# Appendix 4

Titan Uranium Inc.

# Abandonment and Restoration Plan Thelon Project

(Located Northwest of Baker Lake, Nunavut)

N.T.S. Sheets 66 B-14, 66 B-15, 66 B-16, 66 G-1, 66 G-2, 66 G-8, and 66 H-5

Date Prepared: September 12, 2006

Prepared by: Paul R.J. Nicholls, P. Eng.

# **Table of Contents**

			page
1.0	Pream	able	1
2.0	Introduction		1
3.0	Schedule		2
4.0	Infrastructure to be built		2
5.0	5.1 5.2 5.3 5.4 5.5 5.6 5.7 Final 6.1 6.2 6.3 6.4 6.5 6.6	Tents Water system Fuel and Chemical Storage Waste Drill sites Contamination Clean Up Inspection and Documentation  Abandonment and Restoration Tents and Equipment Fuel and Chemical Storage Sumps Camp Site Drill Sites Contamination Clean Up Inspection and Documentation	2 2 2 2 3 3 3 3 4 4 4 4 4 4 5 5
	6.7	Inspection and Documentation	5
		List of Figures	
Figure	: 1	Regional Land Status (1:1,000,000 scale)	6
Figure	2	Land Status N.T.S. Sheet 66 B/14 (1:150,000 scale)	7
Figure	: 3	Land Status N.T.S. Sheets 66 B/15, G/2 (1:150,000 scale)	8
Figure	: 4	Land Status N.T.S. Sheets 66 B/16, G/1 (1:150,000 scale)	9
Figure	5	Land Status N.T.S. Sheet 66 G/8 (1:150,000 scale)	10
Figure	6	Land Status N.T.S. Sheet 66 H/5 (1:150,000 scale)	11
Figure	: 7	Schematic Diagram of Camp	12

**1.0** Preamble page 1

The Abandonment and Restoration Plan will be in effect from April 1, 2006 to April 1, 2008 and applies to the Thelon Project operated by Titan Uranium Incorporated. The Thelon Project is located approximately 150 kilometres northwest of the Hamlet of Baker Lake in N.T.S. Sheets 66B, 66G, and 66H and consists of seven mineral leases, one prospecting permit and fifty-one mineral claims that are subject to an agreement with Ronald McMillan. The agreement defines the boundary project boundary by the following points: Point A - 97°34′W,65°33′N, Point B - 100°29′W, 64°57′N, Point C - 99°43′W, 64°36′N, Point D - 97°55′W, 65°02′N, and Point E - 97°13′W, 65°18′N (Figures 1 to 6). The Abandonment and Restoration Plan has been prepared for Titan Uranium Inc. by Paul Nicholls (phone: 905-640-3957). The camp was constructed and managed by Matrix Aviation from Yellowknife, N.W.T. (phone: 867-766-3134). The field supervisor and camp manager will be responsible for implementing the plan. Additional or revised copies of the Abandonment and Restoration Plan can be obtained from Titan Uranium Inc., Suite 103, 2103 Airport Drive, Saskatoon, Saskatchewan, S7L 6W2 (Phone: 306-651-2405; fax: 306-651-5105). Titan Uranium Inc. head office address is 2nd Floor - 157 Chadwick Ct., North Vancouver BC, V7M 3K2

#### 2.0 Introduction

This Abandonment and Restoration Plan has been prepared for an exploration programs that will be carried out between September 2006 and March 2008 by Titan Uranium Incorporated. The program will be carried out from a temporary fly-in camp located on the southwest shore of Itza Lake in N.T.S. Sheet 66 G/1 (Crown Land; 65°02'38"N and 98°22'30"W; Figure 4), approximately 150 kilometres northwest of Baker Lake in Nunavut.

The program involved establishing a temporary camp (June 2006). The location selected for the temporary camp provides access by float equipped aircraft, and is located centrally to Titan Uranium Incorporated leases, claims and permits. At peak times the camp could accommodate a maximum of 20 people but for the most part there will be 12 to 15 people on site. The camp will operate seasonally.

The Thelon Project is in the early stages of exploration and the 2007 program will consist of geological mapping, prospecting, ground geophysics and exploratory diamond drilling. The camp would be dismantled at the conclusion of the program unless the preliminary exploration results were positive enough to suggest that the project would continue in the summer of 2008. If the program were to continue a Seasonal Shutdown Plan would be followed. The KIA and NWB will be informed of any decision to use the Seasonal Shutdown Plan.

No buildings, equipment or waste will be left on the project area beyond the expiration date of the Land Use or Water License permits, unless new permits licenses have been obtained.

In order to conduct the 2007 work program Titan Uranium Inc. has received the following permits and licences:

Land use permit N2005C0040 from Indian and Northern Affairs Canada (expiry March 23, 2008) Land use License KVL306C01 from the Kivalliq Inuit Association (expiry July 15, 2007) Water License 2BE-THE0608 from the Nunavut Water Board (expiry April 30, 2008)

#### 3.0 Schedule

The final restoration of the camp site will begin once the program is complete. All work under the Abandonment and Restoration Plan will be completed prior to the date of expiry of the land use permits and water license unless a renewal is applied for. Empty fuel drums will be removed from site regularly. Any contamination will be cleaned up according to the Spill Contingency Plan and debris will be removed from the site.

#### 4.0 Infrastructure to be built

The temporary camp will consist of the following (Figure 7):

- 1 wood-floored 42' by 16' combination kitchen / tent with hot and cold running water, refrigerator, stove, shower(s), washer and dryer, hot water tank (Weatherhaven tent)
- 6 wood-floored 14' by 16' sleep tents (Weatherhaven tents)
- 1 wood-floored 14' by 16' office / sleeping (Weatherhaven tent)
- 1 wood-floored 14' by 16' canvas tent for logging core
- 2 wood-framed toilet
- 1 generator shelter housing 10 kW generator
- 1 wood-floored 14' by 16' helicopter pad

A 14' in diameter steel granary was erected (September 2006) on the site to provide safe storage for any equipment left on site over the winter.

#### 5.0 Seasonal Shutdown

#### 5.1 Tents

All canvas tents will be dismantled and removed from site for drying and proper storage. Weatherhaven tents will be either secured to the ground, and closed for winter or removed. Oil stoves will be removed from the tents and taken for storage, with the exception of one tent where the stove will left installed for use by travellers and / or emergency use. Wood structures (generator and toilet shacks) and the wooden tent floors will be kept secured to the ground. Any wooden bed frames will be turned upside down and secured to the wooden floors for over-winter storage. The generator may be removed from site for servicing and storage.

# **5.2** Water system

The pump and hoses will be drained and dismantled. The pump may be removed from site for servicing and storage. Hoses will be stored on site in the generator shack.

# 5.3 Fuel and Chemical Storage

An inventory of the Fuel Storage Area will be conducted prior to leaving at the end of the field season and empty fuel drums will be removed from site. Chemicals will not be stored on the site over the winter. All chemicals will be removed from the site for storage and or disposal.

#### 5.4 Waste

Combustible waste: All combustible waste will be incinerated. The burn barrel will be stored at the camp site for use the following year.

Grey water sump: The grey water sump will be inspected, marked and covered securely for the winter.

## 5.5 Drill sites and Core Storage Area

The drill will be dismantled into its main components by the drilling contractor and packaged and secured along with its ancillary equipment and rods. The drill will be flown out by the drilling contractor. Rods and other equipment will be stored at the camp and at the fuel storage area.

All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved disposal location. As much as possible, drill sites will be restored immediately after the drill has been moved to the next site. During drilling all drill cuttings will be collected and cuttings with elevated uranium values will be placed back in the drill hole. All holes will be sealed by cementing or grouting to an appropriate depth from the surface such that surface waters are prevented from interacting with ground waters. In holes that encounter mineralization with a uranium content greater than 1.0% U<sub>3</sub>O<sub>8</sub> (or equivalent millisievert reading) over a length

> 1 meter, and with a meter-percent concentration > 5.0 the drill cuttings will be collected and back filled into the hole, and the zone of mineralization will be sealed by grouting to a distance of 10 metres above and 10 metres below the mineralization. Greywater sumps will be back filled and levelled. Following back filling, a radiometric survey will be conducted and if material is found to exceed background radiation levels, then the Land Use Inspector will be contacted for review and approval of the handling procedures.

Gamma radiation levels of the core storage area must meet the decommissioning requirements of being less than 1.0  $\mu Sv$  one meter from the surface of the storage area and in no instance will the level be allowed to exceed 2.5  $\mu Sv$ . If core is found to exceed the levels identified, then the Land Use Inspector will be contacted for review and approval of the handling procedures.

#### **5.6** Contamination Clean Up

All contaminated water, ice, snow. soil, and clean up supplies will be stored in closed, labelled containers. All containers will be stored in a well ventilated area away from incompatible materials. The Federal and Nunavut regulatory agencies will be contacted to identify appropriate disposal methods before disposing of contaminated material. Before and after photos will be taken to document the contamination and the clean up. Before and after photos will be taken to document the contamination and the clean up.

#### 5.7 Inspection and Documentation

A complete inspection of all areas and a full inventory will be conducted prior to seasonal closure. Photos will be taken to document the conditions prior to leaving the site for the winter.

#### **6.0** Final Abandonment and Restoration

### 6.1 Tents and Equipment

All buildings will be dismantled and removed. All wooden structures including floors will either be burned or removed. All equipment, including pumps, generators, etc. will be dismantled and removed from the project area.

#### **6.2** Fuel and Chemical Storage

All fuel drums will be removed and the area where fuel has been stored will be thoroughly inspected. Any contamination will be cleaned up as well as any debris removed. Contaminated soil will be handled as outlined in the Spill Contingency Plan. Final photos will be taken of the fuel storage area for inclusion in the final report. All chemicals will be removed from the site. Areas where chemicals have been stored will be inspected to ensure that there has been no contamination.

#### **6.3 Sumps**

All sumps will be inspected to ensure that there is no leaching or run-off. Sumps will be back-filled and levelled as required. Final photos will be taken.

# 6.4 Camp Site

A final inspection of the camp site area will be conducted to ensure that there is no waste left behind. All wastes that are not combustible will be removed from the site.

#### 6.5 Drill Sites and Core Storage Area

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## **6.7** Inspection and Documentation

All areas will be inspected prior to closure with photos will be taken to document the conditions prior to leaving the site for use in the final plan. All appropriate agencies will be contacted and notified once the final clean up has been conducted.











