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File-	1788

Schedule III  
(Subsection 6(1))

APPLICATION FOR LICENCE, AMENDMENT OF LICENCE, OR RENEWAL OF LICENCE

APPLICATION/LICENCE NO: 17881  
(amendment or renewal only)

1. Name and Mailing Address of Applicant Petro-Canada 150 - 6 <sup>th</sup> Avenue S.W. Calgary, Alberta T2P 3E3 John Kerkhoven, Supervisor Surface Land  Telephone: 403.296.6345 Fax: 403.296.3032	2. Address of Head office in Canada if incorporated   Telephone: Fax:
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3. Location of Undertaking (describe and attach a map, indicating watercourses and location of any proposed waste deposits)

Petro-Canada is proposing to drill one or two new exploratory wells, selected from three potential locations within the Nuna area, during the winter of 2002/2003. The potential wellsite locations are within EL 406, and depending on the final sites selected, the wells may be drilled on Crown and/or Inuvialuit 7(1)(b) land. The wellsite locations will be finalized in October when interpretation of last year's Nuna 3D seismic data is complete.

Preliminary Wellsite Locations  
Location

- Nuna 1  
Lat/Long: 69°09.57'N - 133°20.91'W
- Nuna 2  
Lat/Long: 69°05.28'N - 133°20.42' W
- Nuna 3  
Lat/Long: 69°07.33' N - 133°17.71' W



Please refer to the map in the map pocket of the attached project description.

Latitude 69° 05' to 69° 09'N Longitude 133° 17' to 134° 20'W

4. Description of Undertaking (describe and attach plans)

Petro-Canada is applying to conduct a winter 2003 drilling program in the Mackenzie Delta Region of the Northwest Territories. The proposed project is in the Inuvialuit Settlement Region (ISR) and involves three (3) proposed drill locations, one or two of which will be drilled. A north location will be drilled first, and pending seismic interpretation, one of two south locations may be drilled. The proposed drill locations are situated on tundra uplands over 20 km to the northwest of the Husky Lakes estuary with each drill pad and associated facilities expected to occupy approximately 3.6 ha. Akita-Equtak will be the drilling contractor and Akita-Equtak Rig #60 and/or Rig #63 will be used for drilling operations on the program. The program will begin with ice access and lease construction in October and the wells will be drilled between January to April.

5. Type of Undertaking

- |                       |               |                |               |                 |               |
|-----------------------|---------------|----------------|---------------|-----------------|---------------|
| 1. Industrial         | <u>  x  </u>  | 4. Power       | <u>      </u> | 6. Conservation | <u>      </u> |
| 2. Mining and milling | <u>      </u> | 5. Agriculture | <u>      </u> | 7. Recreation   | <u>      </u> |
| 3. Municipal          | <u>      </u> |                |               |                 |               |

8. Miscellaneous (describe) \_\_\_\_\_

## 6. Water Use

To obtain water	x	Flood Control	_____
To cross a watercourse	_____	To divert water	_____
To modify the bed or bank of a watercourse	_____	To alter the flow of, or store, water	_____
Other (describe) _____			

SCHEDULE III – *Concluded*APPLICATION FOR LICENCE, AMENDMENT OF LICENCE, OR RENEWAL OF LICENCE - *Concluded*

## 7. Quantity of Water Involved (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

Water will be withdrawn from various lakes and the Mackenzie River with a maximum withdrawal of 1000 m<sup>3</sup>/day from different sources (Mackenzie River and lakes) during access and wellsite construction, and likely from either lake #42 and/or #34 for drilling (please refer to the map in the map pocket of the attached project description for an identification of lakes). Petro-Canada has completed volumetric calculations for each of the lakes identified for potential withdrawal and numbered each for reference (please refer to Table 5, Section 4.2.5 of the attached project description for volumetric information).

Lake volume sampling was completed by sectioning the lake based on area (one sample for every 10 to 20 ha, based on lake size), and then sampling by section. Smaller lakes were sampled at a frequency of 1 sample per 10 ha, with a minimum of 3 samples per lake. The sampling frequency on larger lakes was reduced to 1 sample per 20 ha.

Petro-Canada has engaged in early discussions with DFO regarding source lake volumes. Water intake hoses will be fitted with screens of such size to prevent impingement or entrainment of fish.

## 8. Waste Deposited (quantity, quality, treatment and disposal)

Drilling wastes will be disposed in a sump. For a complete description of sump location, construction, testing and monitoring please refer to Section 4.2.6 of the attached project description.

Wastewater from the rig camp will be treated using a treatment system to achieve water licence criteria for land. As a contingency, a camp sump will be dug to contain the waste and backfilled at the completion of operations. If wastewater is not meeting criteria, chlorination will be used for treatment and subsequent dechlorination of the treated wastewater will be conducted before disposing to land.

## 9. Other Persons or Properties Affected By This Undertaking (give name, mailing address and location; attach list if necessary)

N/A

## 10. Predicted Environmental Impacts of Undertaking and Proposed Mitigation

Please refer to *Section 12.0 Proposed Mitigation and Anticipated Environmental Impacts* of the attached project description.

## 11. Contractor and Sub-Contractors (names, addresses and functions)

Drilling Contractor:

Akita Equatak

Inuvik, NT

Environmental Consultant:

Inuvialuit Environmental & Geotechnical Inc.

Inuvik, NT

Other subcontractors are yet to be determined.

## 12. Studies Undertaken to Date (attach list if necessary)

Previous environmental assessments prepared by IEG (formerly Inuvialuit Environmental Inc.) for projects within the vicinity of the proposed program include the Petro-Canada Nuna 2001/2002 3D Seismic Program and the Conoco Parsons Lake Winter 2001/2002 3D Seismic Program. Sixth Lake (identified as Lake #34 on the map in the map pocket of the attached project description) was assessed in the fall of 2001 (Aquatics Environmental Services. Draft. 2002. Aquatic Lakes Assessment of Langley Lake, Riverbend Lake, and Sixth Lake. Prepared for Petro-Canada.) In the Mackenzie Delta region, Petro Canada has contributed to caribou and grizzly bear collaring studies conducted by Resources, Wildlife and Economic Development, as well as the following projects:

IEG. 2002. Vegetation Classification and Wildlife Habitat Suitability Modeling in the Mackenzie Delta Region. Prepared for the Operators and the Wildlife Management Advisory Council in the Mackenzie Delta Region, NWT. 66 pp. + appendices.

IEG. 2002. Heritage Resource Survey – Mackenzie Delta: Summary Report. Prepared for the Operators in the Mackenzie Delta Region.

Petro Canada is also currently participating in the Environmental Studies Research Fund Technical Advisory Group, examining current best practices for sump construction.

## 13. Proposed Time Schedule

**Project Activity**  
**Estimated Time Frame**

Planning  
Ongoing

Ice Access and Lease Construction  
October – December 2002

Mobilization to First Drilling Location  
December 2002

Camp Set-up  
December 2002

Well Drilling  
January – February 2003

Move to Second Drilling Location (pending results of first drill)  
February 2003

Well Drilling  
February – April 2003

Final Cleanup  
Dependant upon whether one or two wells are drilled, and ice conditions.  
Well #1 – March 2003  
Well #2 – April 2003

Time lines given in the above table are approximate and subject to change depending upon variables such as weather or ice thickness.

Start date October 2002

Completion date September 2007

ROLAND HERZOG  
NAME

Surface Land  
Representative  
TITLE

[Signature]  
SIGNATURE

August 6, 02  
DATE

FOR OFFICE USE ONLY

APPLICATION FEE                      Amount: \$ 30.00                      Receipt No.: \_\_\_\_\_

WATER USE DEPOSIT                      Amount: \$ \_\_\_\_\_                      Receipt No.: \_\_\_\_\_