

PART A: SCOPE AND DEFINITIONS**1. Scope**

- a) This Licence entitles the Inuvialuit Petroleum Corporation to use water and dispose of waste for industrial undertakings in oil and gas exploration and associated uses in the Inuvik area at the Ikhil Gas Development Site located at 68°45' Latitude North and 134°10' Longitude West, Northwest Territories.

- b) This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the *Northwest Territories Waters Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations; and

- c) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

In this Licence: **N3L1-1710**

“Act” means the *Northwest Territories Waters Act*;

“Regulations” mean Regulations proclaimed pursuant to Section 33 of the *Northwest Territories Waters Act*;

“Board” means the Northwest Territories Water Board established under Section 10 of the *Northwest Territories Waters Act*;

6. Specific clauses of your Licence make reference to the Board, Analyst or Inspector. The contact person, address, phone and fax number of each is:

BOARD: Executive Assistant
Northwest Territories Water Board
Box 1500
YELLOWKNIFE, NT X1A 2R3

Phone No: (867) 669-2772
Fax No: (867) 669-2719

ANALYST: Analyst
Water Laboratory
Northern Affairs Program
Department of Indian Affairs
and Northern Development
Box 1500
4601 - 52nd Avenue
YELLOWKNIFE, NT X1A 2R3

Phone No: (867) 669-2780
Fax No: (867) 669-2718

INSPECTOR: Inspector
Inuvik District Office
Northern Affairs Program
Department of Indian Affairs
and Northern Development
P.O. Box 2100
INUVIK, NT X0E 0T0

Phone No: (867) 777-3361
Fax No: (867) 777-2090

NORTHWEST TERRITORIES WATER BOARD

Pursuant to the *Northwest Territories Waters Act* and Regulations the Northwest Territories Water Board, hereinafter referred to as the Board, hereby grants to

Inuvialuit Petroleum Corporation
(Licensee)
1100, 300 - 5th Avenue S.W.
of CALGARY, ALBERTA T2O 3C4
(Mailing Address)

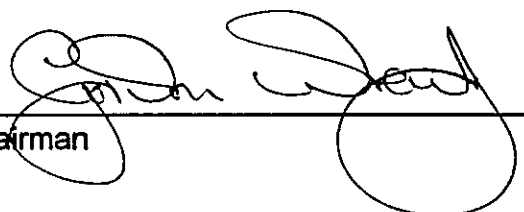
hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Northwest Territories Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence Number	<u>N3L1-1710</u>
Licence Type	<u>"B"</u>
Water Management Area	<u>NORTHWEST TERRITORIES 03</u>
Location	<u>Ikhil Gas Development Site Latitude 68°45' N Longitude 134°10' W INUVIK AREA, N.W.T.</u>
Purpose	<u>TO USE WATER AND DISPOSE OF WASTE AND ASSOCIATED USES</u>
Description	<u>OIL AND GAS EXPLORATION</u>
Quantity of Water Not to be Exceeded	<u>30 CUBIC METRES DAILY</u>
Effective Date of Licence	<u>JANUARY 9, 1998</u>
Expiry Date of Licence	<u>JULY 31, 1998</u>

This Licence issued and recorded at Yellowknife includes and is subject to the annexed conditions.


Witness

NORTHWEST TERRITORIES WATER BOARD


Chairman

**GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES
ISSUED UNDER THE NORTHWEST TERRITORIES WATERS ACT
IN THE NORTHWEST TERRITORIES**

1. At the time of issuance, a copy of the Licence is placed on the Water Register in the Office of the Northwest Territories Water Board in Yellowknife, and is then available to the public.
2. To enforce the terms and conditions of the Licence, the Minister of Indian Affairs and Northern Development has appointed Inspectors in accordance with Section 35(1) of the Northwest Territories Waters Act. The Inspectors coordinate their activities with officials of the Water Resources Division of the Department of Indian Affairs and Northern Development. The Inspector responsible for Licence No. N3L1-1710 is located in the North Mackenzie District Office.
3. To keep the Water Board and members of the public informed of the Licensee's conformity to Licence conditions, the Inspectors prepare reports which detail observations on how each item in the Licence has been met. These reports are forwarded to the Licensee with a covering letter indicating what action, if any, should be taken. The inspection reports and covering letters are placed on the public Water Register, as are any responses received from the Licensee pertaining to the inspection reports. It is therefore of prime importance that you react in all areas of concern regarding all inspection reports so that these concerns may be clarified.
4. If the renewal of Licence No. N3L1-1710 is contemplated it is the responsibility of the Licensee to apply to the Water Board for renewal of the Licence. The past performance of the Licensee, new documentation and information, and points raised during a public hearing, if required, will be used to determine the terms and conditions of any Licence renewal. Please note that if the Licence expires and another has not been issued, then water and waste disposal must cease, or you, the Licensee, would be in contravention of the Northwest Territories Waters Act. It is suggested that an application for renewal of Licence No. N3L1-1710 be made at least eight months in advance of the Licence expiry date.
5. If, for some reason, Licence No. N3L1-1710 requires amendment, then a public hearing may be required. You are reminded that applications for amendments should be submitted as soon as possible to provide the Water Board with ample time to go through the amendment process. The process may take up to six (6) months or more depending on the scope of the amendment requested.

The Surveillance Network Program annexed to the Licence can be modified at the discretion of the Board and does not require a public hearing. A request for any proposed change to the Surveillance Network Program should be forwarded to the Board in writing, including a rationale for the change.

“Inspector” means an Inspector designated by the Minister under Section 35(1) of the *Northwest Territories Waters Act*;

“Licensee” means the holder of this Licence;

“Minister” means the Minister of Indian Affairs and Northern Development;

“Waste” means waste as defined by Section 2 of the *Northwest Territories Waters Act*;

“Artesian Aquifer” means a water-bearing rock stratum, which when encountered during drilling operations, produces a pressurized flow of groundwater that reaches an elevation above the water table or above the ground surface;

“Drilling Fluids” mean any liquid mixture of clay, water or chemical additives pumped downhole;

“Modification” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“Permeability” means the capacity to transmit water through a medium; and

“Sump” means an excavation or depression in impermeable soil for the purpose of catching or storing fluids.

PART B: GENERAL CONDITIONS

1. The water use fee shall be paid annually in advance.
2. The Licensee shall file a Final Report with the Board not later than October 31, 1998 which shall contain the following information:
 - a) the total quantity of water used in cubic metres during the drilling operations;
 - b) an itemized list indicating the names, uses and quantities of all substances which were used during the drilling operation and were discharged into the drilling sump;

- c) details of sampling and analysis of any decant, and the date, time, location and amount of waste or water discharged during the decant;
 - d) details of work completed;
 - e) details on the restoration of any sumps;
 - f) a list of unauthorized discharges; and
 - g) any other details of water use or waste disposal requested by the Board by June 30, 1998.
3. Meters, devices or other such methods used for measuring the volumes of water used and waste discharged shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
4. A copy of this Water Licence shall be located on site at all times in a readily available location.

PART C: CONDITIONS APPLYING TO WATER USE

- 1. The Licensee shall obtain all fresh water for camp use and well drilling from Peter Lake, East Channel of the Mackenzie River, and the unnamed lake near the site, or as approved by an Inspector.
- 2. The water intake hose used on the water pumps shall be equipped with a screen with a mesh size sufficient to ensure no entrainment of fish.
- 3. The daily quantity of water used for all purposes shall not exceed 30 cubic metres.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. All wastes to be disposed of from the drilling operation shall be completely contained in a drilling sump adjacent the drill site, or at an alternate sump location, as approved by an Inspector.
2. Sumps shall be constructed of material that normally exhibit low permeability in a manner that prevents intrusion of runoff water.
3. In the event the initial Sump does not consist of low permeability materials, the Licensee shall construct an offsite Sump to the satisfaction of an Inspector.
4. There shall be no disposal of Drilling Fluids from the Sump into any waters or onto any land surface where drilling fluids may enter any waters.
5. The Licensee shall construct and maintain the Sumps to the satisfaction of an Inspector.
6. If during the drilling, an Artesian Aquifer is encountered producing water flowing at the surface, the Licensee shall notify an Inspector immediately. A sample of not less than ten (10) litres shall be collected from the flowing source at the point of discharge from the well. Five (5) litres shall be made available to an Inspector for analysis, and the Licensee shall have the remaining five (5) litres analysed.
7. The disposal of fluids generated by an Artesian Aquifer to other than a Sump requires the approval of the Inspector.
8. The sealing of an Artesian Aquifer should be to the satisfaction of an Inspector.
9. In the event where decanting Waste or water from the Sump is planned or required by an unanticipated event, the Licensee shall:
 - a) advise an Inspector;

- b) obtain a representative sample from the Sump using the information requirements outlined in the "Sampling and Analytical Requirements for Characterization of Sump Supernatant Fluids" (Appendix A).
 - c) submit the results of the sampling and analyses to the Inspector at least ten (10) days prior to the requested date of commencing decant, or in the case of an unanticipated event, as soon as possible; and
 - d) indicate in writing to the Inspector;
 - i) the method of decant;
 - ii) the direction of flow,
 - iii) the location of where the decanted effluent is expected to go, and
 - iv) any treatment that will be applied to the Sump.
10. The Licensee may commence decanting upon receipt of the Inspector's approval.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Inspector, carry out Modifications to the planned undertakings provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
- a) the Licensee has notified the Inspector in writing of such proposed Modifications at least five (5) days prior to beginning the Modifications;
 - b) such Modifications do not place the Licensee in contravention of either this Licence or the Act;
 - c) the Inspector has not, during the five (5) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than five (5) days; and
 - d) the Inspector has not rejected the proposed Modifications.

2. **Modifications for which all of the conditions referred to in Part E, Item 1 have not been met may be carried out only with written approval from the Inspector.**
3. **The Licensee shall provide to the Board as-built plans and drawings on the modifications referred to in this Licence within ninety (90) days of completion of the modifications.**

PART F: CONDITIONS APPLYING TO CONTINGENCY PLANNING

1. **The Licensee shall, by February 16, 1998, submit to the Board for approval, a Contingency Plan in accordance with the Board's "Guidelines for Contingency Planning, January 1987".**
2. **The Licensee will maintain a copy of the approved Contingency Plan onsite in a readily available location, to the satisfaction of the Inspector.**
3. **The Licensee shall ensure that petroleum products, hazardous material and other wastes associated with the project do not enter any waters.**
4. **The Licensee shall ensure that all containment berms are constructed, of an impermeable material, to the satisfaction of an Inspector.**
5. **If, during the period of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:**
 - a) **report the incident immediately via the 24 Hour Spill Report Line (867) 920-8130; and**
 - b) **submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.**

PART G: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

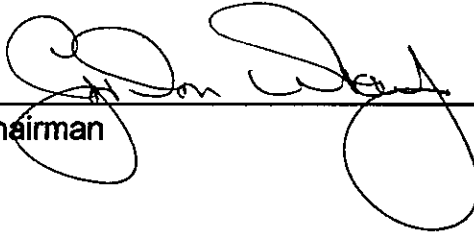
1. The Licensee shall, by February 27, 1998, submit to the Board for approval an Abandonment and Restoration Plan in accordance with the Board's "Guidelines for Abandonment and Restoration Planning for Mines in the Northwest Territories, September 1990."

In addition to conforming with the Guidelines, the Plan shall also address the following items:

- a) water intake facilities;
- b) petroleum and chemical storage areas;
- c) any site affected by waste spills;
- d) water treatment and waste disposal facilities; and
- e) methods to be used in the restoration of sumps.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman

APPENDIX A - SAMPLING AND ANALYTICAL REQUIREMENTS FOR CHARACTERIZATION OF SUMP SUPERNATANT FLUIDS

In the event that decanting a sump is required, the Licensee shall sample the sump using the following method:

Divide the sump into a grid of six equal areas, take three samples in the vertical profile (surface, mid-depth, just above the mud/supernatant interface) at the centre of each area. Mix these eighteen samples together to form a single composite sample, from which as many sub-samples may be obtained as necessary for analysis. An additional sample must be taken from the surface of the sump.

The Licensee shall have the composite sample analysed for the following parameters:

Total and Dissolved Metals	-	Copper
		Cadmium
		Iron
		Nickel
		Lead
		Zinc
		Chromium
Sulphate		
Conductivity		
pH		
Total Suspended Solids		
Chloride		
Sodium		
Potassium		
Calcium		
Magnesium		
Oil and Grease		
Toxicity (96 hour LC50 using rainbow trout)		

The surface sample should be analysed for oil and grease.