWIC (2002b) and Sensitive under the NT general status ranking (GNWT, 2000). Wolverines have been observed in the vicinity of both the Anniv and XY Nose claim areas. Similarly, wolf and fox have been documented as using both areas. Beaver lodges/dams have been observed near the Anniv claim area in the vicinity of the Wise Lake complex. Both hoary marmot and arctic ground squirrel are common in the vicinity of XY Nose claims/lease. It is suspect that these species also occur near the Anniv claim/lease area.

Avifauna

Golden eagle is the most common raptor species in the area and is considered secure in the NT (GNWT, 2000). It is suspected that this species is a local migrant, with snow packs limiting prey presence and distribution in the winter months. Historical records indicate golden eagle breed in the area; Alexander et al (2003) reports that in the Selwyn Mountains golden eagles range over 392 km² per active nest site. Arctic ground squirrel, the primary food source for this species, is abundant in the vicinity of XY Nose. Willow ptarmigan are found commonly in the XY Nose lease/claims area and are distributed throughout during the spring and summer months. It is likely that ptarmigan migrate seasonally from tundra areas into riparian willows and sometimes the boreal forest in the fall (Alexander et al, 2003). Ptarmigan have been documented to breed in the XY claim/lease area; and it is suspected that this species also occurs near the Anniv claims/leases.

Trumpeter swans in the project area are part of the Rocky Mountain population (Alexander et al, 2003) and are considered to be a sensitive species according to the NT general status ranking (GNWT, 2000). Two pairs of nesting swans were observed incidentally on Wise Lake, below the Anniv claim/lease area, from Anniv Camp in 2007. No suitable habitat is available for swans in the vicinity of XY Nose.

Fisheries Resources

Limited data is available for fisheries resources in the XY Nose and Anniv claim/lease areas. The Wise Lake stream/lake/wetland complex in the vicinity of the Anniv area, as shown on Figure 11, is a tributary system to the South Nahanni River watershed. No capture data is currently available for fisheries resources in the Wise Lake catchment. In the upper portions of the South Nahanni, arctic grayling, burbot, and slimy scuplin have been captured (J. Babaluk, pers. comm., 29 February 2008). It is unknown if the species reported for the South Nahanni also occur in the Wise Lake area.

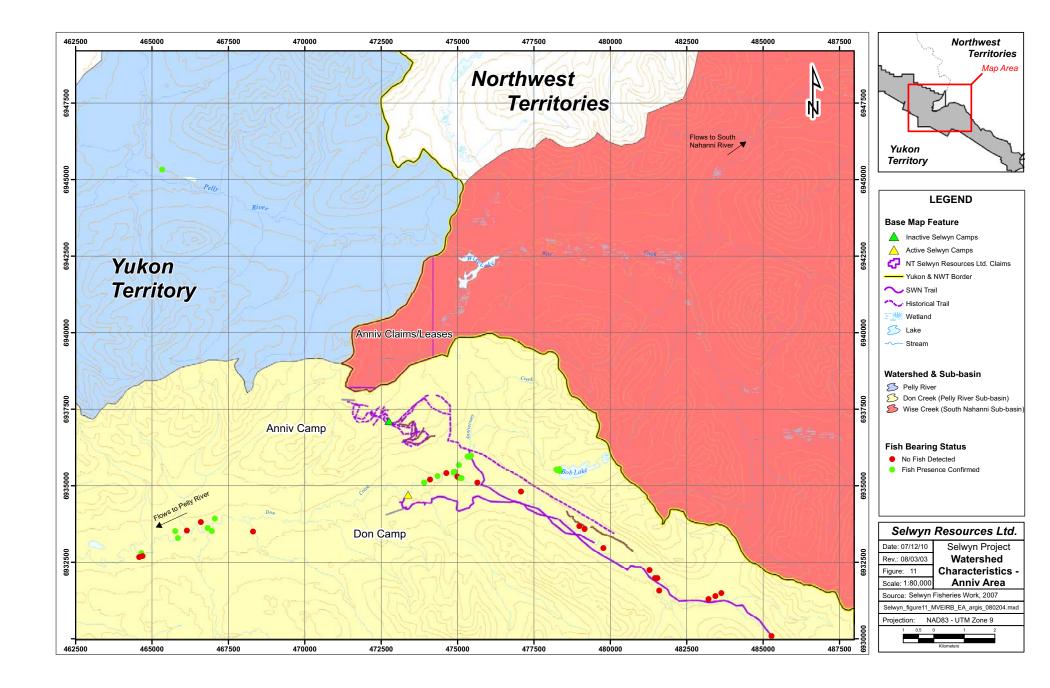
The XY nose area drains to Steel Creek catchment via Canex and Placer Creeks. Steel Creek is approximately 10 km from the XY Nose area and drains to the Little Nahanni River. About 1.5 km upstream of the confluence of the Little Nahanni, Steel Creek enters a steep rocky canyon that flows over a series of rapids and a waterfall about 2-3 m high that is likely a barrier to fish passage (Photo 10). A fisheries program was conducted by Envirocon Ltd in June 1976 which included 48 hours of netting at 3 locations and an hour of angling at a fourth location above this canyon.

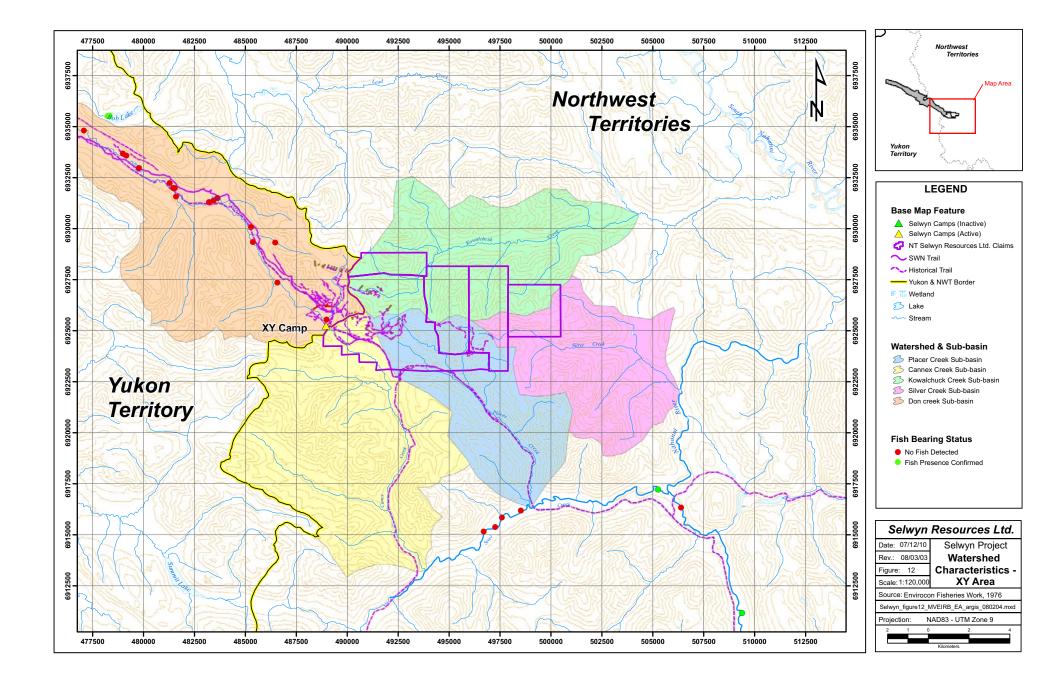
No fish were captured at these sites. Similar sampling efforts were applied to the reach below the canyon and seven arctic grayling were captured. Slimy sculpin have been reported to be present in this area (J. Babaluk, pers. comm., 29 February 2008).

Envirocon concluded that Steel Creek above the canyon is unlikely to support fish. As smaller upstream tributaries with higher gradient and alpine origins, Placer and Canex Creeks are likewise unlikely to support fish. Habitat suited to fish in these streams near the XY Nose would be extremely limited, as there is no vegetation cover, the area experiences high snowpack, and winter flows are low or non-existent.



Photo 10 – Suspected Fish Barrier on Steel Creek





10.3 Habitat Use

The ToR asks Selwyn to identify habitat important for species identified in Section 10.1, and also asks for a description of the timing and nature of the habitat use by fish or wildlife. A summary of habitat use by woodland caribou and fisheries resources is provided in the following section. This section will focus on habitat use in the vicinity of the Project areas.

Woodland Caribou

Use of the Project area by woodland caribou during the winter months is very limited to absent due primarily to high snowpack levels and the inaccessibility of terrestrial lichens (and other food sources) as a forage resource. Snowpack surveys were completed at three stations at the project site, located mid to upper Don Creek watershed, in March and May 2007, and March and April 2008. All sites ranged in elevation from 1,219 to 1,310 m above sea level. Snow levels in 2007 ranged from 72 to 84 cm in March and 47 to 97 cm in May. Comparatively, in March 2008 snowpack levels were from 101 to 114 cm and 98 to 122 cm in April 2008. With the exception of one station sampled in May 2007, winter snow levels reported at the Project site exceed levels known to hinder mobility of caribou. For individual caribou maximum depths are 50-60 cm and 80-90 cm for groups of caribou (Russell and Martel, 1984). Moreover, use and location of winter ranges for both the Nahanni and Finlayson caribou herds are well documented and located distant from the project site.

During the calving season, caribou cows generally disperse into alpine areas away from travel routes of predators. This predator avoidance approach is compromised when the alpine is covered in snow. Snow-free patches in the alpine are also needed by cows for calving so that the brown-colored calves are well hidden. For years when bare patches of ground are less extensive, the movement of caribou into alpine areas is reduced and location of caribou by predators is easier. The peak calving period for both the Finlayson and Nahanni Caribou Herds is the last week of May and first week of June (Unpublished data, Yukon Department of Environment; Weaver, 2006). The closest calving locations to the Project site for each herd are shown on Figure 8 and 9. The South Nahanni River and its tributaries to the east of the Project site, upper Steel Creek watershed, and high-elevations sites in the vicinity of Mount Pike are the nearest documented calving occurrences for the Nahanni Caribou Herd to the Project site (Unpublished data, Yukon Department of Environment). The closest sites for the peak of calving for the Finlayson Caribou Herd are located to the south and west of the Project site. Caribou were also observed after the peak of calving in the vicinity of the Project primarily on highelevation sites mid-June 2007. Most of the animals seen were caribou cows with a few bulls. The low number of bulls observed during this survey is typical of this time of year as bull caribou tend to lag behind cow caribou during spring migration into the mountains for summer (Bergerud et al, 2008).

Movement of caribou into the Project area continues through June to peak of postcalving in July. During this season, caribou have been observed aggregating in larger groups on late-lying snow patches in alpine areas. Caribou use snow patches to avoid insects (Downes et al, 1986; Ion and Kershaw, 1989) and thermoregulate during the warm summer months (Ion and Kershaw, 1989) (Photo 9; Figures 8 and 9). Selwyn conducted two post-calving surveys on June 27 and July 15, 2007. The June survey focused on the Project area and resulted in 200 caribou being found, in 34 individual groups, ranging in size from 1 to 48 animals. The comprehensive July 15 survey was focused on the Project site and a control area to the north (up to near Mount Itzie) and to the south (down to near Mount Pike) of the Project area. A total of 603 caribou in 105 groups were found during this survey. Group size ranged from 1 to 52 animals and almost all were on snow patches. Most of the caribou were found in the southern control area (42 %), followed by the Project area (37 %) and then the northern control area (21 %). High elevation alpine areas in the vicinity of XY Nose claims/leases with snowpatches are found to be used by caribou during the post-calving season. No caribou were found in the Anniv claim/lease area.

Surveys indicate that there is limited use of the Project area during the fall rut period. Three occurrences of caribou were found in areas east of the XY Nose claim/lease area for the Nahanni Caribou Herd. The majority of Nahanni Caribou distribution during the fall rut period is to the southeast of the Project site south of the Steel Creek catchment. Selwyn, in partnership with Yukon Department of Environment, conducted a fall composition survey for the Finlayson and Nahanni Caribou Herds from September 29 to October 2, 2007. A focused survey of the Project area occurred on October 1, 2007. A total of 57 caribou were found, in nine different aroups comprised of 1 to 15 animals. More than half of the caribou encountered were adult females (61 %) followed by males (mature and immature; 23 %) and calves (16%). All animals were found in alpine habitats with snow depths < 50 cm and snow covering almost all of the area surveyed. During the survey, the majority of the Finlayson Caribou Herd were located on the fall range south of the Robert Campbell Highway; however, there were some caribou from the herd found on highelevation sites along the Don Creek watershed. Compared to other parts of the respective ranges for each herd, use of the Project area is limited during the fall season. No caribou were found in association with XY Nose and Anniv claim/lease areas as shown on Figures 8 and 9.

Fisheries Resources

The Little Nahanni River and upper South Nahanni River watershed are located in Zone 2 of the NT fisheries zones. A summary of key species spawning and incubation period are identified below (DFO, 2008):

- Arctic grayling spawn mid-May to early-June and incubate for 8 to 32 days;
- Burbot spawn December to mid-January and incubate for 30 to 90 days;
- Lake trout spawn mid to late August and hatch in May/June; and,
- Slimy sculpin no information is available for this species in this zone in the NT.

Placer, Canex, Silver and Kowalchuk creeks and their tributaries are the four water bodies in the vicinity of the XY Nose area. Fish presence is unlikely in the upper portions of the Steel Creek watershed where these streams occur due to a barrier to fish passage located about 1.5 km upstream of the confluence of Steel Creek and Little Nahanni River (Envirocon, 1976). Available habitat in the South Nahanni River tributary system below the Anniv area has not been determined. Activities associated with the proposed drilling program will be conducted well away from the complex and is not anticipated to have any impact on the system.

10.4 Watershed Characteristics

The ToR asks for a map delineating local sub-watersheds and associated drainage patterns, along with known watercourses and associated fish-bearing status information.

The Wise Lake stream/lake/wetland complex in the vicinity of the Anniv area is a tributary to the South Nahanni watershed (Figure 11). It is unknown whether this system is fish bearing, contains suitable habitat, or if barriers are present that would limit fish distribution in the system. As reported by J. Babaluk (Pers.Comm., 29 February 2008) the upper part of the South Nahanni River watershed contains arctic grayling, burbot and slimy sculpin. It is possible that these species could occur in this tributary system but cannot be confirmed at this time. Further, there is no information currently available for the characteristics of this system. Photo 11 provides an overview of the Wise Lake complex below the Anniv claim area.



Photo 11 – Tributary complex to the South Nahanni River Below Anniv Area (view from Anniv)

The Little Nahanni River is a tributary of the South Nahanni River, which is part of the Mackenzie River system. The Little Nahanni originates at Flat Lakes near Tungsten in the NT and drains an area of about 1,670 km² (Envirocon, 1976). Steel Creek (also know as Lidia Creek) catchment is the largest tributary to the Little Nahanni River and drains the XY Nose lease/claims areas (Figure 12). This catchment drains an area of 487 km², including Canex and Placer creeks which form the western and eastern limits of the XY Nose area respectively. Steel Creek is generally braided, flowing around vegetated gravel bars and is interspersed with short stretches of rapids flowing through small canyons. The presence of a steep rocky canyon that flows over a series of rapids and a 2 to 3 m high waterfall (Photo 10) about 1.5 km upstream of the Steel Creek/Little Nahanni River is a suspected barrier to fish passage. Both Placer and Canex creeks are characterized by a narrow v-shaped valley with a relatively steep gradient and rubble and boulder substrates in the

stream bed (Envirocon, 1976). All streams above the suspected barrier on Steel Creek, including Placer and Canex creeks, are believed to have no fish present.

As mentioned in Section 3.7, the water for drilling will be withdrawn from sources nearby the drill sites, usually a spring or creek. Specific sources for water withdrawals must be determined at the time of drill setup, as water flows within streams and from springs at these high elevation sites vary considerably through the year.

10.5 Direct & Indirect Impacts

The ToR asks Selwyn to provide an assessment of direct and indirect impacts from Development activities on local fish and wildlife. A description of potential impacts to fish/fish habitat and caribou follow.

Fish and Fish Habitat

All Development activities are scheduled to occur at high-elevation alpine and subalpine sites where local streams are unlikely to support fish. Further, the Development does not include drilling or trail construction activities either adjacent to (a 30 m minimum setback will be adhered to) or directly within streams (no stream crossings), thus no direct impact to fish or fish habitat is anticipated.

Development activities having potential to indirectly impact fish and fish habitat include vegetation clearing for bulldozer trails, drill pad construction, drilling (both exploration and definition), and reclamation activities. Additional indirect impacts to fish and fish habitat could potentially occur through water withdrawals.

Vegetation clearing activities will cause varying levels of surface disturbance, and will sometimes leave sites devoid of vegetation and having exposed mineral soils. Erosive mechanisms (including surface water flow during snow melt and rainfall) can result in sediment being liberated and subsequently mobilized from the exposed soils.

If the Development activities are undertaken in close proximity to water courses, mobilized sediment could be transported by surface water flow directly or indirectly to streams, resulting in negative impacts to downstream fish or fish habitat. As noted above, operations will not occur within 30 m of water courses as a measure to mitigate the potential for stream sedimentation.

Water withdrawals from local sources for drilling, as described in Section 3.7, will involve small volumes and short durations, and are not expected to have any measurable impact to stream flows and downstream habitats. As a precaution, pump intakes are screened to prevent the entrainment of fish or other aquatic creatures. Table 7 below summarizes anticipated direct and indirect impacts to fish and fish habitat.

| Impact Factor | Description | | |
|--------------------|---|--|--|
| Direction | Neutral. No direct or indirect impacts to fish or fish habitat are anticipated. | | |
| Magnitude | No direct or indirect impacts to fish or fish habitat of any measurable magnitude are anticipated. | | |
| Duration | The Development will occur over a five year period. No direct or indirect impacts to fish or fish habitat are anticipated during the duration of the Development. | | |
| Frequency | No occurrence of direct or indirect impacts to fish or fish habitat is anticipated. | | |
| Probability | The likelihood of impacts occurring is low, as the Development does not include drilling or trail construction activities either adjacent to or directly within streams. | | |
| Reversibility | Not applicable. No direct or indirect impacts to fish or fish habitat are anticipated, so reversibility is not a consideration. | | |
| Ecological context | Not applicable. No direct or indirect impacts to fish or fish habitat are anticipated. | | |
| Geographic extent | The geographic extent of the Development is defined by the boundaries of the Anniv and XY Nose area claims/leases. No measurable direct or indirect impacts to fish or fish habitat are anticipated from the Development activities within these bounds. | | |

Table 7: Direct & Indirect Impacts to Fish & Fish Habitat

Woodland Caribou

Development activities having potential to directly or indirectly impact caribou are related primarily to noise and visual disturbances (disturbance events) from drilling and helicopter operations. Physical impact to habitat will be insignificant (up to 3.5 hectares of disturbance over a 5-year period in caribou ranges greater than 18,000,000 hectares), and as such has not been included as a direct or indirect impact to caribou.

Direct impacts to woodland caribou from disturbance events are expected to be localized and of low magnitude. Primary effects are expected to be temporary spatial displacement as a response to noise and/or visual disturbances associated with the proposed drilling and helicopter activities in the Anniv and XY Nose claim/lease areas. It is anticipated that there will be active drilling at 20 sites on average in both areas combined each year. Limited studies have been conducted quantifying avoidance distance for caribou from active exploration programs. Wolf et al. (2000) reported that caribou tend to move away from point source (e.g. drilling sites) disturbances; and Johnson et al. (2005) noted that it is difficult to quantify the exact location and area influenced by mineral exploration activities. A discussion of effects from helicopter disturbance is provided in additional detail in Section 10.6 below.

The number of caribou affected from the proposed Development is expected to be low. Based on the calving, post-calving and fall rut surveys conducted by Selwyn in 2007 and calving survey in 2008 only a small component of caribou for both herds range in the vicinity of the proposed development areas. High elevation mountain blocks in the study area were flown during field surveys with low elevation areas used as transit corridors between mountain blocks. Thirteen caribou were counted during the June 14/15 calving survey, 61 caribou during the June 27 early post-calving survey, and 29 caribou for the July 15 peak post-calving survey within the XY Nose development area. Almost all caribou seen during the post-calving surveys were found associated with snow patches on mountain slopes. Snow patches provide important habitat for caribou to thermoregulate and avoid insects. No caribou were not seen in the vicinity of the Anniv development area during any survey period in 2007. Further, a calving survey was conducted by Selwyn on May 29, 2008; no caribou were found using habitats in the XY Nose and Anniv development areas.

When compared to the total size of the Finlayson (population estimate 2007: 3,077 caribou) and Nahanni (population estimate 2001: 1,140 caribou) Caribou Herds, the number of animals that could potentially be disturbed is small. Further, use of the XY Nose claim lease area is primarily associated with snow patches which are away from the proposed development area. Caribou activities associated with the claim/lease area proper are primarily associated with movement to/from other habitats (e.g. forage habitat, snow patches to thermoregulate and avoid insects) available in the area. Comparatively use of the Anniv claim/lease area by caribou is low with limited forage or snow patch habitat available for caribou. Population level impacts are not expected to occur.

The impact to woodland caribou habitat from the proposed Development is expected to be low. Based on the proposed Development, a total of 3.5 ha are expected to be cleared and/or disturbed over a 5-year period, inclusive of both the Anniv and XY Nose claim/lease areas. This anticipated disturbance area compared to the overall ranges of the Finlayson (23,000,000 ha) and Nahanni (18,000,000 ha) Caribou Herds is very small in scope. Neither of these development areas are considered to be critical habitat for either herd and similar habitat is available in adjacent areas during all seasons of use (calving, post-calving, summer and early fall). Forage value in these areas during the snow-free period is not high with the understory comprised primarily of short forb, grass and shrub species. Further, on completion of the proposed development activities, it is planned that each of the disturbance sites (i.e. drill sites) will be reclaimed using native seed stock similar to the program that has been initiated at other locations across Selwyn's claim/lease area in the Yukon.

A summary of direct and indirect impacts to woodland caribou from the proposed Development activities is provided in Table 8 below.

| Impact Factor | Description | | |
|--------------------|---|--|--|
| Direction | Disturbance events associated with the proposed Development are considered negative in direction. It is likely that caribou will avoid or be displaced from areas where drilling and/or helicopter operations are active. | | |
| Magnitude | Impacts to caribou from disturbance events are expected to be of low magnitude. Few caribou occur in the XY Nose development area during the calving season (13 caribou were seen June 14/15, 2007 and no caribou found during May 29, 2008 calving survey). A small portion of the Finlayson herd (90 of 3,077 caribou or about 3% of the herd) was noted in the XY Nose area during the post-calving season (June-July). No caribou were found near the Anniv area. No caribou were found in either area during the fall rut survey period. | | |
| Duration | Disturbance events impacting caribou are expected to occur intermittently during the seasonal operating periods over the five-year term of the development. Impacts are not expected to persist beyond the duration of the Development. | | |
| Frequency | Disturbance events associated with impacts to caribou will be intermittent. Between 0 and 4 drill sites will be active up to 24 hours/day during the operating season (June to November). The frequency of helicopter- support flights will vary with the number of active exploration drilling sites. | | |
| Probability | Disturbance events are a high probability if the proposed Development occurs. | | |
| Reversibility | The impacts are reversible. Caribou will likely avoid locations during disturbance events. Our experience in the Yukon shows that caribou return and continue to use areas associated with drilling and/or helicopter activity once the disturbance event has stopped. | | |
| Ecological context | A low ecological context is associated with anticipated impacts from disturbance events. Habitat in the high-elevation Anniv and XY Nose areas is neither unique nor critical (generally devoid of terrestrial lichens and permanent snow patches); it is anticipated that caribou disturbed by Development activities will move into adjacent areas. Population level effects are unlikely to occur as a result of the proposed Development. Disturbances are expected to elicit a behavioral response from caribou (e.g. avoidance or movement away from the temporary disturbance). | | |
| Geographic extent | The impacts are expected to occur within the bounds of the XY Nose and Anniv claims /leases (5,534 ha). Areas subject to physical disturbance will be less than 3.5 hectares over a 5-year period. In comparison, the Nahanni Caribou Heard range is about 1,800,000 hectares, and the Finlayson Caribou Heard range is about 2,300,000 hectares. | | |

Table 8: Direct & Indirect Impacts to Woodland Caribou

10.6 Helicopter Overflights

The ToR requires that an assessment of direct and indirect impacts from helicopter traffic on local wildlife be conducted. It is anticipated that any potential effects will be associated primarily with noise disturbance from helicopters. The effects are expected to be localized in geographic extent and will be infrequent and of short

duration. Temporary spatial displacement and/or movement of animals from areas with helicopters present are likely to be the primary response from wildlife. These effects are most likely to occur along the flight path to drill sites and at the helicopter pad at the drill site (Figures 3 and 4). In some cases effects may also be noted at the drill site proper during drop-off and set-up of helicopter portable drills. It is not anticipated that any population level effects will occur as a result of these activities.

Noise from rotary aircraft is complex and is comprised of a combination of continuous engine noise and rapidly repeating impulse noise. The source of noise varies by model and dependent on the number, type and design of rotors, blades and engines (Larkin, 1995). The number of blades, blade tip speed and load determines whether the frequency range is more audible or annoying to an animal. Subsequently the model of helicopter will play a role in the degree of response exhibited by an animal (True & Rickley, 1977). It has been noted in various studies that different animals exhibit differing degrees and types of responses to aerial disturbance.

Studies have been conducted evaluating the sensitivity of caribou to aerial disturbance and is associated primarily with military overflights (i.e. jets and helicopters). Some research shows that chronic exposure to aircraft can be associated with shorter resting bouts and increased daily movements during the post-calving season (Murphy et al, 1993; Maier, 1996; Maier et al, 1998), females with young calves are generally more reactive than other sex and age classes (Miller & Gunn, 1979; Harrington & Veitch, 1991; Murphy et al, 1993; Maier et al, 1998) and in some cases may affect overall calf survival (Harrington & Veitch, 1991, 1992). In comparison, Davis et al (1985) found that the Delta Caribou Herd in Alaska became habituated to aircraft overflights and showed no evidence of long-term population level effects from frequent aerial activity. The study determined that response in 49% of caribou was mild, showing no overt behavioral response and only 13% moved away from aircraft activity (Murphy et al, 1993).

It was further noted by Larkin (1995) that different animals exhibit varying responses to aerial disturbance. Moose, for example, tend to show a higher tolerance to aircraft overflights than other ungulates such as caribou. A strong avoidance response by grizzly bears has been reported with bears moving away from the source of disturbance in advance of aircraft flying overhead into areas with cover. According to Klien (1973) wolves seems to be the least affected by aerial-based disturbance when compared with other species.

To minimize the potential for disturbance to wildlife from aircraft, the best practices manual "Flying in Caribou Country: How to Minimize Disturbance from Aircraft" (MPERG, 2008) will be used a guide for pilots operating in the area. Pilots flying on behalf of Selwyn are already familiar with the guidelines provided and are experienced flying according to the guidelines and in northern environments with sensitive wildlife populations. Where possible, flight paths will avoid areas that are known (or suspected) to have high concentrations of wildlife and operate in a manner that limits any potential disturbance to animals in the area. As a note, Selwyn has been undertaking ground and helicopter-supported exploration program in adjacent claim areas in the Yukon since 2005. No long-term population level effects have

been noted; rather, animals exhibit temporary spatial displacement or movement from areas with concentrated exploration activities.

11.0 Culture & Heritage Use

11.1 Local Resources

The Prince of Wales Northern Heritage Center in Yellowknife was consulted regarding the existence of registered archaeological sites in the Anniv and XY claim/lease areas. Archaeology staff from the Heritage Center report that there are no known archeological sites within the areas (J. deDios, Pers.Comm., 17 March 2008).

11.2 Direct & Indirect Impacts

There are no known archaeological sites in the Development area, so no direct or indirect impacts to sites are anticipated.

Should unrecorded sites be encountered in the course of the Development work, Selwyn's established SOP for archaeological site preservation (see Appendix I) will be adhered to. If a suspected site is encountered, all work in the immediate area will be stopped and the site will be cordoned off. Archaeology staff at the Prince of Wales Northern Heritage Center will be notified of the finding, and will be provided with details of the site location and what was encountered.

12.0 Land Use Conflict

12.1 Conservation Lands

The ToR asks for a description of what impact the Development will have on the land and water that may impact future park lands. It also asks for a description of what impact creating parks lands in the project area will have on the development.

As described in Section 2.3, previous development work has been undertaken within the XY Nose claim/lease areas, including road/trail/drill pad construction and subsurface drilling. The roads/trails that were developed (~29 kms) remain in place and are largely stable, and are visibly evident on the landscape. The road/trail construction and drilling have had no known residual impact on water resources.

The effects of the Development work proposed by Selwyn will be similar to that from road/trail/drill pad construction and drilling in previous years; that is physical disturbances from new trails and drill pads, and no impact to water resources. The visual result of trail construction/use is expected to be of lesser magnitude and duration compared to previous development, owing to the planned reclamation efforts as described in Section 3.9.

Creation of Park lands adjacent to the Project will increase regulatory risk and decrease regulatory competitiveness; there will be greater potential for denial and/or delay of permits for development activity. The impacts of creating a park adjacent to Selwyn's NT mineral tenures will alter the permitting atmosphere, since activities on lands adjacent to a park would be scrutinized for potential direct and indirect impacts to resources in the adjoining park. In effect, project activities could be subject to a

level of review akin to activities occurring directly within a Park. While there is no formal process or protocol that predetermines this outcome, the company experience thus far applying for permits related to exploration, land use and baseline environmental investigations in the NT has followed this pattern when Park creation still only in conceptual stages. As a result, those portions of the Project in the NT are significantly delayed relative to components located in the Yukon where potential Park creation is not a consideration.

Project decisions regarding strategic direction and investment are directly influenced by regulatory risk and competitiveness. Creation of park lands adjacent to the Company's leases and claims in the NT will increase the regulatory risk and make those lands less attractive for potential development. Resources that would potentially be invested in development of NT located minerals could be diverted to the Yukon. The pace of development in the Yukon will continue at its current rate or increase as a result. The Company will not abandon its mineral tenure in the NT and will continue to pursue development rights on those lands as it has an obligation to its shareholders to do so. However, these efforts will be secondary to Yukon based development.

Short or long term delays in acquiring permits necessary to advance NT portions of the Selwyn Project will likewise delay the potential for economic opportunities that the Project can provide to NT communities, businesses and individuals. This is evident already in relation to the Selwyn Project where significant investments have been made in the Yukon; Yukon businesses are providing services, local Yukoners are employed at the Project, and relationship development between the company and local communities is advanced. Similar investment and advances have not been made in the NT due to the lack of work permits forthcoming from NT regulators. The delays in receiving work permits are due, at least in part, to the potential creation of a National Park in the vicinity of the claims and leases held in the NT.

13.0 Cumulative Impacts

The ToR asks for a description of how the proposed NT development will contribute to the impacts of the Yukon development and vice versa. It also asks for a list of activities currently planned or ongoing in the NT and describe how those activities may contribute to the impacts of the Development and vice versa.

As noted earlier the proposed NT Development, as defined in the Terms of Reference for this DAR, includes:

- Drilling of up to 100 drill holes in alpine and sub-alpine terrain using diamond drill rigs (some heli-portable, some land-based) within identified claim and lease blocks;
- Clearing of vegetation for new bulldozer trails for access to drill sites at a rate of up to 2 km/year for 5 years¹;
- Helicopter transportation of personnel and equipment from the Yukon to work sites in the NT²;
- Off-site waste disposal from work sites in the NT to disposal facilities in the YT, as well as on site waste disposal in the NT.
- Reclamation and closure activities at drill sites and trails.

Developers notes:

1. Clearing of vegetation for new bulldozer trails will not exceed <u>an average</u> of 2 km per year over a 5-year period.

2. Transportation of personnel and equipment will occur between Selwyn's established camps in the Yukon and work sites in the NT.

The only enduring, measurable effect from Development activities spanning both sides of the YT/NT border will be physical disturbance to the ground surface. The disturbance includes vegetation removal and soil disturbance associated with drill pads, bulldozer trails, airstrips, trenches, and camps.

While a substantial portion of these impacts have been (and will continue to be) mitigated through ongoing reclamation efforts and natural processes, for the purposes of estimating cumulative impacts a conservative process and been employed whereby it is assumed all sites remain fully disturbed.

To illustrate the how the proposed NT development will contribute to the impacts of the YT development and vice versa, all known surface disturbance at the project site (1972 through 2007) has been tallied and then compared to the additional surface disturbance that is expected to occur over the 5-year term of the proposed Development in the NT (2008-2013). Cumulative surface disturbance at the Selwyn site is shown below in Table 9.

| On-Claim Surface Disturbance by Development Activity (hectares) ¹ | | | | | | |
|--|--------------------------------|---|------------------------|----------------------------------|--|--|
| Location | Drill Pads ² | Roads, Trails & Airstrips ³ | Trenches ⁴ | Camps⁵ | | |
| Existing YT Development (1972-2007) | 5.4 | 25.0 | 3.5 | 3.0 | | |
| Existing NT Development (1972-2000) | 0.3 | 8.7 | 2.5 | 0.0 | | |
| Totals | 5.7 | 33.7 | 6.0 | 3.0 | | |
| Notes: | ¹ All numbers giver | n are approximate. ² Ass | umes drill pads are, o | on average, 100 m ² . | | |

Table 9: Existing Surface Disturbance

¹ All numbers given are approximate.
² Assumes drill pads are, on average, 100 m².
³ Assumes all roads & trails are 2.5 m wide, and that all airstrips are 700 m x 40 m.
⁴ Assumes all trenches are 10 m wide.
⁵ Assumes all camps are 100 x 100 m.

Total existing surface disturbance at the Selwyn Project site is about 48.4 ha, of which 36.9 ha (75%) is in the YT and 11.5 ha (25%) is in the NT. The disturbance represents less than 1/5 of one percent of the 32,130 ha Selwyn Project area.

The NT Development planned for 2008-2013 will cause about 3.5 ha of additional surface disturbance (100 drill pads, each about 10 x 10 m, and 10 kms of trails 2.5 m wide).

The proposed Development in the NT will represent an increase of about 7% to the total surface disturbance, inclusive of both YT and NT sites (from 48.4 ha to 50.9 ha). For the NT only, surface disturbance will increase by about 22% (from 11.5 ha to 14 ha).

There are no activities underway in the NT associated with the Development at the time of this writing. A program for baseline environmental data collection has been in the planning stages since early 2007. Selwyn applied for a number of scientific research permits in the NT in early 2007 and again in 2008 for the baseline work (wildlife and fisheries). To date, Selwyn has been issued a Wildlife Research Permit from the NT Government. A fish collection permit is pending.

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Appendix I Standard Operating Procedures Appendix II MSDS for Drilling Additives Appendix III YT Waste Management Plans & Permits Appendix IV Native Seed Mixes Appendix V Consultation Appendix VI Traditional Ecological Study