

**Yukon Environmental & Socioeconomic Assessment Act  
Final Decision Document - 2006-0285**

This document meets the Yukon government's requirements as a Decision Body as set out in the *Yukon Environmental & Socioeconomic Assessment Act*

**Decision Document Issued By**

<b>YG Decision Body:</b>	<b>EMR – Oil and Gas Management Branch</b>
<b>Federal Decision Body(ies):</b>	
<b>First Nation Decision Body(ies):</b>	

**Project**

<b>Project Name :</b> <b>Flow Tests at Three Existing Well Sites</b>	<b>YESAA File Number 2006-0285</b>
<b>Proponent Name:</b>	<b>Northern Cross (Yukon) Limited</b>
<b>Project Scope:</b>	
<p>The assessor determined that there are two principal activities in the project proposal, each with associated accessory activities. This determination is based on the fact that these assessable activities are somewhat independent of one another (i.e. one does not require the other; one does not make it inevitable for the other to occur). They have both been included in this project scope and will be assessed as one project given their inclusion in the project proposal and inherent relatedness.</p> <p><b><u>Principal Activity #1</u></b></p> <p>The first principal activity proposed involves conducting extended formation flow tests to acquire appropriate data and evaluate the subsurface hydrocarbon potential at 3 existing well-sites (Canoe River Chance YT J-19; Western Minerals Chance YT M-08; and Socony Mobil Chance YT G-08). The project is located approximately 60km southwest of Eagle Plains Lodge and 247km from Dawson City. Proposed project duration is for a period of 2 years starting in November through to October. Note that acquisition of all referenced land leases are dependent upon the outcome of flow test operations and are intended for a 20 year period. Activities indicated are dependent on the provision of proposed access to the well-sites through construction and use of a winter road or an all-weather road. Activities include the following:</p> <p><b><i>Flow Test Operations</i></b></p> <ul style="list-style-type: none"> <li>• Acquisition of 3 land leases at each well-site (1 ha each).</li> <li>• Initial site preparation at well-sites (anticipated between November – April):             <ul style="list-style-type: none"> <li>○ Clearing of vegetation to 1 ha extent;</li> <li>○ Contouring and stabilization of ground surface as required.</li> </ul> </li> <li>• Initial well testing in first year (January – March) dependent upon establishment of winter road:</li> </ul>	

- Testing for approximately: 24hrs/day over the course of 3 weeks; 10,080 person hours.
- Produced crude oil volumes of approximately 500 barrels/day (80,000 liters/day). Produced water concentration anticipated to be approximately 20% of oil volume (16,000 liters); produced water potentially disposed of in well-site M-08, otherwise trucked out of Territory as per the oil.
- Potential continued testing in second year (December – April) dependent upon establishment of winter road; expected oil volume over the life of well testing of approximately 2.2 million liters.
- Potential continued testing year-round for duration of project (2 year period) dependent upon establishment of all-weather road.
- Establishment and operation of equipment to support testing is anticipated to include but is not limited to the following:
  - 3 – 750bbl oil storage tanks (112,500 liters each);
  - 4 – 400bbl heated steel storage tanks + secondary containment (63,600 liters each);
  - 2 – 200bbl storage tanks for completion fluids (31,800 liters each);
  - 3 – 400bbl heater treaters used to separate natural gas from produced liquids;
  - 3 – 12.2m flare stacks used for the disposal (by burning) of waste gas;
  - 3 – jet pumps;
  - 1 – service rig (for well-site M-08);
  - Portable power generators; heated shelter(s) with communication facilities.
- Impermeable spill contingency dykes surrounding all heater treaters and storage tanks.
- Transfer of oil and produced water from storage tanks to mobile tanker truck and mobilized off-site (approximately 2 trips/day or as required).

**Accessory Activities**

Activities associated with principal activity #1 include the following:

***Construction and Use of Winter Road***

- Construct winter road (approximately 21km) using previously disturbed winter trail right-of-way from junction with Dempster Highway via each well-site to McParlon Creek (anticipated between November – January).
- Initial site preparation and construction (flatten vegetation, compact snow and potential application of water to form ice cap) and maintenance (further compaction/additions, water application as needed).
- Use of winter road (anticipated between December – April).
- Access control (chain barrier or locked gate; barriers erected to deter circumvention of the gate; and signage) proposed at or near junction with Dempster Highway to prevent unauthorized public from entering; only authorized personnel will be able to open the gates.
- Reclamation generally will involve allowing the winter road to melt followed by an inspection and remediation as required.

***Camp***

- Acquisition of 1 land lease (8 ha) located in proximity to well-site J-19.
- Initial site preparation (anticipated between November – April):
  - Clearing of vegetation to 1 ha extent;
  - Contouring and stabilization of ground surface as required.

- Construction and operation of a temporary camp (approximate capacity for 20 people).
- Water use (approximately 35m<sup>3</sup>/day); obtained and hauled via water truck (capacity of 20,000 L) from the water withdrawal system located near the Eagle Plains Lodge and/or pumped from McParlon Creek.
- Wastewater treated in a self-contained onsite treatment facility housed in an additional trailer; treated water will be dispersed through a number of perforated hoses to ground; residual solid waste will be trucked to the nearest authorized disposal facility.
- Combustibles incinerated at site. Non-combustible waste collected and trucked to appropriate waste facility east of Eagle Plains Lodge.
- Use of electrical generators.
- Demobilization and reclamation generally includes:
  - Disassembly of infrastructure;
  - Salvageable material removed from site;
  - Re-contoured, covered with overburden (0.25m) and re-vegetated.

### ***Fuel Storage and Use***

- Transport, storage and use of approximately 1 fuel truck (diesel with capacity of 18,000 L); 3 tidy tanks (250 L each) located on pick-up trucks; and 4 propane tanks (500 L at each well-site; 500 L at camp).
- Demobilization and reclamation generally includes:
  - Removal (if present) of fuel contaminated soils.
  - Re-contoured and covered with overburden (1m).

### **Principal Activity #2**

The second principal activity is the construction and use of an all-weather road and associated activities to support potential continued extended formation flow testing all-year for the duration of principal activity #1. The proponent has indicated that all activities associated with principal activity #2 are dependent upon the success of principal activity #1. Activities to construct and use the all-weather road will occur within the same 2 year period identified for principal activity #1. For the purposes of this assessment, the length of time for the all-weather road to exist will correspond to the expected lifespan of land leases, which is proposed to be 20 years. Activities include the following:

### ***Quarry Development***

Use of potential quarry site area 2 including the following activities:

- Initial site assessment, preparation (March – May) and development (April – August).
- Potential upgrading of existing access road:
  - Shear/flatten vegetation;
  - Place geogrid;
  - Place aggregate (approximately 5m width)
- Harvest and salvage of merchantable timber; piling or burning of non-merchantable timber and grub within organics stockpile.
- Stripping, clearing and stockpiling topsoil and overburden (approximately 15,000m<sup>3</sup> of each).
- Extraction and crushing of aggregate (approximately 176,000m<sup>3</sup>).

- Use of grader(s), dozer(s), loader(s), belly dump truck(s), dump truck(s) and service vehicle(s).
- Approximately 13 personnel stationed out of Eagle Plains Lodge; trailer on-site.
- Reclamation generally including contouring; replacing topsoil from stockpiles; spreading organics; and seeding and planting native shrubs.

***Construction and Use of All-Weather Road***

- Acquisition of 1 land lease (1 ha) located at Dempster Highway Junction for use as a staging and storage area; initial site preparation (clearing vegetation, contouring & stabilization as required).
- Construction of single track road (approximately 21km) over an estimated 6 weeks (occurring between May – August); using previously disturbed winter trail right-of-way and likely overtop any previous route for winter road; from junction with Dempster Highway via each well-site to McParlon Creek including the following activities:
  - Shear/flatten vegetation;
  - Place geogrid;
  - End dump and compact aggregate (approximately 1.2m height x 5m width x 21km);
  - Grading, sloping.
  - Installation of turnouts/passing areas of same dimensions as road, no more than 4kms apart.
- Improvements and maintenance (anticipated between April – August):
  - Slope and drainage stabilization (e.g. culverts and ditches), erosion prevention and re-vegetation.
- Approximately 50-300 loads aggregate/day transported from quarry pit for construction of road.
- Approximate usage of 25 trips/day anticipated for periods of construction and improvement / maintenance periods; average of 5 trips/day on a daily basis.
- Access control (chain barrier or locked gate; barriers erected to deter circumvention of the gate; and signage) proposed at or near junction with Dempster Highway to prevent unauthorized public from entering; only authorized personnel will be able to open the gates.
- Reclamation upon decommissioning includes re-contouring, scarification and erosion barriers along steep slopes.

***Fuel Storage and Use***

Transport, storage and use of approximately 16,800L of fuel.

**Other Decision Bodies**

<p><b>Other Decision Body Consultation:</b></p>	
<p><b>Consolidated Decision Document:</b></p>	<p><input type="checkbox"/> N/A  <input checked="" type="checkbox"/> No  <input type="checkbox"/> Yes</p>

**Non-Self Governing First Nations**

<b>Non-self governing First Nation Consultation:</b>	
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**Decision**

Pursuant to YESAA s. 75, 76 and 80, the Yukon government has considered the assessment of this project and:	
<input type="checkbox"/>	a) Yukon government accepts the following recommendation (inserted below)
<input type="checkbox"/>	b) Yukon government rejects the following recommendation (inserted below) for the following reason(s):
<input checked="" type="checkbox"/>	<p>c) Yukon government varies the following recommendation (inserted below) as follows for the reason(s) specified:</p> <p><b><u>Government of Yukon accepts the following:</u></b></p> <p><b>Land Use Permit will include the following conditions:</b></p> <ol style="list-style-type: none"> <li>1. Proponent shall, to the extent possible, minimize disturbances to woody vegetation and steeply sloped areas.</li> <li>2. On slopes exceeding 8%, the proponent shall construct ditches or berms across rights-of-way at intervals of no less than 30 meters, prior to the completion of the project or spring breakup (March 31 for locations south of 64 degrees, April 15 for locations north of 64 degrees), whichever occurs first.</li> <li>3. Proponent shall comply with the following conditions for activities intended to occur from November to April in winter conditions: <ul style="list-style-type: none"> <li>– Vehicle travel shall not be conducted without the presence of snow cover.</li> <li>– A minimum operating base of 10cm of snow above the ground surface shall be maintained on all areas of the project.</li> <li>– In addition to adequate snow cover, the movement of personnel and equipment should not commence until there is sufficient ground frost penetration to support vehicles.</li> <li>– Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.</li> <li>– Vehicle movement shall be restricted in the event of thaw or soft ground conditions.</li> <li>– Winter activities shall end no later than April 15 or sooner as dictated by other mitigation measures and where local climate conditions result in deficient snow cover or frost penetration.</li> </ul> </li> <li>4. Proponent shall confine all operations to the boundaries of the land leases (3 well-sites, camp, highway junction), 15m wide previously disturbed summer trail right-of-way and quarry site area 2 with access road.</li> <li>5. All activities associated with quarry development (i.e. initial assessment, site preparation and development) shall be confined to the boundaries of quarry site area 2 as proposed.</li> <li>6. The proponent shall preferentially locate all camp infrastructure on gravel, sand, or other durable sites.</li> <li>7. Any camp located on permafrost will be constructed and maintained to minimize thermal transfer to the ground. The proponent shall insulate the ground surface beneath all temporary structures</li> </ol>

	<p>and temporary facilities used in relation to the project.</p> <p>8. Proponent shall ensure that the project area is kept clean and tidy at all times.</p> <p>9. Proponent shall remove all scrap metal, discarded machinery parts, drums, buildings, and building materials associated with the project.</p> <p>10. Proponent shall deposit all scrap metal, discarded machinery and parts, and drums at an approved metal salvage site.</p> <p>13. Proponent shall have a Spill Contingency Plan in place or ensure that the haul contractor has a Spill Contingency Plan in place to provide for response to and clean-up of any spills or fuel or other hazardous materials.</p> <p>14. The proponent shall at all times have on site sufficient oil spill clean-up equipment and material in readiness to clean-up all petroleum which may be spilled.</p> <p>15. Proponent shall carry out total disposal of debris and brush in all areas visible from the Dempster Highway.</p> <p>17. Proponent shall ensure that adequate reclamation and decommissioning is carried out within quarry site area 2.</p> <p>18. Proponent shall save the organic soil and overburden stripped from all excavation areas in a manner suitable for use during site reclamation.</p> <p>19. Proponent shall replace all excavated material from the test pits prior to site closure.</p> <p>20. Proponent shall ensure that the winter road and all-weather road are constructed, maintained and used in a manner that:</p> <ul style="list-style-type: none"> <li>– Supports proper surface drainage and structural integrity for both the road and surrounding lands.</li> <li>– Does not further degrade permafrost within the previously disturbed summer trail right-of-way;</li> </ul> <p>21. Proponent shall ensure that the winter road is reclaimed and decommissioned in a manner that:</p> <ul style="list-style-type: none"> <li>– Supports natural re-vegetation, natural drainage patterns, soil stability, natural contours and local aesthetics for both the road right-of-way and the previously disturbed summer trail right-of-way;</li> <li>– Does not further degrade permafrost within the previously disturbed summer trail right-of-way;</li> </ul> <p>With the exception of when the winter road right-of-way is intended to be used for placement, construction, use and existence of an all-weather road.</p> <p>22. Proponent shall ensure that the all-weather road is reclaimed and decommissioned in a manner that:</p> <ul style="list-style-type: none"> <li>– Supports natural re-vegetation, natural drainage patterns, soil stability, natural contours and local aesthetics for both the road right-of-way and the previously disturbed summer trail right-of-way;</li> <li>– Does not further degrade permafrost within the previously disturbed summer trail right-of-way.</li> </ul> <p>27. Proponent shall take appropriate precautions to ensure petroleum fuel or associated products do not escape from storage, distribution or dispensing facilities in such a manner as to:</p> <ul style="list-style-type: none"> <li>– contaminate any fresh water source or stream</li> <li>– create a hazard to public health or safety</li> <li>– interfere with the rights of any person</li> </ul> <p>28. Proponent shall not allow petroleum products to spread to surrounding lands or into water bodies.</p> <p>31. Proponent shall not disturb, harass, feed, hunt or trap wildlife.</p> <p>32. If caribou are encountered along the access route they should be given the right-of-way and should be left undisturbed with the exception of emergency travel.</p> <p>33. Proponent shall report to the District Conservation Officer in Dawson City at 867-993-5492 in the event that caribou are encountered within the project area. The District Conservation Officer</p>
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<p>shall have the authority to require that all project activities stop until further notice.</p> <p>34. Avoid disturbance to individual breeding waterfowl during nesting.</p> <p>38. Ensure horizontal cutting of stems to avoid sharp points.</p> <p>41. Provide a copy of all documentation produced by Environmental Monitors to Government of Yukon (Department of Environment and Energy Mines and Resources – Oil and Gas Management Branch).</p> <p>42. Windrowed slash should not be pushed into the adjacent timber. Breaks of 10m in length should be made in the windrows at intervals of 60m to allow movement of wildlife and reduce fire hazard. The height of windrows should not be more than approximately 1.0m.</p> <p>43. All wood debris and leaning trees should be slashed, limbed and bucked to lie flat on the ground to allow them to decompose and to minimize fire hazard.</p> <p>44. Ensure major game trails are not blocked.</p> <p>45. Restore any trails used, crossed or impeded by windrows by slashing any and all trees that may fall across these paths or trails in the course of operations, and by removing any other obstructions such as snow piles or debris that may be pushed across the trails.</p> <p>46. Proponent shall take every precaution to ensure that wildlife habitat is not damaged.</p> <p>47. Do not destroy or damage animal dens, lodges or burrows found during the project.</p> <p>51. Proponent shall make efforts to dogleg the route for the winter road and all-weather road.</p> <p>54. Proponent shall not allow petroleum products, garbage, or inadequately treated sewage to remain in the project area except in specific designated areas.</p> <p>55. Proponent shall keep all garbage, including kitchen waste, in a container that prevents access by bears and other wildlife until properly disposed of by hauling it to a licensed landfill facility or by burning daily to ash by forced air or fuel fired incineration.</p> <p>56. Proponent shall equip each camp with bear deterrent devices and maintain such devices in good working order throughout the duration of camp occupancy. The District Conservation Officer can be contacted for any necessary information regarding bear deterrent devices.</p> <p>57. Proponent shall install and operate an electric fence around the entire camp (within 8ha land lease) during spring, summer and fall.</p> <p>58. Proponent shall make every effort to avoid disturbing, covering, or destroying set traps or snares and trapping equipment within project area.</p> <p>59. Clearly mark with stakes or flags the location of any disturbed, covered or destroyed trap, snare or trapping equipment.</p> <p>60. Proponent shall restore any trails, including those used by trappers or hunters, along access routes by slashing any and all trees that may fall across these paths or trails and by removing any other obstructions such as snow piles or debris that may be pushed across the trails.</p> <p>61. Proponent shall contact each individual trapper and/or land user known to be trapping or harvesting in the vicinity of the project area 10 days prior to initiating the program by mail or through personal communication.</p> <p>62. The proponent shall screen all water intakes from fish bearing waters to prevent the entrainment and/or entrapment of fish in accordance with the Department of Fisheries and Oceans (Pacific Region) Freshwater Intake End-of-Pipe Guidelines.</p> <p>64. McParlon Creek shall be monitored visually during water withdrawals to ensure that adequate flow remains.</p> <p>65. The proponent shall not in any circumstances deposit or allow the deposit of any deleterious substances (including but not limited to fuels, lubricants, hydraulics, and coolants) of any type into any waters, or in any place under any conditions where the deleterious substances may enter any waters.</p> <p>66. Proponent shall conduct an archaeological impact assessment for all land leases, quarry site area 2 and associated access roads prior to the commencement of project activities in these areas that occur after April 15.</p> <p>67. Proponent shall provide results of the archaeological impact assessment to Yukon Government (Tourism and Culture – Yukon Archaeology), the Vuntut Gwichin and the Tetlit Gwich'in.</p> <p>70. Any archaeological resources uncovered during operation shall be reported to the Yukon Archaeology Program, Government of Yukon.</p>
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<p>71. Proponent shall set aside and protect fossils that are unearthed.</p> <p>72. Proponent shall report these findings to Yukon Palaeontology at the end of each season.</p> <p>73. If mummified fossil remains, with intact flesh, are discovered, the proponent shall immediately contact Yukon Palaeontology.</p> <p>74. Proponent shall institute traffic control measures to ensure the safety of the public and security of the worksite. Traffic control measures shall meet or exceed current Transport Association of Canada Standards.</p> <p>80. In the event that the winter road or all-weather road requires temporary closure and/or seasonal shutdown the proponent shall:</p> <ul style="list-style-type: none"> <li>– Ensure that access continues to be restricted as prescribed.</li> </ul> <p>81. In the event that the winter road is to be decommissioned the proponent shall ensure that this is done in a manner that prevents access and use of the road right-of-way by unauthorized persons.</p> <p>82. In the event that the all-weather road is to be decommissioned, the proponent shall ensure that it is decommissioned and reclaimed in a manner that prevents access and use of the road right-of-way.</p> <p>83. Proponent shall submit all plans related to temporary closure and decommissioning and reclamation of the winter road and all-weather road to Yukon Government, and specifically: Oil and Gas Management Branch, Highways and Public Works, Lands Branch and Environment).</p> <p><b>Oil &amp; Gas Approval will include the following conditions:</b></p> <p>23. Proponent shall not release or allow the release of any air contaminant to such extent or degree as may:</p> <ul style="list-style-type: none"> <li>– cause or be likely to cause irreparable damage to the natural environment; or</li> <li>– in the opinion of a health officer, cause actual or imminent harm to public health or safety.</li> </ul> <p>24. Proponent shall obtain and comply with an Air Emissions Permit to authorize any flaring of gas.</p> <p>50. Proponent shall prohibit hunting by employees and contractors.</p> <p>53. All incidents with wildlife shall be reported to the District Conservation Officer in Dawson City at 867-993-5492.</p> <p>75. Access to the winter road and all-weather access road shall be restricted to those who are specifically authorized.</p> <p>76. Proponent shall erect an appropriate locked gate at the intersection of the winter road and all-weather road with the Dempster Highway, and only authorized employees will be able to open the gates</p> <p>77. Proponent shall erect appropriate barriers to deter circumventing of the gate.</p> <p>78. Use of the winter road and all-weather road will be strictly controlled using a check-in/check-out system during well-site operations.</p> <p>79. Proponent shall conduct periodic monitoring and maintenance of access control structures (ie. locked gate and associated barriers) to ensure integrity of these structures for the duration of the winter road and the all-weather road.</p> <p><b>Yukon Government modifies the following:</b></p> <p>68. Operations must not be carried out within 30m of a known archaeological, palaeontological or burial site unless the Chief indicates, in writing, that such activities may be carried out.</p> <p>69. Any sites containing archeological objects or human remains or burial sites discovered in the course of carrying out mining operations must be immediately marked and protected from further disturbance and, as soon as practical, the discovery reported to the Chief, Mining Land Use, Mineral Resources Branch. No further activities may be carried out within 30m of the site until the Chief indicates, in writing, that the activities may be resumed.</p> <p><b>Justification:</b> Correspondence will be with the Engineer of Land Use, not the Chief of Mining Land Use.</p>
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	<p><b>Replaced with:</b> 68. Operations must not be carried out within 30m of a known archaeological, palaeontological or burial site unless the Engineer indicates, in writing, that such activities may be carried out. 69. Any sites containing archeological objects or human remains or burial sites discovered in the course of carrying out mining operations must be immediately marked and protected from further disturbance and, as soon as practical, the discovery reported to the Engineer, Land Use, Lands Branch. No further activities may be carried out within 30m of the site until the Engineer indicates, in writing, that the activities may be resumed.</p> <p><b>Yukon Government modifies the following:</b> 4. Proponent shall confine all operations to the boundaries of the land leases (3 well-sites, camp, highway junction), 15m wide previously disturbed summer trail right-of-way and quarry site area 2 with access road.</p> <p><b>Justification:</b> The recommendation pre-supposes the granting of land leases. There can be no certainty regarding granting of land leases until applications are received by the government of Yukon, reviewed and regulatory decisions made regarding the individual applications. The material presented to date to the assessor describes a project to conduct extended flow tests at three existing well sites and construct a winter and an all weather road to those sites. None of the activities assessed are permanent. The Evaluation Report in “Context for Assessment” (p.9) notes that most activities have been proposed over a two year period. Save for monitoring, maintenance, decommissioning and reclamation of the road, all assessed activities occur with the initial two year period.</p> <p><b>Replaced with:</b> 4. Proponent shall confine all operations to the boundaries of the proposed land leases (3 well-sites, camp, highway junction), 15m wide previously disturbed summer trail right-of-way and quarry site area 2 with access road.</p> <p>37. Low shrub and ground vegetation should be kept intact. Vegetation should be cut at a minimum height of 10 cm to improve natural regeneration. <b>Justification:</b> The condition is only relevant to winter season construction; permanent roads and leases necessitate vegetation removal.</p> <p><b>Replaced with:</b> 37. For winter construction, low shrub and ground vegetation should be kept intact. Vegetation should be cut, if necessary, at a minimum height of 10 cm to improve natural regeneration.</p> <p>40. Employ sufficient numbers of Environmental Monitors with knowledge of the region to observe wildlife and wildlife habitat in the project area and surroundings. Tasks include but are not limited to the following: a) Conduct reconnaissance of project prior to startup to identify: i. Sensitive habitats; ii. General wildlife presence in the area; iii. Relative densities and distribution of wildlife in the area with specific emphasis on: – barren ground caribou (Porcupine Caribou); – grizzly bears; – moose; and</p>
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	<ul style="list-style-type: none"> <li>– small mammals/birds (wolf, marten, wolverine, lynx, red fox, beaver, otter; Northern Hawk Owl, Great-grey Owl, gray gays, grouse, woodpeckers, Canada Geese, and waterfowl);</li> <li>iv. Where observed, locations of nests, dens, lodges and burrows;</li> <li>v. Any issues within project area that in combination with project activities may pose undue risk to wildlife during and after the project.</li> </ul> <p>b) Continue field observations by air and on ground throughout project duration to maintain current information on noted subjects.</p> <p>c) Promote and monitor compliance of mitigative measures associated with wildlife and wildlife habitat.</p> <p>d) Document and report wildlife incidents on a frequent basis.</p> <p>e) Document adaptive management techniques developed and employed to mitigate unforeseen effects to wildlife and wildlife habitat that may occur during the project.</p> <p>f) Ensure compliance with all terms and conditions of the decision document and consequent authorizations.</p> <p><b>Justification:</b> The condition is overly prescriptive and requires ground and air observation of the area, beyond the scope contemplated in the project proposal. In addition, ensuring compliance with all terms and conditions and consequent authorizations is beyond the scope of the wildlife monitor and is rather the responsibility of the respective regulators.</p> <p><b>Replaced with:</b></p> <p>40. Employ sufficient numbers of Environmental Monitors with knowledge of the region to observe wildlife and wildlife habitat in the project area and surroundings. Tasks include but are not limited to the following:</p> <ul style="list-style-type: none"> <li>b) Conduct reconnaissance of project prior to startup to identify: <ul style="list-style-type: none"> <li>vi. Sensitive habitats;</li> <li>vii. General wildlife presence in the area;</li> <li>viii. Relative densities and distribution of wildlife in the area with specific emphasis on: <ul style="list-style-type: none"> <li>– barren ground caribou (Porcupine Caribou);</li> <li>– grizzly bears;</li> <li>– moose; and</li> <li>– small mammals/birds.</li> </ul> </li> <li>ix. Where observed, locations of nests, dens, lodges and burrows;</li> <li>x. Any issues within project area that in combination with project activities may pose undue risk to wildlife during and after the project.</li> </ul> </li> <li>b) Continue field observations throughout project duration to maintain current information on noted subjects.</li> <li>c) Monitor compliance with mitigative measures associated with wildlife and wildlife habitat.</li> <li>d) Document and report wildlife incidents on a regular basis.</li> <li>e) Document adaptive management techniques developed and employed to mitigate unforeseen effects to wildlife and wildlife habitat that may occur during the project.</li> </ul> <p><b>Yukon Government modifies the following:</b> 12. Proponent shall comply with the <u>Drilling and Production Regulations</u> as per the <i>Yukon Oil and Gas Act</i>. 29. Proponent shall comply with the <u>Fuel Spill Regulations</u> of the <i>Environment Act</i>. 84. Proponent shall comply with the <u>Drilling and Production Regulations</u> as per the <i>Yukon Oil and</i></p>
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<p><i>Gas Act.</i></p> <p>85. Proponent shall comply with the Yukon <u>Occupational Health and Safety Regulations</u> with specific consideration of Part 17 – Oil and Gas Industry.</p> <p>86. Proponent shall comply with the <i>Occupational Health and Safety Act</i> and its <u>Occupational Health and Safety Regulations - Minimum First Aid Regulations</u></p> <p>89. Proponent shall comply with the <u>Camp Sanitation Regulations</u>.</p> <p>90. Proponent shall comply with the Yukon Sewage <u>Disposal Systems Regulations</u>.</p> <p><b>Justification:</b> Combine into one condition.</p> <p><b>Replaced with:</b></p> <p>12. The Proponent shall at all times conform to all applicable Federal, Territorial or local regulations, ordinances or by-laws including but not limited to:</p> <ul style="list-style-type: none"> <li>- <u>Drilling and Production Regulations</u> as per the <i>Yukon Oil and Gas Act</i>.</li> <li>- <u>Fuel Spill Regulations</u> of the <i>Environment Act</i>.</li> <li>- <u>Occupational Health and Safety Regulations</u> with specific consideration of Part 17 – Oil and Gas Industry.</li> <li>- <i>Occupational Health and Safety Act</i> and its <u>Occupational Health and Safety Regulations - Minimum First Aid Regulations</u></li> <li>- <u>Camp Sanitation Regulations</u></li> <li>- <u>Yukon Sewage Disposal Systems Regulations</u>, in particular:  <div style="margin-left: 20px;">Proponent shall pipe sewage effluent from the wastewater treatment plant to a suitably-sized sewage pit located at least 50 m from camp. Proponent shall fence the area around the pit to restrict access by people and animals. Proponent shall not disperse sewage effluent to ground surface. At the completion of the project, the proponent shall remove the fence, backfill the pit and restore the area.</div> </li> </ul> <p><b>Yukon Government removes the following:</b></p> <p>11. Proponent shall design, construct and maintain infrastructure to withstand extreme snow fall/rapid melting event and monitor climate conditions on site and the effects of such conditions on infrastructure. [as per proposal]</p> <p>16. Proponent shall minimize the ponding of water adjacent the all-weather road. [as per proposal]</p> <p>26. Dust reduction technologies will be employed; road watering if required; use of buffer zones to allow for settling out of airborne dust. [as per proposal]</p> <p>39. Proponent shall use buffer zones to absorb noise and current noise muffling technologies will be employed on all equipment [as per proposal]</p> <p>63. Water withdrawals will be conducted at a moderate pace when necessary to prevent excessive suction at the intake nozzle. [as per proposal]</p> <p>87. All flow test operations will be conducted in accordance with the Northern Cross (Yukon) Limited Safety and Emergencies Procedures Manual. [as per proposal]</p> <p>88. No open burning will be allowed on the project area aside from slash during the clearing process under permit only. [as per proposal]</p> <p><b>Justification:</b> Project proposal submitted by the Proponent forms part of the terms and conditions of the authorizations issued by Yukon Government.</p> <p><b>Replaced with:</b></p> <p>11. The Proponent shall adhere to all mitigation outlined in their project proposal.</p> <p><b>Yukon Government removes the following:</b></p> <p>35. Promote wildlife awareness, avoidance and appropriate speed limits for all employees working</p>
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	<p>within the project area.</p> <p>36. Proponent shall ensure a speed limit of 50 km/hr on the winter road or all-weather road.</p> <p>48. Maintain a minimum line of sight of 300 m on the winter road and all-weather road so that wildlife collisions can be avoided</p> <p>49. Relay sightings of wildlife by radio to all vehicles to reduce collision occurrences</p> <p>91. Ensure that all employees have, or are provided with suitable equipment, gear, and clothing, appropriate to the weather conditions in which they will be working.</p> <p>92. Ensure that vehicles are stocked with sufficient winter survival gear for the workers aboard, should the vehicles break down in inclement conditions.</p> <p>93. Snow clearing equipment shall be available on site.</p> <p><b>Justification:</b> Yukon Government cannot enforce these conditions.</p> <p><b>Yukon Government removes the following:</b></p> <p>25. Proponent shall use reasonable and appropriate flare stack technology designed to improve and maintain efficiency for more complete combustion.</p> <p>30. Produced water may not be disposed of to the surface environment or into a water body or water course. Proponent shall account for the volumes of all produced water and how it was disposed of.</p> <p>94. Radio telephone or satellite phones will be available on site.</p> <p>95. Trained first aid staff will be on site at all times during operations.</p> <p><b>Justification:</b> Condition 25 is already addressed by Section 128, Condition 30 by Sections 145 and 165, and Conditions 94 and 95 are addressed by Section 156 of the <u>Drilling and Production Regulations</u></p> <p><b>Yukon Government removes the following:</b></p> <p>52. Sound levels generated as a result of flow test operations will be maintained below 66 dB and measured occasionally over a 24 hour period at the land lease boundary.</p> <p><b>Justification:</b> The issue of generated noise is raised in Section 2.2.1, <i>Effects of Flow Test Operation</i>. The rationale for this condition appears to be, although it is not accurately referenced, the comparison with an investigation of high-pressure gas flaring at a petrochemical facility. As previously discussed with the assessor, the comparison is meaningless; the production of oil and gas in this project will not generate significant noise levels.</p>

**Dates**

<b>Project Recommendation Issued:</b>	<b>Decision Document Issued:</b>

**Recommendation Received From**

Designated Office	<input checked="" type="checkbox"/>	Location: Dawson City
Executive Committee	<input type="checkbox"/>	
Panel	<input type="checkbox"/>	a) Panel of the YESAB
	<input type="checkbox"/>	b) CEAA Panel
	<input type="checkbox"/>	c) Joint Panel (YESAB and other assessment body)

**Authorization**

By signing below, the Yukon government has exercised its authority as per YESAA s. 75 or s. 76 to issue a decision document on this project.

Name: \_\_\_\_\_ Position: Director, Oil & Gas

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

*Original signed by*

**Copies Forwarded to (as required by YESAA):**

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|--------------------------|--------------------------------------|-------------------|---------------------------------------|
| <input type="checkbox"/> | Other Decision Bodies                | [list]            | _____                                 |
| <input type="checkbox"/> | Project Proponent                    | [name]            | <u>Northern Cross (Yukon) Limited</u> |
| <input type="checkbox"/> | DAP Branch, Executive Council Office |                   | _____                                 |
| <input type="checkbox"/> | YESAB Designated Office              | [location]        | <u>Dawson City</u>                    |
| <input type="checkbox"/> | YESAB Executive Committee            | [when applicable] | _____                                 |
| <input type="checkbox"/> | Minister Environment (Canada)        | [when applicable] | _____                                 |
| <input type="checkbox"/> | Yukon Surface Rights Board           | [when applicable] | _____                                 |
|                          | Yukon Water Board                    | [when applicable] | _____                                 |
| <input type="checkbox"/> | Land Use Planning Commission:        | [when applicable] | _____                                 |
| <input type="checkbox"/> | Independent Regulatory Agency        | [when applicable] | _____                                 |
| <input type="checkbox"/> | Other Body/Person as Required        | [List]            | _____                                 |