

# **WESTERN URANIUM CORPORATION**

**Annual Report – 2007  
NWB Water License 2BE-SAN0709**

**Thelon Basin Project**

**Kivalliq Region, Nunavut**



**Prepared by:**  
**Date:**

**Douglas R. Bowden, P. Geol.**  
**March 2008**

## Executive Summary

Western Uranium applied for a water license in November 2006 to accompany a Land Use Permit for a uranium exploration and drilling program and remote support camp in the Kivalliq region about 200 km northwest of Baker Lake. The Water License was issued on March 30, 2007. A one year LUP (N2006C0041) was issued, effective April 2, 2007 with extensions available for 2 or 3 additional years. Construction of a 20 person camp on the north shore of Sand Lake (Latitude 65° 17', Longitude 99° 35.7') began in early April 2007 with occupation immediately following. Diamond drilling began in a permitted area (G7) 32 km ENE of Sand Lake (Latitude 65° 21.5', Longitude 99° 34') shortly thereafter and continued to May 19. The camp was put on care and maintenance from late May through August 1, with a caretaker in camp from late May through early July. Camp was re-opened on August 4 for geological survey work. Drilling re-started in early September in the eastern drill area. The LUP was amended in August to allow drilling in a new area (6L) 29 km SW of Sand Lake (Latitude 65° 11', Longitude 100° 8') and NWB was notified of the changes. The drill was moved to the western area in late September and ended on October 6. The camp was put into hibernation on October 11.

Water for domestic use in the Sand Lake camp was drawn from Sand Lake. Daily consumption averaged 1.4 m<sup>3</sup> over the 157 days the camp was occupied for an estimated annual water use of 215 m<sup>3</sup>. Water use in the camp was monitored and documented daily. Waste water (grey water) from the kitchen and showers was disposed into a boxed sump containing a screen to catch particulates and then allowed to drain out through sandy soil. The camp instituted a waste monitoring program designed to minimize the amount of trash requiring incineration or disposal by buying products with minimal packaging or combustible versus plastic or metal containers. Garbage and other related trash from the kitchen and personal use were collected daily and incinerated using a "Smart Ash" oil incinerator. Human waste was collected daily from the outhouse and incinerated with the kitchen waste. The ash and burned containers were bagged with other noncombustible and industrial waste, such as drill products and waste, and stored for haulage to Yellowknife and disposal in the Yellowknife Bailing facility.

Water for drilling in Area G7 was drawn from a 150 acre lake immediately west of the drill sites. Drilling in April, May and September is estimated to have used 233.5 m<sup>3</sup> of water from this lake or an average of 5.2 m<sup>3</sup> per day of water over 45 days of drilling. Water for drilling in Area 6L was drawn from a 3000 acre lake immediately east of two permitted drill sites. Drilling used an estimated 88 m<sup>3</sup> of water or 6.8 m<sup>3</sup> of water per day over 13 days of drilling.

Cuttings and core from the drilling were monitored according to standards established in the Uranium Exploration Plan submitted to NWB. No cuttings or core exceeded threshold values established in the plan or in the conditions set by the license, so no extraordinary mitigation methods were required for disposal of cuttings or storage of the core. All eight drill holes were plugged according to guidelines set forth in the license.

The camp and the drill sites generated in April and May were inspected in mid-August by INAC inspector David Ningeongan; a passing Industrial Water Use Inspection Report was issued. Water samples from the domestic supply were collected by the inspector for analysis, but results were not received by Western at the time of this report.

## **Introduction**

Western Uranium applied for a water license in November 2006 to accompany an application for a Land Use Permit for a uranium exploration and drilling program and remote support camp in the Kivalliq region about 200 km northwest of Baker Lake. The Water License was issued on March 30, 2007. A one year LUP (N2006C0041) was issued, effective April 2, 2007 with extensions available for 2 or 3 additional years. Construction of a 20 person camp on the north shore of Sand Lake (Latitude 65° 17', Longitude 99° 35.7') began in early April 2007 with occupation immediately following. Diamond drilling began in a permitted area (G7) 32 km ENE of Sand Lake (Latitude 65° 21.5', Longitude 99° 34') shortly thereafter and continued to May 19. The camp was put on care and maintenance from late May through August 1, with a caretaker in camp from late May through early July. Camp was re-opened on August 4 for geological survey work. Drilling re-started in early September in the eastern drill area. The LUP was amended in August to allow drilling in a new area (6L) 29 km SW of Sand Lake (Latitude 65° 11', Longitude 100° 8') and NWB was notified of the changes. The drill was moved to the western area in late September and ended on October 6. The camp was put into hibernation on October 11.

Western has applied to INAC for an extension of the LUP for 2008 and that application is pending.

## **Monitoring Program**

### **Water Use**

Water for use in Western's Sand Lake Camp was drawn from a broad bay northwest of the camp site. Water for drilling was drawn from smaller lakes immediately adjacent to the two main drill areas. GPS coordinates for the camp and drill sites and water collection/disposal sites are tabulated in Table I.

The camp drew water from Sand Lake in April and May by auguring test holes in the ice until a spot was found where there was sufficient room between sandy lake bottom and the bottom of the ice sheet. Water was pumped from the ice hole into a 500 Imperial gallon (2.25 cubic meters) water storage tank using a flexible fire hose. The pump and hose were retrieved after every filling. The tank was filled first thing in the morning and usually again in the afternoon when the camp population was close to 20, but in the fall it was only filled every other day for a population of 10-12. A record of each tank filling was kept by the Camp Manager. Grey water from the kitchen, showers and laundry was piped into a buried catch box equipped with a screen to catch solids. The screened water was allowed to drain through sandy soil on the down slope side of the camp. Grey water volume is estimated to be the same as clean water intake assuming actual consumption (drinking and cooking) to be less than 1 per cent on average.

The diamond drilling utilized water from two small lakes within 500 meters of the individual drill sites. The core drilling in area G7 in April and May utilized one pump site on the ice for two drill sites and four drill holes. The core drilling in area G7 (one site, one drill hole) in September utilized a second pump site at the same lake, but at the shore. The core drilling in September and early October in area Six Left utilized a shoreline pump site for each of two sites drilled. Water consumption for core drilling is estimated based on pump capacity and hours drilled during active drill shifts.

Water consumption from the Sand Lake Camp and the core drilling is summarized in Table II.

## **Waste Disposal**

Toilet wastes were collected and incinerated daily in an oil-fired “Smart Ash” barrel incinerator, along with domestic waste from the kitchen such as food containers and garbage, clean cardboard and paper products. No waste was buried and no waste oil, plastic containers, or drilling additives were incinerated. Remnant ash from the incinerator along with burned metal food containers and the non-combustible waste was stored and sent out to Yellowknife on fuel backhauls. Industrial waste such as motor oil containers, drill additive buckets and broken drill tools and drill steel were stockpiled and sent out to Yellowknife on fuel backhauls or during drill demobilization. Waste disposal in Yellowknife at the Yellowknife Bailing Facility was handled by the camp expeditor, Matrix Aviation Solutions, Inc. and is tabulated in Table III.

## **Drilling Operations**

Western Uranium submitted a Uranium Exploration plan to NWB, which was received by them on July 11, 2007.

Western’s drill hole and sump locations are listed in Table 1. No holes were drilled through lake ice in 2007 and all drill fluids and cuttings were deposited into natural depressions in the immediate vicinity of the drill hole and were pumped into a natural depression away from any body of standing water proximal to the drill hole. No artesian water flow was encountered in any of the eight holes drilled in 2007. All holes bottomed in permafrost, the deepest of which was 375 metres. There were no intervals of drilling or cuttings containing greater than 0.05% uranium; no extra mitigation efforts such as pumping cuttings back down the hole were necessary for these holes. Measurements at the drill hole used a hand held scintillometer. No extra cementing was necessary in the abandonment of the holes drilled in 2007, and all were abandoned and sealed according to the conditions of the water license. The core produced from the 2007 program did not meet thresholds requiring separate storage or protection under the conditions set forth in the license.

## **Reclamation Work**

Western constructed and used two drill sites in April and May in area G7 and one drill site in September. There were two drill sites constructed and used in area Six Left in September and early October. Each drill area was provided with an emergency Weatherhaven tent on a wood platform, which were removed at the end of drilling activities. All drill equipment and as much waste material as possible was removed in late May from the two sites in area G7. In August, reclamation continued with pickup of all remaining waste material such as scrap wood, product containers, miscellaneous drill tools or hoses and rods lost in the snow. The actual drill hole and immediate surrounding ground were leveled and raked to distribute cuttings and to allow vegetation to grow. Trash and waste from the September and October drilling were picked up after drilling and before termination of the season. Final reclamation is planned for 2008.

## **Camp Construction Activities**

Construction of the camp began in early April 2007 and continued well into April. Construction personnel, materials and tents were flown onto site from Yellowknife via Baker Lake using airplanes equipped with skis. Subsequent flights landed on an ice strip constructed on Sand Lake using a small tractor. The current camp consists of eleven Weatherhaven tents set up on wood and plywood platforms, including a kitchen/dry tent, a core logging tent and nine smaller units used as sleepers, storage tent and office tent. In addition, the camp has a generator shack (plywood), an outhouse (plywood) and 2 fuel storage berms.

## **Fuel Storage**

The camp fuel cache is contained in two InstaBerm Arctic fuel berms (20'x50'x15" and 30'x30'x15") including a rain drain filtering system. The fuel berms required a minimum of preparation since a relatively flat, barren spot was found behind the camp site proper, as shown in aerial views of the camp. The berms were not so easily set up, due to extremely low temperatures and high winds in April, but later adjustments in August showed that the process was much simpler under warmer conditions. Rain and especially, snow tended to build up inside the berms, but excess water automatically drained through the filtering system without any problems. Barrels of fuel used in helicopter refueling, power generation and heating utilized metal "cookie sheets" underneath to catch any possible spills and absorbent pads were used to pick up any actual drips. There were no fuel spills during the camp occupancy and no fuel spillage in the berms. The camp as described, including the fuel berms, was inspected by INAC in mid August of 2007 by a water inspector and a land inspector. The water inspection report is included as Appendix A. There were no unauthorized discharges of waste water or hazardous materials in 2007. Water samples from the domestic supply were collected by the inspector for analysis, but results were not received by Western at the time of this report. There were no revisions to the Spill Contingency Plan or Abandonment and Restoration Plan after their submission to NWB.

Table I

Site	Description	Latitude	Longitude
Sand Lake Camp	11 Weatherhaven Tents	65° 16' 28.056"	-99° 34' 03.576"
SL Camp Water Source	Sand Lake near shore	65° 16' 37.521"	-99° 34' 12.036"
SL Fuel Berms	2 Fuel Berms	65° 16' 27.222"	-99° 33' 59.832"
G7-W1	Drill Water, April/May 2007	65° 21' 27.285"	-98° 54' 25.662"
G7-D1	Drill Site and sump for cuttings	65° 21' 18.565"	-98° 54' 08.116"
G7-D2	Drill Site and sump for cuttings	65° 21' 25.102"	-98° 54' 19.544"
G7-W2	Drill Water, September 2007	65° 21' 27.645"	-98° 54' 11.521"
G7-D3	Drill Site and sump for cuttings	65° 21' 25.582"	-98° 54' 00.373"
6L-W1	Drill Water, September 2007	65° 11' 22.202"	-100° 07' 42.215"
6L-D1	Drill Site and sump for cuttings	65° 11' 24.036"	-100° 07' 59.486"
6L-W2	Drill Water, Sept/Oct 2007	65° 10' 34.931"	-100° 09' 13.629"
6L-D2	Drill Site and sump for cuttings	65° 10' 28.879"	-100° 09' 07.714"

Table II

Date	Cubic Metres Hauled Off Site			Disposal Site
	Domestic	Sewage	Industrial Waste	
4-Apr-07	2.0	0.0	0.0	City of Yellowknife Bailing Facility
10-Apr-07	1.0	0.0	0.0	City of Yellowknife Bailing Facility
17-Apr-07	1.0	0.0	0.0	City of Yellowknife Bailing Facility
25-Apr-07	1.0	0.0	0.0	City of Yellowknife Bailing Facility
9-May-07	1.0	0.0	0.0	City of Yellowknife Bailing Facility
19-May-07	1.0	0.0	3.0	City of Yellowknife Bailing Facility
22-May-07	1.0	0.0	4.0	City of Yellowknife Bailing Facility
18-Aug-07	1.0	0.0	0.0	City of Yellowknife Bailing Facility
5-Sep-07	1.0	0.0	0.0	City of Yellowknife Bailing Facility
18-Sep-07	1.0	0.0	3.0	City of Yellowknife Bailing Facility
6-Oct-07	2.0	0.0	4.0	City of Yellowknife Bailing Facility
11-Oct-07	1.0	0.0	1.0	City of Yellowknife Bailing Facility
	14.0	0.0	15.0	

Table III

## Thelon Basin Project - Water Consumption (in cubic metres)

Date	Sand Lake	G7 Drill Area.	Six Left Drill Area	Total
		WS	WS	
6-Apr-07	2.3			2.3
7-Apr-07	2.1			2.1
8-Apr-07	2.1			2.1
9-Apr-07	2.1			2.1
10-Apr-07	2.1			2.1
11-Apr-07	2.1			2.1
12-Apr-07	3.2			3.2
13-Apr-07	2.1			2.1
14-Apr-07	3.2			3.2
15-Apr-07	2.1			2.1
16-Apr-07	3.2			3.2
17-Apr-07	2.1	4.0 G1		6.1
18-Apr-07	3.2	6.0 G1		9.2
19-Apr-07	2.1	4.0 G1		6.1
20-Apr-07	3.2	8.0 G1		11.2
21-Apr-07	2.1	3.0 G1		5.1
22-Apr-07	3.2	5.0 G1		8.2
23-Apr-07	2.1	2.0 G1		4.1
24-Apr-07	3.2	3.5 G1		6.7
25-Apr-07	2.1	8.0 G1		10.1
26-Apr-07	3.2	8.0 G1		11.2
27-Apr-07	2.1	8.0 G1		10.1
28-Apr-07	3.2	8.0 G1		11.2
29-Apr-07	2.1	8.0 G1		10.1
30-Apr-07	3.2	4.0 G1		7.2
<b>April</b>	<b>63.7</b>	<b>79.5</b>	<b>0.0</b>	<b>143.2</b>
1-May-07	2.1	8.0 G1		10.1
2-May-07	3.2	8.0 G1		11.2
3-May-07	2.1	4.0 G1		6.1
4-May-07	3.2	2.0 G1		5.2
5-May-07	2.1	0.0 G1		2.1
6-May-07	3.2	0.0 G1		3.2
7-May-07	2.1	0.0 G1		2.1
8-May-07	2.1	0.0 G1		2.1
9-May-07	3.2	2.0 G1		5.2
10-May-07	2.1	6.0 G1		8.1
11-May-07	3.2	8.0 G1		11.2
12-May-07	2.1	8.0 G1		10.1
13-May-07	2.1	8.0 G1		10.1
14-May-07	3.2	8.0 G1		11.2
15-May-07	2.1	2.0 G1		4.1
16-May-07	3.2	8.0 G1		11.2
17-May-07	2.1	6.0 G1		8.1
18-May-07	2.1	8.0 G1		10.1
19-May-07	3.2	4.0 G1		7.2
20-May-07	2.1			2.1
21-May-07	2.1			2.1
22-May-07	2.1			2.1
30-May-07	2.1			2.1
<b>May</b>	<b>57.1</b>	<b>90.0</b>	<b>0.0</b>	<b>147.1</b>
7-Jun-07	2.1			2.1
14-Jun-07	3.1			3.1
21-Jun-07	4.1			4.1
28-Jun-07	5.1			5.1
<b>June</b>	<b>14.4</b>	<b>0.0</b>	<b>0.0</b>	<b>14.4</b>

Table III

## Thelon Basin Project - Water Consumption (in cubic metres)

Date	Sand Lake	G7 Drill Area.	Six Left Drill Area	Total
		WS	WS	
3-Aug-07	2.1			2.1
7-Aug-07	2.1			2.1
10-Aug-07	2.1			2.1
12-Aug-07	2.1			2.1
14-Aug-07	2.1			2.1
15-Aug-07	2.1			2.1
18-Aug-07	2.1			2.1
19-Aug-07	2.1			2.1
21-Aug-07	2.1			2.1
22-Aug-07	2.1			2.1
24-Aug-07	2.1			2.1
26-Aug-07	2.1			2.1
28-Aug-07	2.1			2.1
30-Aug-07	2.1			2.1
<b>August</b>	<b>29.4</b>	<b>0.0</b>	<b>0.0</b>	<b>29.4</b>
2-Sep-07	2.1			2.1
3-Sep-07	0.0			0.0
4-Sep-07	2.1			2.1
5-Sep-07	0.0			0.0
6-Sep-07	2.1			2.1
7-Sep-07	2.1			2.1
8-Sep-07	0.0	2.0 G2		2.0
9-Sep-07	2.1	8.0 G2		10.1
10-Sep-07	0.0	8.0 G2		8.0
11-Sep-07	2.1	6.0 G2		8.1
12-Sep-07	2.1	6.0 G2		8.1
13-Sep-07	0.0	8.0 G2		8.0
14-Sep-07	2.1	6.0 G2		8.1
15-Sep-07	2.1	4.0 G2		6.1
16-Sep-07	2.1	8.0 G2		10.1
17-Sep-07	2.1	8.0 G2		10.1
18-Sep-07	2.1	0.0 G2		2.1
19-Sep-07	2.1	0.0 G2		2.1
20-Sep-07	2.1		8.0 S1	10.1
21-Sep-07	2.1		8.0 S1	10.1
22-Sep-07	2.1		8.0 S1	10.1
23-Sep-07	2.1		8.0 S1	10.1
24-Sep-07	2.1		8.0 S1	10.1
25-Sep-07	2.1		8.0 S1	10.1
26-Sep-07	0.0		0.0 S1	0.0
27-Sep-07	0.0		8.0 S1	8.0
28-Sep-07	0.0		4.0 S2	4.0
29-Sep-07	0.0		8.0 S2	8.0
30-Sep-07	2.1		8.0 S2	10.1
<b>September</b>	<b>42.0</b>	<b>64.0</b>	<b>76.0</b>	<b>182.0</b>
1-Oct-07	2.1		8.0 S2	10.1
2-Oct-07	2.1		4.0 S2	6.1
4-Oct-07	2.1			2.1
5-Oct-07	2.1			2.1
<b>October</b>	<b>8.4</b>	<b>0.0</b>	<b>12.0</b>	<b>20.4</b>
<b>Annual</b>	<b>215.0</b>	<b>233.5</b>	<b>88.0</b>	<b>536.5</b>
<b>Average Daily Use*</b>	<b>1.4</b>	<b>5.2</b>	<b>6.8</b>	<b>3.4</b>

7 days of camp occupancy

\* 58 days of drilling



## Photographs



**Sand Lake Camp – April 2007 – Under Construction**



**Sand Lake Camp – April 2007 – View from West Ice Strip**



**Sand Lake Camp – April 2007 – Building Tents**



**Sand Lake Camp – April 2007 – Building the Core Shack**



**Ice Strip Northeast of Sand Lake Camp**



**Water Source for Sand Lake Camp – April 2007**

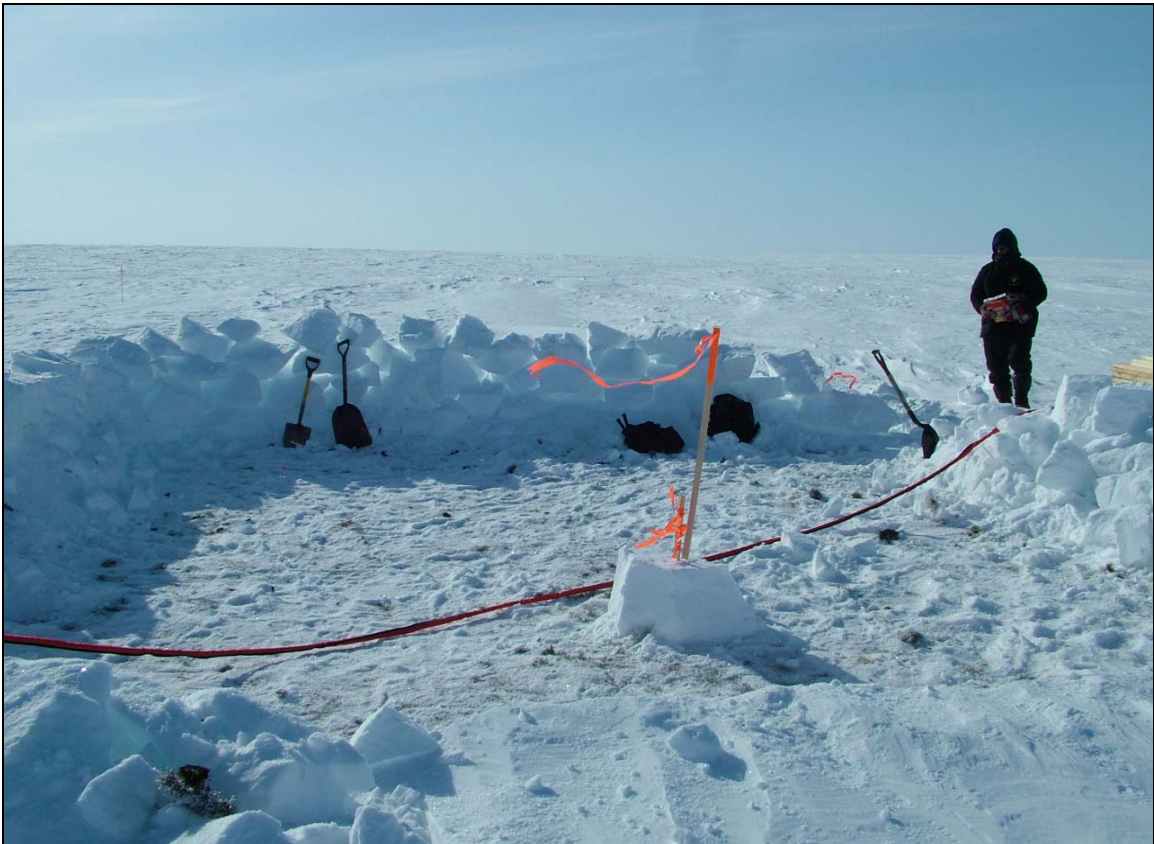




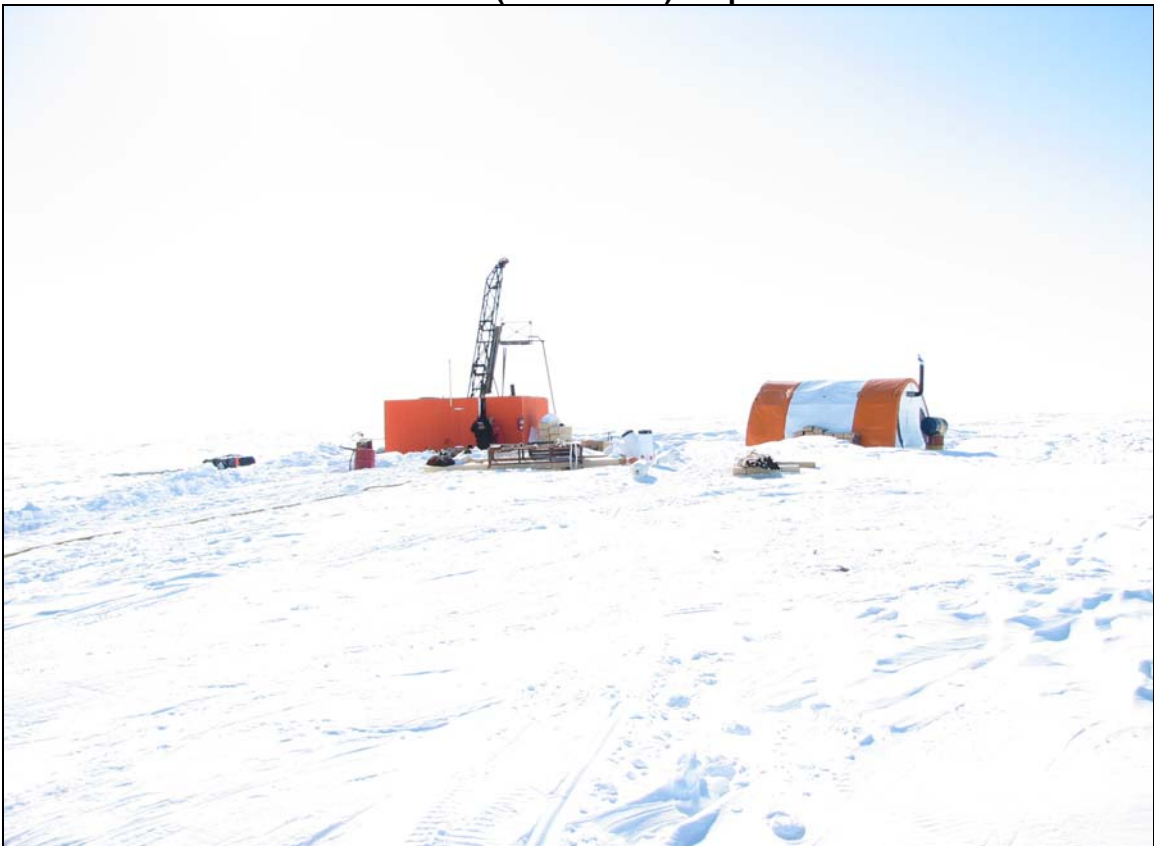
**Sand Lake Camp – August 2007**



**Sand Lake Helipad & Fuel Berms – October 2007**



**Drill Area G7 (Drill Site #1) – April 2007**



**Drill Area G7 (Drill Hole 1) – April 2007**





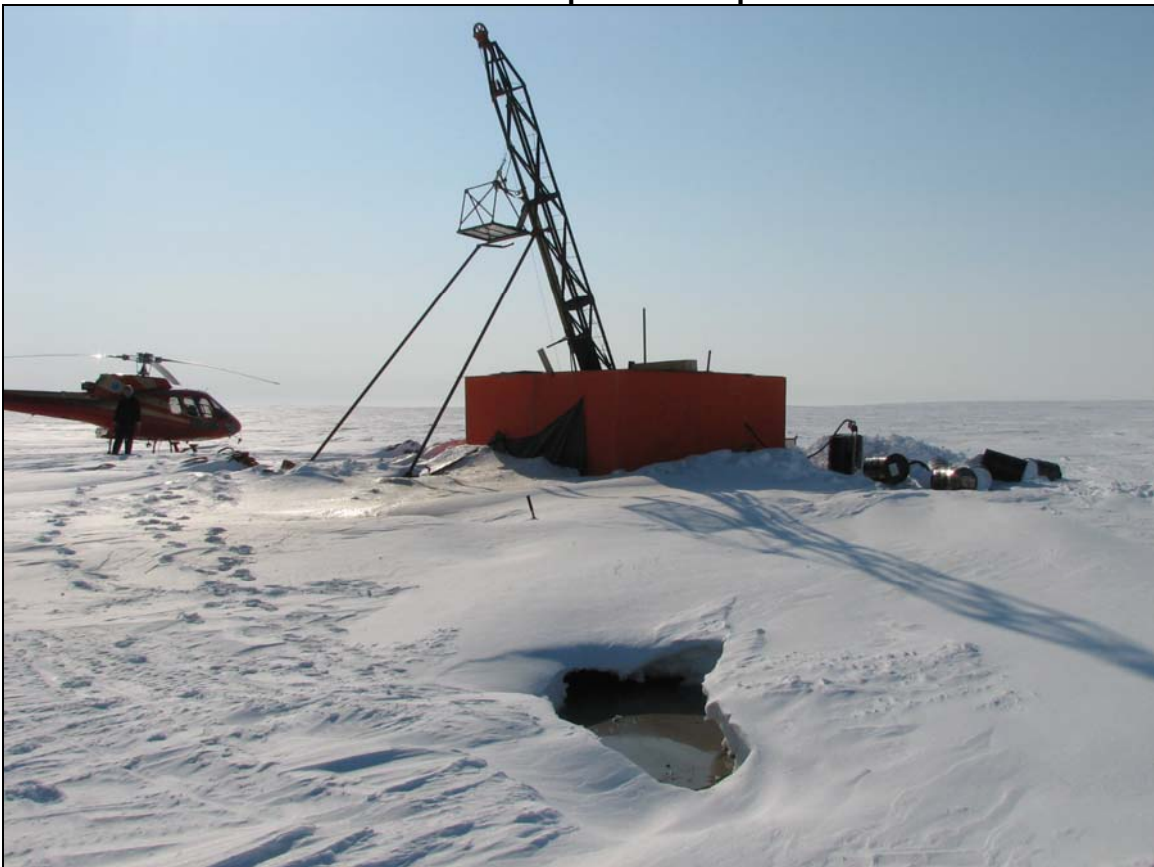
**Drill Area G7 (Holes 1 & 2)– August 2007 – Reclamation**



**Drill Area G7 (Holes 1 & 2) – August 2007 - Reclamation**



**Drill Area G7 - Pump House – April 2007**



**Drill Area G7 (Drill Hole 4) Sump – April 2007**



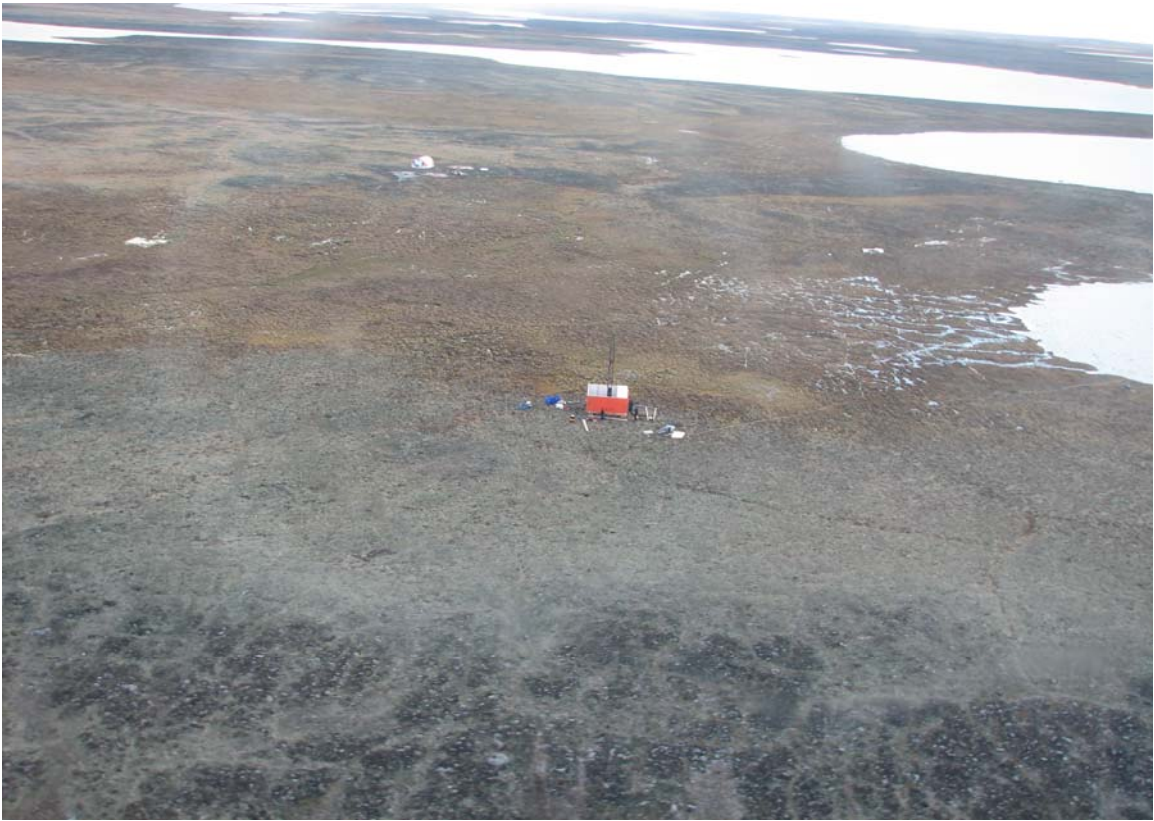


**Drill Area G7 (Holes 3 & 4) – August 2007 – Reclamation**

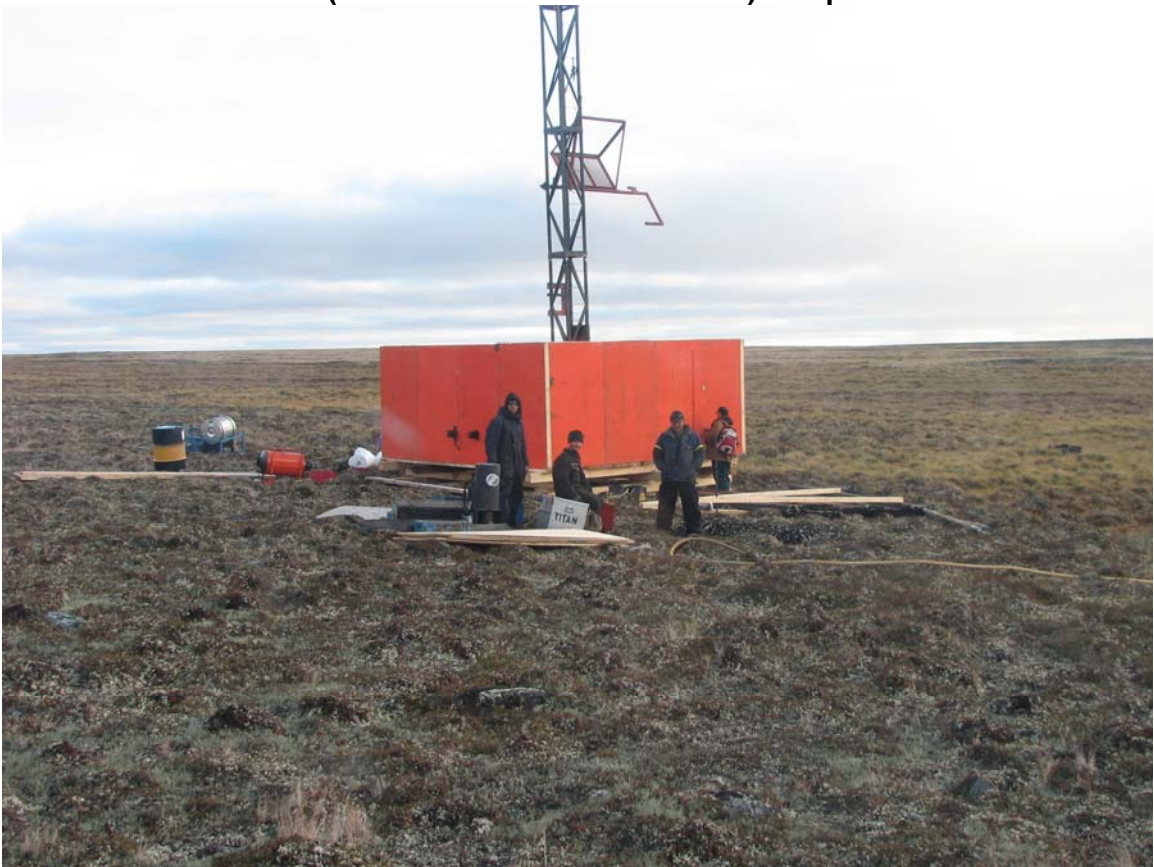


**Drill Area G7 (Holes 3 & 4) – August 2007 – Reclamation**





**Drill Area G7 (Hole 5 and Hole 1 Site at Tent) – September 2007**



**Drill Area G7 (Hole 5) – September 2007**



**Area 6L (Drill Hole 8) – September 2007**



**Area 6L (Drill Hole 8) – October 2007**



**Area 6L (Drill Hole 8) – October 2007**



**End of the 2007 Season**

## Appendix I



# INDUSTRIAL WATER USE INSPECTION REPORT

DATE: August 16, 2007 COMPANY REP.: DOUGLAS R BOWDEN  
 LICENSEE: Western Uranium Corporation LICENCE #: 2BE-SAN0709

## WATER SUPPLY

Source: Sand Lake Quantity Used: \_\_\_\_\_ Meter Rdg.: \_\_\_\_\_

Indicate:	A - Acceptable	U- Unacceptable	N/A - Not Applicable
Intake Facilities	<u>A</u>	Storage Structures	<u>A</u>
Flow Meas. Device	_____	Conveyance Lines	<u>A</u>
		Treatment Systems	<u>A</u>
		Pumping Stations	<u>A</u>
		Recycling Modifications	_____

Comments: \_\_\_\_\_

## WASTE DISPOSAL

Tailings: Tailings Pond ☐ Natural Lake ☐ Underground ☐

Sewage: Sewage Treat. System ☐ Tailings Pond ☐ Natural Water Body ☐  
 Continuous Discharge ☐ Inter.Dischg. ☐

Solid Waste: Open Dump ☐ Landfill ☐ Burn & Bury ☒ Underground ☐

Indicate:	A - Acceptable	U- Unacceptable	N/A - Not Applicable
Discharge Quality	_____	Conveyance Lines	_____
Decant Structures	_____	Pond Treatment	_____
Dyke Inspections	_____	Runoff Diversion	_____
		Disch. Meas. Dev.	_____
		Dams, Dykes	_____
		Erosion	_____
		Freeboard	_____
		Seepages	_____
		Spills	_____

Effluent Discharge Rate: \_\_\_\_\_ Samples Collected: Yes, TNAC

Comments: \_\_\_\_\_

## GENERAL CONDITIONS

Indicate:	A - Acceptable	U- Unacceptable	N/A - Not Applicable
Ore & Waste Rock Stockpiles	_____	Records & Reporting	_____
Geotechnical Inspection	_____	Posting, Signage	_____
Restoration Activities	_____	New Construction	<u>A</u>
Mine Water Discharge	_____	Chemical Storage	<u>A</u>
		Surv. Net. Prog.	_____
		Contingency Plan	<u>A</u>
		Fuel Storage	<u>A</u>
		Annual Report	_____

Comments: \_\_\_\_\_

Violations of Act or Licence: \_\_\_\_\_

General Comments: Absorbent pads should be installed on the fuel drums by tent.  
All fittings should be covered and monitored for leakage on regular basis

Page 2 attached ☐ Yes ☒ No

PROJECT MANAGER  
 Licensee Representative's Title

David Nungeorgan  
 Inspector's Name