



INAC, Nunavut District
P.O. Box 2200
Qimuggjuk Building
Iqaluit, NU, X0A 0H0

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John A. Dixon MA, P. Geo.
Senior Geologist
Titan Uranium Inc.
Suite 100 - 2100 Airport Drive
Saskatoon, SK Canada S7L 6M6
Ph: 306.651.2405
Fax: 306.651.5105
cell: 647.668.4333
jdixon@titanuranium.com

RE: Water license inspection of Titan Uranium –Thelon Exploration Project Itza Lake Camp - June 27th, 2007

The Water Resources Officer (WRO) appreciates the assistance and cooperation provided by Mr. Paul Nichols, Field Supervisor for Titan who accompanied the Inspector during the inspection of the camp and drilling sites.

The following report is based on observations made at the time of the inspection, results of samples collected during the inspection period and items outlined during a review of the terms and conditions of the license with the Mr. Nichols. Immediately following the inspection an Industrial Water Use Inspection Report was signed by both Mr. Nichols and the Inspector.

Part A: Scope and Conditions

No issues were found with respect to the location of the camp as they relate to the information contained within the current license.

As indicated during the inspection, the location of the camp is poor. The camp is very close to the potable water source. Because of snow and drifting conditions, the lack of drainage at the site and the lack of a properly constructed sump the camp was full of standing water. This is not ideal and should be reviewed given the proximity of a gravel esker/ strip being so close.

The license is classed as mining and milling as indicated on the license form.

Part B: General Conditions

The question of water use fees and a determination on if they had been paid was not included within the context of this inspection.

A review of the Nunavut Water Board FTP – Public Registry was conducted during the writing of this report. A 2006 Annual report was found to be complete and included supplementary documentation on water usage for both camp and drill operations.

The proponent is reminded that an annual report is required to be filed by March 31st 2008 for the year ending December 31st 2007.



The licensee is reminded that it is the responsibility of the licensee to ensure that any documentation submitted by the licensee to the Nunavut Water Board is acknowledged by the Manager of Licensing.

Part C: Conditions Applying to Water Use

At the time of the inspection the licensee was allocated the use of 3 Cubic Meters / day of water from ITZA Lake for camp and domestic purposes.

Water for drilling operations must not exceed 15 Cubic Meters per day. It is highly recommended that flow meters be installed on pump lines so accurate measurements can be recorded. Extrapolation of the quantity of water used based on the run time of a pump or the number of times a tank is filled is not adequate and will not be accepted in future inspections.

Part D: Conditions Applying to Waste Disposal

During the period of inspection one incinerator was noted on site. The unit was a SMART ASH portable forced air incinerator provided by the camp expeditor. The capability of the unit to meet the Canada-wide Standards for Dioxins and Furans and the Canada-wide Standard for Mercury Emissions was not reviewed with the proponent. The licensee is reminded that this standard must be met by the date of the next inspection if not already achieved.

The proponent is reminded to include in the 2007 annual report due on March 31st 2008 a list of hazardous materials shipped out of the camp, the treatment received, and the location of the approved treatment facility to which they were sent. All of the foregoing is required information to be included in the annual report. Shipping and receiving invoices are not required so long as the records are available for inspection during the 2008 inspection season.

The location of the grey water sump was a matter of concern for the Inspector. The poor ground the camp is located on, the location of the camp so close to water as well as the extent of frozen ground so early in the season resulted in an overflow of the sump and in grey water flowing over ground behind the cook tent and dry. This overflow and subsequent efforts to build up the sump and contain the sump waters in plastic tubs was of concern to the inspector and requires the licensee to take measures to address this problem prior to the next inspection.

Part E: Conditions For Camps, Access Infrastructures And Operations

No on-ice work is covered under the current license. It is recommended that the inspector conduct an inspection during the early spring season to monitor compliance with this part if activities are expected to start that early in subsequent years of operation. This planned activity should be noted in the annual report and an appropriate application for amendment submitted a minimum of 3 months ahead of the expected start date.

Part F: Conditions Applying To Drilling Operations

One drill sites was visited during the inspection. It was noted that the Drill foreman and workers had made efforts to build a sump to catch drill cuttings and return overflow.

However, the licensee is directed to section 4 of this Part which reads;

The Licensee shall ensure that all drill cuttings and any return water and sludge that cannot be re-circulated, including CaCl in any quantity or concentration, be disposed of in a properly constructed sump or an appropriate natural depression located at least thirty (30) metres above the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created



In this case the sump was full at the time of the inspection and red streak of material was visible from the helicopter while landing at the drill. The red streak was caused as a result of the red color of the rock being drilled. The red streak consisting of rock cuttings and the return water from the drill was approximately 100 m long and was flowing downhill toward the source being used by the drill. This was addressed with the Drill foreman. A verbal direction to contain all cuttings and to remediate the drill site was issued at this time. The licensee was required to provide photographs of the site once clean up had been completed. To date these photographs have not been received.

Part G: Conditions Applying to Modifications

No mention of modifications to the existing plan was discussed during the period of inspection. The licensee is reminded that all modifications need to be consistent with the terms and conditions of the existing license and if not then require the Nunavut Water Boards approval.

Such approval is acquired through written notification to the board 60 days in advance of the proposed modification.

Part H: Conditions Applying To Spill Contingency Planning

The licensee is reminded that they must comply with section 4 of this part.

The licensee is reminded that section 5 of this part requires the licensee to ensure that any equipment maintenance and servicing be conducted only in designated areas and to implement special procedures to prevent spills of these products from entering the environment.

Part I: Conditions Applying To Abandonment And Restoration

A review of the Nunavut Water Board FTP site provided the Inspector a copy of the 2006 Abandonment and Restoration Plan which had been revised after a review of comments supplied by Environment Canada and Indian and Northern Affairs. . This document was not reviewed during the course of the inspection.

The licensee is encouraged to provide information on all on-going progressive reclamation activities conducted on site during the 2007 year. This information should be included in the annual report.

The licensee is reminded that section 7 of this Part must be followed and addressed in the annual report. The Licensee is invited to submit photographs showing before and after shots of drill holes to address this section of the license.

The licensee is also reminded that as per section 9 of this Part, all drill holes must be permanently sealed upon completion. The Licensee is invited to submit photographs showing the completion of this activity to address this section of the license.

Part J: Conditions Applying To The Monitoring Program

Records of all hazardous wastes transported off site along with the location and name of the approved disposal site should be available for inspection during the next inspection season.



Non-Compliance:

During the inspection a number of items were noted and discussed with the drill foreman and field supervisor. These issues required corrective action to be undertaken prior to the date of the next inspection and submission of a record showing these activities had been completed was requested.

During the period of the inspection water samples were collected from both the Potable source and 50 meters downstream of the drill.

A review of the results of the potable samples did note the presence of Hexane Extractable Materials (HEM) in the potable water at a concentration of 73.9 Mg/L. HEM is more commonly noted as Oil and grease. The presence of any concentration of oil and grease or petroleum product in the potable source is a matter of concern and an investigation as to the possible origin of this contaminant should be addressed by the licensee.

A review of the samples collected 50 meters downstream of the drill was of far greater concern to the Inspector. The following were the results that gave rise to this concern;

Inorganic- Physicals

Apparent color	1260 Color Units –
pH	5.41 pH units
Solids- Total dissolved	194 mg/L

Trace metals

Result	Guideline
Aluminium 4690 µg/L	CCME Guideline <100 µg/L
Iron 3010 µg/L	CCME Guideline 300 µg/L

The enclosed results indicate clearly to the inspector that the returns from the drill visited during the inspection were not captured within a properly constructed sump or returned back down the hole.

The licensee is reminded that subsequent inspections of this site will focus on this issue and efforts to prevent this in the future and to remediate sites where this may have occurred during the 2007 season should be undertaken prior to the next inspection.

It should be noted a result indicating that Hexane Extractable Material (Oil and grease) was found in the return water as well. The results were 37.5 mg/L.

Andrew Keim
Inspector's Name

(Original signed and mailed this date)
Inspector's Signature

Attached under separate cover;
Photos taken during Inspection of June 27th, 2007

Cc:

Peter Kusugak – Manager Field Operations section- Indian and Northern Affairs Canada
Phyllis Beaulieu – Manager licensing – Nunavut Water Board