



SAHTU Land and Water Board Water Licence

Pursuant to the *Mackenzie Valley Resource Management Act*, the *Northwest Territories Waters Act and Regulations*, the SAHTU Land and Water Board, hereinafter referred to as the Board, hereby grants to

Apache Canada Ltd.

(Licencee)

of **1000, 700 - 9th Avenue SW, Calgary, AB T2P 3V4**

(Mailing Address)

hereinafter called the Licencee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Mackenzie Valley Resource Management Act*, 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>S03L1-016</u>
Licence Type	<u>"B"</u>
Location	<u>West Nogha K-14, Nogha B-23 and North Tunago E-44 well locations, 54 km south of the Settlement of Colville Lake</u>
Purpose	<u>Water use and waste disposal for industrial undertakings in oil & gas exploration and associated uses.</u>
Effective Date of Licence	<u>December 13, 2003</u>
Expiry Date of Licence	<u>December 12, 2008</u>

This Licence issued and recorded at Fort Good Hope includes and is subject to the annexed conditions.

Witness

SAHTU Land and Water Board

Chairman

**This Licence and conditions shall be kept on site.
If you have any questions please call the SAHTU Land & Water Board at
(867) 598-2413**

SAHTU LAND AND WATER BOARD

LICENSEE: Apache Canada Ltd.
LICENCE NUMBER: S03L1-016
EFFECTIVE DATE OF LICENCE ISSUANCE: December 13, 2003

TERMS AND CONDITIONS

PART A: SCOPE AND DEFINITIONS

1. Scope

- a) This Licence entitles Apache Canada Ltd. to use water and dispose of waste for industrial undertakings in oil and gas exploration and associated uses at well sites: K-14 at Latitude 66° 33' 39.5" N and Longitude 126° 03' 09.9" W, B-23 at Latitude 66° 32' 06.1" N and Longitude 125° 49' 40.3" W, and E-44 at Latitude 66° 23' 19.7" N and Longitude 125° 54' 07.4" W, located between approximately 54 Km and 73 Km south of Colville Lake.
- b) This Licence entitles Apache Canada to use water for industrial undertakings, in oil and gas exploration and associated uses, for construction and maintenance of a Winter Access Road from Km 144 of the Fort Good Hope-Colville Lake Winter Road, along existing cut lines and trails continuing south to the K-14, B-23 and E-44 Wellsites for a total distance of approximately 131 Km. These water sources are as follows:

Water Source (WS)	Volume (m ³)
WS-12 (Tweed Lake)	1500
WS-13	875
WS-14	1450
WS-15	1075
WS-16	2925
WS-17 (Tunago Lake)	1750
WS-18 (Lac Belot)	2000
WS-19 (Lac Belot)	1750

- c) 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

- d) 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: S03L1-016

“**Act**” means the *Mackenzie Valley Resource Management Act* and/or the *Northwest Territories Waters Act*.

“**Active Soil Layer**” means the uppermost layer of soil above the permafrost zone that annually thaws and refreezes.

“**Analyst**” means an Analyst designated by the Minister under Section 35(1) of the *Northwest Territories Water 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.

“**Board**” means the SAHTU Land and Water Board established under Section 60(1) of the *Mackenzie Valley Resource Management Act*.

“**Disposal Well**” means a well that is drilled and used to inject liquid wastes or produced waters into permeable geologic formations that have no potential to allow the migration of contaminants into potential potable water aquifers. Depleted gas and oil wells are often used as disposal wells.

“**Down Hole**” means a term used to describe the tools, equipment and instruments that oil and gas workers use in the well bore.

“**Drilling Fluids**” means any mixture of water, oil, solid additives and various other chemicals that are pumped down hole while drilling and are specifically related to drilling activity.

“**Freeboard**” means the vertical distance between the water line and the crest on a dam, berm or dyke's upstream slope.

“**Freshwater Gel-Chem Drilling Fluids**” means a drilling fluid system whose continuous liquid phase is comprised of freshwater.

“**Licensee**” means the holder of this Licence.

“**LC50(96)**” means in a bioassay test, that effluent is deemed acutely lethal if the undiluted (100%) effluent kills 50% or more of the fish in the test after 96 hours.

“**EC50(15)**” means in a bioassay test, the effluent is deemed excessively toxic if the light emission of a marine bioluminescent bacterium colony is reduced by more than 50% over 15 minutes when challenged by a sample containing a toxic substance. A test result of greater than or equal to (75) is considered a pass.

“**Low Permeability**” a rate of hydraulic conductivity of less than 10^{-6} m³/s.

“Microtox Test” means a bioassay test, that monitors changes in the level of light emission from a marine luminescent bacteria when challenged with a toxic substance or sample containing toxic materials, and is used to provide a more rapid, real-time measurement of acute toxicity. Microtox Test is measured as EC50(15) or IC50(15).

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

“Mix-Bury-Cover Method” means a method of disposal for drilling wastes whereby drilling waste solids, fluids, or the total waste are stabilized by mixing with subsoil below the major rooting zone and above the water table, in a manner that preserves soil chemical properties and protects groundwater quality.

“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.

“Oil Based Drilling Mud” means a drilling fluid system whose continuous liquid phase is oil.

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

“Produced Water” means any waters produced during gas and oil extraction that cannot normally be disposed of at the surface of the earth because such waters can contain high levels of salts and trace levels of hydrocarbons and other pollutants.

“Regulations” means Regulations proclaimed pursuant to Section 33 of the *Northwest Territories Waters Act*.

“Remote Sump” means any sump that is not on the lease of a well being drilled.

“Sump” means a surface excavation, constructed of material that exhibits low permeability (hydraulic conductivity of less than $10^{-6}m^3/s$), for the purpose of holding or storing drilling muds, waste drill cuttings, sludge, and fluids.

“Total Waste Sample” means a waste sample from the entire depth of the drilling waste sump, where the fluid and solid phases are collected at the same time using a column sampling tube, and the required sample is a composite of sub-samples from several locations in the sump.

“Toxicity Bioassays” means tests used to determine if components that might be harmful to vegetation, microorganisms, aquatic species, as well as animals or humans are present, but are not normally detected in routine chemical analysis.

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

“Waste Management Plan” a document providing comprehensive details of the manner in which drilling waste is handled, treated and disposed of during drilling operations.

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

PART B: GENERAL CONDITIONS

1. The water use fee shall be paid annually in advance.
2. The Licensee shall file a report with the Board not later than September 1st, 2004 and each year thereafter for the life of the Water Licence which shall contain the following information:
 - a) the monthly and annual quantities in cubic metres of fresh water obtained from all sources;
 - b) the monthly and annual quantities in cubic metres of each and all wastes discharged;
 - c) an itemized list indicating the names, uses and quantities of all substances which were used during the drilling operation;
 - d) a tabular summary of sampling dates and analysis of sump contents;
 - e) a summary of exploration and development activities as they relate to water use and waste disposal;
 - f) a list of unauthorized discharges;
 - g) details of all abandonment and restoration activities; and
 - h) any other details on water use or waste disposal requested by the Board by May 31st of the year being reported.
3. The Licensee shall submit all reports in the units of measurement as outlined in Part B: General Conditions.
4. All laboratory test results shall be submitted to the Board and the Water Licence Inspector, concurrently, within (48) hours of the Licensee receiving such results. The laboratory tests include, but are not limited to: total waste samples, microtoxicity samples, LC(50)96 samples on test populations, unauthorized waste samples, baseline soil samples, parent material samples, supernatant fluid samples, Artesian waters samples, produced waters samples, dissolved oxygen/temperature profiles and water quality sample results.
5. 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 the Board and the Water Licence Inspector.
6. The Licensee shall maintain a copy of the Water Licence at the site of operation at all times.
7. The Licensee shall maintain a copy of the Waste Management Plan on-site in a readily available location to the satisfaction of the Water Licence Inspector.
8. The Licensee shall submit to the Board, not later than (30) days after the annual Summer site inspection, a report detailing the results of the inspection as set out in

Part E, Conditions Applying to Abandonment and Restoration, sub-part (1) to (5) inclusive.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all water for industrial undertakings in oil and gas exploration, and associated uses for construction and maintenance of a Winter Access Road from Km 144 of the Fort Good Hope-Colville Lake Winter Road, along existing cut lines and trails continuing south to the K-14, B-23 and E-44 Wellsites for a total distance of approximately 131 Km. The Winter Access road shall be constructed and maintained utilizing the water sources as identified in the application and listed above in Part A, or as otherwise approved by the Board and the Water Licence Inspector.
2. Water obtained for industrial undertakings in oil and gas exploration includes water used for road access and lease construction, potable and non-potable camp water, and drilling operations.
3. Total quantities of water involved are approximately as follows:

ACTIVITY	WATER USAGE (m³)
Drilling Operations	1500
Camp Use	900
Access and Lease Construction	13671
Total	16071

4. The water intake hose used on the water pumps shall be equipped with a screen of a mesh size of (2.54 mm) sufficient to ensure no entrainment of fish.
5. Water source lakes shall be evaluated on site. Lakes that have a water depth of (50) cm. or greater under ice can be used as a water source. Any lake that has a water depth of less than (50) cm. under ice shall not be used.
6. A dissolved oxygen/temperature profile shall be taken just prior to initial water withdrawal and again as close to the project termination date as possible. Timing would be approximately March or April for each water source lake.
7. No more than (5)% of available under ice water volume shall be removed per lake per winter season.
8. The Licensee shall comply with the most recent version of the "Department of Fisheries and Oceans Protocol for Water Withdrawal for Oil and Gas Activities in the Northwest Territories".

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall submit a Waste Management Plan (3) days prior to the spudding of a well. The plan shall be submitted to the Board and the Water Licence Inspector and shall address the following: baseline soil sampling results, permafrost zones, permafrost temperatures, and depth of the active layer, specific to the final in-ground sump locations. A detailed description of drilling muds (including approximate concentration), drilling additives, fluids, storage,

processing, transportation, handling, treatment, disposal, and waste minimization technologies utilized during operations shall also be included.

2. All oil based drilling muds and cuttings produced during the use of this mud must be removed for disposal to an approved waste disposal facility outside of the Northwest Territories.
3. The Licensee shall notify the Board and the Water Licence Inspector, in writing, (48) hours prior to the shipping of any oil based drilling mud waste.
4. All oil based drilling waste shall be stabilized with an appropriate material prior to shipment.
5. The Licensee shall not at any time deposit oil based drilling waste into a sump.
6. All freshwater gel-chem drilling wastes to be disposed of shall be completely contained in a drilling sump near the drill site, or at an alternate remote sump location, as approved by the Water Licence Inspector.
7. The Licensee shall, to the satisfaction of the Board and the Water Licence Inspector, contain all freshwater gel-chem drilling waste in a sump(s) composed or constructed of material that exhibits the quality of low permeability (hydraulic conductivity of less than $10^{-6} \text{m}^3/\text{s}$) and is constructed to prevent the intrusion of runoff water. Alternate methods of containment require the approval of the Board.
8. In the event the primary sump(s) does not meet the requirement of low permeability the Licensee shall construct a secondary off-site or remote sump exhibiting such requirements to the satisfaction of the Board and the Water Licence Inspector.
9. All raised berms constructed for sumps must be constructed of material(s) that exhibit the quality of low permeability (hydraulic conductivity of less than $10^{-6} \text{m}^3/\text{s}$).
10. The Licensee shall ensure that drilling waste and camp sump(s) are either fenced or bermed in such a manner as to prevent the entrapment of, or accidental injury to, the general public, personnel or wildlife.
11. In the event that a sump cannot be constructed that is of low permeability, then an impermeable synthetic liner shall be used.
12. All sumps shall totally contain all wastes and/or waste fluids and will provide a minimum, normal operating freeboard of (1.2) metres below the active soil layer. Under no circumstances shall the freeboard be less than (1) metre.
13. The Licensee shall construct and maintain the sump(s) to the satisfaction of the Board and the Water Licence Inspector.
14. No decant of waste or a fluid out of a sump(s) is permitted without prior approval of the Board.
15. Prior to the Mix-Bury-Cover of the drilling Sump, the Licensee shall perform a Total Waste Sample, analyzing the sample for the following parameters:

Analyte	Lifetime Loading Limits Per Disposal Site***
Boron	10 kg
Cadmium	3 kg
Chromium	200 kg
Chlorides	1600 kg
Copper	400 kg
Lead	200 kg
Nickel	50 kg
Nitrogen	400kg
Vanadium	200 kg
Zinc	600 kg
Analyte	Guidelines
Chloride	<2000mg/kg in subsoil and waste mix
pH	5.5 - 8.5
Microtox EC50(15) Toxicity Testing*	Pass=EC50(15)>/=75%
Microtox EC50(15) With Charcoal Filtration**	Pass with Charcoal Filtration=EC50(15)>/=75%
LC50(96) Toxicity Testing*	Test sample is of acutely lethal toxicity if test population mortality equals or exceeds 50% of the test population in 96 hour time period
Hydrocarbons	<0.1% on a dry weight basis in the subsoil and waste mix in a sump

*Applicant must complete either a Microtox EC50(15) toxicity test, a LC50(96) toxicity test or both.

** If original microtox tests fail the applicant may perform the microtox test with charcoal filtration.

*** *All results must be reported in the indicated units of measurement.

16. All sampling, sample preservation and analysis shall be conducted in accordance with methods prescribed in a current edition of "Standard Methods for the Examination of Water and Wastewater", or by such other methods as approved by an Analyst.
17. All test results must be reported in the units of measurement as indicated in the Terms and Conditions applying to water usage and waste disposal. The Board shall not accept test results in the improper unit of measurement.
18. In the Mix-Bury-Cover of the drilling sump, the ratio of subsoil to waste must be at least three (3) parts subsoil to one (1) part waste by volume. The base of the final subsoil and waste mixture must be at least one (1) metre below the active soil layer.
19. The subsoil and waste mixture must be adequately compacted prior to abandonment.
20. All sumps shall be capped with a minimum of (2) metres of well compacted subsoil and a (2) metre overlap of the sump edges shall be utilized. Replacement of non-compacted topsoil shall be replaced over the sump cap.
21. Prior to Mix-Bury-Cover of the drilling Sump, the total chlorides must be less than (2000) mg/kg in subsoil and waste mix.
22. The Licensee shall notify the Board and the Water Licence Inspector (10) days prior to the Mix-Bury-Cover of a sump(s).

23. No sump(s) shall be Mixed-Buried-Covered before the laboratory results of the total waste sample and microtox test are reviewed by the Board and the results of the tests prove that the lifetime loading limits set out in Part D, Sub-part (11) of the Terms and Conditions of the Water Licence, have not been exceeded. Lab results shall be to the satisfaction of the Board.
24. The Licensee shall ensure that qualified personnel are retained to ensure the success of the sampling regime and sampling results in keeping with Part D, Sub-part (12) of the Water Licence Terms and Conditions.
25. If, during drilling, an Artesian Aquifer is encountered producing water flowing at the surface, the Licensee shall notify the Board and the Water Licence Inspector within (24) hours of the occurrence.
26. If, during drilling, an Artesian Aquifer is encountered producing water flowing at the surface, the Licensee shall employ appropriate drilling technology, as necessary, to prevent Artesian waters from flowing off-lease and to minimize the quantity of such waters that will be stored in the snow bermed area.
27. The Licensee shall notify the Board of the flow rate of the Artesian aquifer within (24) hours of the occurrence. The flow rate shall be reported in cubic metres per minute.
28. Within (24) hours after the cessation of the flow of Artesian waters, the Licensee shall report to the Board the total amount of such waters that has been generated by the Artesian aquifer and the amount of Artesian waters that shall be stored in the snow bermed area or otherwise approved storage area. The amounts reported shall be in cubic metres.
29. If, during drilling an Artesian Aquifer is encountered, 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 a Water Licence Inspector for analysis, and the Licensee shall have the remaining five (5) litres analysed for the following parameters and provided for the approval of an Inspector:

Analyte	Unit of Measurement***
Electrical Conductivity	DS/m at 25° C
pH	Report Result
Total Suspended Solids	mg/L
Total Dissolved Solids	mg/L
Sulphate	mg/L
Chloride	mg/L
Sodium	mg/L
Copper	mg/L
Cadmium	mg/L
Iron	mg/L
Nickel	mg/L
Lead	mg/L
Zinc	mg/L
Chromium	mg/L

Potassium	mg/L
Calcium	mg/L
Magnesium	mg/L
Hydrocarbons	<0.1% on a dry weight basis
Toxicity (Microtox EC50(15)*	Pass=EC50(15)>=75%
LC50(96) Toxicity Testing*	Test sample is of acutely lethal toxicity if test population mortality equals or exceeds 50% of the test population in 96 hour time period
Microtox EC50(15) With Charcoal Filtration**	Pass with Charcoal Filtration=EC50(15)>=75%

*Applicant must complete either a Microtox EC50(15) toxicity test, a LC50(96) toxicity test or both.

** If original microtox tests fail the applicant may perform the microtox test with charcoal filtration.

***All results must be reported in indicated units of measurement.

30. The disposal of fluids generated by an Artesian Aquifer to other than a snow bermed area, or other self-contained area, requires the approval of the Board and the Water Licence Inspector.
31. Upon the completion of each drilling operation, the Licensee shall, where fluids generated by an Artesian Aquifer are encountered, seal the borehole in such a manner as to permanently prevent any further outflow of water.
32. The sealing of an Artesian Aquifer shall be to the satisfaction of a Water Licence Inspector.
33. The Licensee shall not allow any drilling waste to spread off-lease to the surrounding lands. This includes Artesian and produced waters.
34. Any produced waters generated from a gas or oil formation shall be reinjected down hole into the original formation or injected down hole into an off-site disposal well. An alternative method of disposal is shipping produced waters to an acceptable hazardous waste disposal site outside of the Northwest Territories.
35. The Licensee shall notify the Board and the Water Licence Inspector (48) hours prior to the onset of any down hole disposal activities. Down hole disposal of waste, waste fluids or produced waters requires the approval of the National Energy Board.
36. As built drawings of camp sumps and drill waste sumps shall be submitted to the Board within (90) days of being Mixed-Buried-Covered. The drawings shall contain, but not limited to containing, the following information: sump depth, water table depth, permafrost classification, permafrost depth, soil classification, parent material type, sump design and dimensions, sump freeboard at time of mix-bury-cover, GPS location(s), and on-site or remote sump(s).
37. The Licensee shall provide to the Board, within (90) days of completion of drilling an exploratory well, a Lease Well Pad Schematic.
38. No spreading of sewage on the ground shall be permitted.

PART E: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. The Licensee shall monitor drilling waste and camp sump(s) for a minimum of (5) consecutive years to inspect the sump(s) for leakage, slumping or failure of any kind.
2. The Licensee shall monitor the project area affected by activities relating to the issued Water Licence for a minimum of (5) years to ensure that mitigation, reseeding, erosion control and restoration efforts have been successful. These efforts shall be performed to the satisfaction of the Board and the Water Licence Inspector.
3. The Licensee shall inspect the sump(s) and project location for the parameters set out in Part E: Conditions (1) and (2) of this document once in the Summer months to ensure that efforts to fulfill the conditions are successful. The inspection results shall be to the satisfaction of the Board and the Water Licence Inspector.
4. During the (5) year monitoring period, any failure of the measures as set out in Conditions (1), (2) and (3) of Part E: shall be reported to the Board and the Water Licence Inspector within (7) days of the discovery of said failure or failures.
5. The Licensee shall submit a written report documenting the annual Summer site inspection as set out in Part B, General Conditions, sub-part (8).
6. All disturbed areas relating to Water Licence activities shall be restored, fertilized and reseeded with either Forestry Canada # (1) natural seed mixture or other acceptable natural seed mixtures.
7. Natural seed mixtures shall be applied at the rate of (50) kg per hectare.
8. Reseeded areas shall be fertilized with (10-10-10) fertilizer at the rate of (100) kg per hectare.
9. The Licensee shall perform baseline soil sampling of the drill pad prior to the mobilization of persons and equipment to the drilling site. The samples shall be tested for the following parameters:

Analyte	Description	Units Of Measurement*
Salinity		
pH	Salinity	Report Result
Electrical Conductivity	Salinity	DS/m at 25° C
Solids	Total Dissolved	mg/L
Calcium	Salinity	mg/L
Magnesium	Salinity	mg/L
Sodium	Salinity	mg/L
Potassium	Salinity	mg/L
Chloride	Salinity	mg/L
Sulfate-S	Salinity	mg/L
SAR	Salinity	mg/L
Specific Gravity	Saturated Paste	Report Result
Specific Gravity	As Received	Report Result
Cation Electrical Conductivity	Salinity	Report Result

*All results must be reported in indicated units of measurement.

10. The Licensee shall include the laboratory test results of the baseline soil sampling in the Waste Management Plan which will be submitted as per Part D: Conditions Applying to Waste Disposal, Sub-part (1).

PART F: CONDITIONS APPLYING TO STREAM CROSSINGS

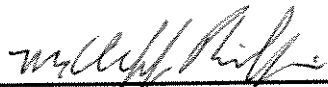
1. The Licensee shall ensure that only clean snow is used on all stream crossings and that no debris is left on the surfaces of the crossings.
2. Stream crossings shall be v-notched or completely removed before spring break-up to facilitate natural flow.
3. The removal of naturally occurring material from the bed or banks of any stream below the ordinary high water mark is not permitted.
4. The Licensee shall not cut or modify any stream banks.
5. The Licensee shall not ford wet watercourses or areas of overflow, unless authorized in writing by a Water Licence Inspector
6. The Licensee shall not destroy or damage beaver dams or lodges, and minimize disturbance to beaver activities.
7. The Licensee shall comply with the most recent version of the *"Department of Fisheries and Oceans Protocol for Temporary Winter Access Water Crossings for Oil and Gas Activities in the Northwest Territories"*.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Board, 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 Board in writing of such proposed Modifications at least thirty (30) days prior to beginning the Modifications;
 - b) such Modifications do not place the Licensee in contravention of either the Licence or the Acts;
 - c) the Board has not, during the thirty (30) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than thirty (30) days; and
 - d) the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, Item (1), have not been met may be carried out only with written approval from the Board.
3. The Licensee shall provide to the Board as-built plans and drawings of the modifications referred to in this Licence within ninety (90) days of completion of the modifications.

PART H: CONDITIONS APPLYING TO CONTINGENCY PLANNING

1. The Licensee shall maintain a copy of the Emergency Response Plan on-site in a readily available location to the satisfaction of the Water Licence Inspector.
2. The Licensee shall ensure that petroleum products, hazardous material and other wastes associated with the project do not enter any waters.
3. The Licensee shall review the Fuel Spill Contingency Plan annually and modify the Plan as necessary to reflect changes in regulations, operations and technology. Any proposed modifications shall be submitted to the Board for approval.
4. If, during the period of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a.) employ the appropriate Fuel Spill Contingency Plan;
 - b.) report the incident immediately via the (24) Hour NWT Spill Report Line. Currently the number is (867) 920-8130;
 - c.) report the unauthorized discharge of waste to the Board within (24) hours; and
 - d.) submit to a Water Licence Inspector, a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.
5. The Licensee shall comply with the National Energy Board's revised "*Spill Reporting Protocol for Upstream Oil and Gas Operations in the Northwest Territories and Nunavut Regulated by the National Energy Board*" which is effective as of July 15, 2003.



Witness

SAHTU LAND AND WATER BOARD



Chairman



SAHTU Land & Water Board
REASONS FOR DECISION
Issued Pursuant to Section 121 of
The Mackenzie Valley Resource Management Act
and Section 26 of
The Northwest Territories Waters Act

Water Licence Number: S03L1-016 (Type "B")

This is the decision of the SAHTU Land & Water Board with respect to an application for a Water Licence dated October 16, 2003 made by:

Apache Canada Ltd.
1000, 700 – 9th Avenue S.W.
P.O. Box 2850
CALGARY, ALBERTA
T2P 3V4

for: Water use and waste disposal for industrial undertakings in oil & gas exploration and associated uses for the West Nogha K-14, Nogha B-23, and North Tunago E-44 wells located 54 Km South of the Settlement of Colville Lake.

With respect to this application, notice was given in accordance with Sections 63 & 64 of the Mackenzie Valley Resource Management Act and Section 23 of the Northwest Territories Waters Act. There was no Public Hearing held in association with this application.

DECISION

After having been satisfied that the project had been screened pursuant to the Mackenzie Valley Resource Management Act, and that any potential adverse environmental effects were insignificant or mitigable with known technology, and as such the application could proceed through the regulatory process and after reviewing the submission of the Applicant and after reviewing the written comments received by the Board; the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope and intent of the Mackenzie Valley Resource Management Act and the Northwest Territories Waters Act and Regulations made thereunder has determined that:


Water Licence S03L1-016: be issued subject to the terms and conditions contained therein.

The Board's reasons for this decision are as follows:

1. Information contained in Staff Report S03L1-016 relative to environmental impacts and/or public concerns.
2. No significant public concern was made known to the Board.
3. Conducting the undertaking in compliance with the Terms and Conditions imposed by the Licence will minimize any disturbance to the natural conditions of surrounding water bodies.
4. The use of water proposed by the Licensee is of a nature contemplated by the Mackenzie Valley Resource Management Act, and the Northwest Territories Waters Act.
5. The Sahtu Land Use Planning Board has confirmed that the proposed water use, and deposit of waste activities would not be inconsistent with an approved Land Use Plan, as one does not yet exist.
6. The significant contribution of Licensee's Project to the socio-economic well being and economic development of the region.

Water Licence S03L1-016 contains provisions that the Board feels necessary to ensure and monitor compliance with the Mackenzie Valley Resource Management Act and the Northwest Territories Waters Act and the Regulations made thereunder and to provide appropriate safeguards in respect of the Applicant's use of the waters affected by the Licence. The Board will provide any referenced material or documents and/or reasons for decision for any specific clause or clauses contained within the application if requested to do so in writing.

SIGNED this 13th day of December 2003 on behalf of the SAHTU Land & Water Board.



Larry Wallace (Chairman)
SAHTU Land & Water Board