

DENISON MINES CORP.

Form 6-K

April 25, 2007

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
FORM 6-K  
Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16  
of the Securities Exchange Act of 1934**

**Date: April 23, 2007**

**Commission File Number: 001-33414**

**Denison Mines Corp.**

(Translation of registrant's name into English)

Atrium on Bay, 595 Bay Street, Suite 402, Toronto, Ontario M5G 2C2

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

**Note:** Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

**Note:** Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's home country), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes  No

If  Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-

\_\_\_\_\_

**TABLE OF CONTENTS**

Signatures

EXHIBIT INDEX

**Signatures**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**Denison Mines Corp.**

*/s/ Sheila Colman*

Date: April 23, 2007

Sheila Colman  
Canadian Counsel and Corporate  
Secretary

2

---

EXHIBIT INDEX

Exhibit Number	Description
1	Technical Report on the Uranium Exploration Properties in Mongolia dated February 27, 2007
2	Consent to filing of Technical Report
3	Consent to filing of Technical Report
4	Code of Ethics

**TECHNICAL REPORT ON THE  
URANIUM EXPLORATION  
PROPERTIES IN MONGOLIA**

**PREPARED FOR  
DENISON MINES CORP.**

**NI 43-101 Report**

**Authors:**

**Neil N. Gow, P. Geo.**

**Thomas C. Pool, P.E.**

**February 27, 2007**

---

**SCOTT WILSON RPA****TABLE OF CONTENTS**

	PAGE
1 SUMMARY	1-1
2 INTRODUCTION AND TERMS OF REFERENCE	2-1
3 RELIANCE ON OTHER EXPERTS	3-1
4 PROPERTY DESCRIPTION AND LOCATION	4-1
Gurvan Saihan Joint Venture	4-1
Wholly Held Denison Properties	4-7
5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	5-1
6 HISTORY	6-1
7 GEOLOGICAL SETTING	7-1
Regional Geology	7-1
Local Geology	7-1
Property Geology	7-2
8 DEPOSIT TYPES	8-1
9 MINERALIZATION	9-1
General	9-1
Choir Depression	9-1
Hairhan Depression	9-6
10 EXPLORATION	10-1
11 DRILLING	11-1
Gurvan Saihan Joint Venture	11-1
12 SAMPLING METHOD AND APPROACH	12-1
13 SAMPLE PREPARATION, ANALYSES AND SECURITY	13-1
14 DATA VERIFICATION	14-1
15 ADJACENT PROPERTIES	15-1
16 MINERAL PROCESSING AND METALLURGICAL TESTING	16-1

General	16-1
Haraat Deposit	16-2
Hairhan Deposit	16-2
17 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES	17-1
General Statement	17-1
Database	17-1

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

	PAGE
Resource Estimation	17-2
Classification	17-6
18 OTHER RELEVANT DATA AND INFORMATION	18-1
19 INTERPRETATION AND CONCLUSIONS	19-1
20 RECOMMENDATIONS	20-1
21 REFERENCES	21-1
22 SIGNATURE PAGE	22-1
23 CERTIFICATE OF QUALIFICATIONS	23-1
Neil N. Gow	23-1
Thomas C. Pool	23-3

**LIST OF TABLES**

	PAGE
Table 1-1 Haraat Historical Mineral Resource Estimate	1-5
Table 1-2 Hairhan Current Mineral Resource Estimate	1-6
Table 1-3 Recommended Program	1-7
Table 4-1 Pre-1997 Gurvan Saihan Joint Venture Properties	4-4
Table 4-2 Post-1997 Gurvan Saihan Joint Venture Properties	4-5
Table 4-3 Wholly Owned Denison Properties	4-7
Table 6-1 Historical Mineral Resources, Haraat Deposits	6-4
Table 9-1 Dimensions of Smaller Choir Depression Uranium Deposits	9-2
Table 9-2 South Block Sand Packages	9-7
Table 9-3 North Block Sand Packages	9-7
Table 11-1 Drilling by Property and Year	11-1
Table 11-2 Drilling by Location and Type	11-1
Table 11-3 GSV Drilling in 2005 and 2006	11-2
Table 11-4 IUM Drilling in 2006	11-2
Table 17-1 Hairhan Mineral Resource Estimate	17-1
Table 17-2 Hairhan Mineral Resource Estimate	17-7
Table 19-1 Haraat Historical Mineral Resource Estimate	19-2
Table 19-2 Hairhan Current Mineral Resource Estimate	19-2
Table 20-1 Recommended Program	20-2



SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

**LIST OF FIGURES**

	PAGE	
Figure 4-1	General Location Map	4-6
Figure 9-1	Haraat N-2 Uranium Deposit	9-3
Figure 9-2	Haraat N-2 Deposit Vertical Cross Section A-A	9-4
Figure 9-3	Haraat Uranium Mineralization	9-5
Figure 9-4	Hairhan Depression Regional Map	9-9
Figure 9-5	Hairhan Depression Generalized Activity Map	9-10
Figure 9-6	Hairhan Uranium Deposit Geologic Cross section, Profile P-156	9-11
Figure 14-1	Comparison of Chemical Assays and Gamma Log Interpretation Values Hairhan Deposit	14-2
Figure 14-2	Typical Downhole Comparison Hairhan Deposit	14-3
Figure 17-1	Hairhan Uranium Deposit, Thickness Contour Map for F7.5 to F08	17-4
Figure 17-2	Hairhan Uranium Deposit, GT Contour Map for F7.5 to F08	17-5

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**1 SUMMARY**

Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA) has been retained by Denison Mines Corp. (Denison) to prepare an independent technical report on Denison's uranium properties in Mongolia. This report is prepared to conform to National Instrument 43-101 and Form 43-101F1. The report is required for corporate purposes and to report a mineral resource estimate on the Hairhan property.

The Denison properties containing historical and current mineral resources were visited in September 2005. Discussions were held with company personnel, and Denison reports and databases were examined. Available published geological reports considered to be pertinent were examined.

Denison has a significant mineral land position in Mongolia. Denison is part of a joint venture, the Gurvan Saihan Joint Venture (GSJV), with the Government of Mongolia (through the Ministry of Industry and Trade) and Concern Geologorazvedka, a Russian state organization for uranium exploration and development. Denison holds a 70% interest in the GSJV. The GSJV holds four exploration licences that were obtained under a Mineral Agreement with the Government of Mongolia prior to the introduction of the 1997 Mineral Law.

The original GSJV licences have an area of 671,314 ha. The GSJV also holds two exploration licences, totaling 78,849 ha, which are subject to the 1997 Mineral Law. In addition, Denison has five exploration licences, held through its Mongolian affiliate International Uranium Mongolia XXK (IUM), with an aggregate area of 322,580 ha.

Scott Wilson RPA has been advised that Denison is in full compliance with Mongolian laws and regulations in regard to all of its properties.

Mongolia is a large landlocked country with an area of about 1,566,000 km<sup>2</sup>. The southern third of the country is dominated by the Gobi Desert. Much of the area in which

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

Denison is working is more correctly termed desert steppe and supports nomadic herdsmen. Access to most of the southern part of the country is easy, although distances may be significant. The resident population of Mongolia is about 2.4 million. Overall, there are few resources necessary for mine development in the area of the Denison properties.

Mongolia has a long history of uranium exploration commencing with joint Russian and Mongolian expeditions from 1943 to 1957. Initial success was obtained in northeastern Mongolia (Dornod and Gurvanbulag regions) where uranium is present in volcanogenic sediments. In 1955, exploration for uranium commenced in the Choir Depression. Regional scale drilling was completed in 1988-1989. In addition to providing depression-wide stratigraphic profiles, the drilling confirmed the presence of continuous, shallow uranium mineralization in sands, siltstones, claystones, and coal of the Dzuunbayan Formation in the Haraat area. Once identifiable deposits were located, detailed drilling was conducted to delineate resources. More than 1,000 holes, totaling approximately 47,000 m, were drilled in the late 1980s. The work is considered to have established the favourability of the sedimentary basins of the Gobi region as hosts for uranium deposits.

Following the formation of the GSJV in January 1994, work was recommenced in the Haraat area. The focus of this work was to identify mineralization amenable to In Situ Recovery (ISR) production methodology. A further 8,430 m of drilling was completed in 1994. A small ISR field test was completed on the Haraat mineralization in 1994. While significant tonnages of mineralization were identified in the Haraat area, detailed drilling showed that more than 70% of the mineralization was located above the water table, a difficult situation for ISR production. Part of the tested tonnage below the water table is included in the historical mineral resource of the Haraat property.

There was a major escalation of work in 1996 with the focus on the Choir Depression. Additional mineralization, lying both above and below the water table, was identified. Exploration drilling was carried out in the Gurvan Saihan and Hairhan Depressions also.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

One hole in the Hairhan Depression intersected 14 m grading 0.144% U within what would become the Hairhan deposit. The GSJV also built an ISR Pilot Plant at Haraat capable of handling 20 m<sup>3</sup>/hr. The GSJV established that recovery of mineralization was possible, although further work is required to confirm the economic viability of the process.

In 1997, testing confirmed the Hairhan discovery and further exploration drilling was completed in the Choir, Hairhan, and Ulziit Depressions. Exploration drilling was continued in 1998 and an initial ISR leach test was completed successfully at Hairhan. Declining uranium prices led to a curtailment of work in 1999, but intensive exploration work has resumed in recent years.

With the resurgence of world market uranium prices beginning in 2003, Denison resumed uranium exploration activity in Mongolia. Following acquisition of several exploration licences, both for the GSJV and for Denison's sole interests, prospecting and mapping work began in 2004. In 2005, reconnaissance drilling totaling 34,000 m was conducted in five licence areas where previous prospecting work and radiometric surveys had identified uranium anomalies. In 2006, Denison further expanded its exploration efforts, which included drilling approximately 44,000 m on GSJV licences and 12,000 m on IUM licences.

The targets of Denison's exploration in Mongolia are uranium deposits amenable to ISR recovery techniques. Exploration has been concentrated in internal basins or depressions in southern Mongolia that contain Cretaceous age sediments. These basins are filled mainly with clastic sediments that are locally up to 1,500 m thick.

The GSJV has identified and estimated mineral resources for five separate deposits in the Haraat area and a significant deposit in the Hairhan area. All of the historical mineral resources reported in the Haraat area are located below the water table. Mineralization is typically uraninite with smaller amounts of coffinite. The uranium deposit in the Hairhan

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

area occurs as stacked horizons within an area of about 1,500 m by 2,000 m and is located below the water table.

In the period 1994 to 1998, the GSJV completed 147,058 m of drilling. Most of the drilling was rotary non-core, but about 10% was rotary core drilling. Drilling was carried out by Geologorazvedka working as a general contractor under the supervision of Denison staff. Since the recommencement of work, exploration is being carried out by various local contractors under the direct supervision of Denison staff. Holes are logged using Mount Sopris equipment (U.S. manufacture), although Russian analog equipment had been used in exploration completed prior to the formation of the GSJV. When samples are taken, the core is split by hand. Sample lengths range from 0.2 m to 0.9 m, but are typically 0.2 m to 0.3 m in length.

In the work conducted in the 1990s, samples were transported to the camp near Haraat, where they were crushed to -200, +300 size and transported to the Central Analytical Laboratory (CAL) of Sosnovgeology in Irkutsk, Russia. CAL is registered by the Russian Federation and is certified to standard N 41083-95. Analyses were carried out for U and Th and a package of 26 elements by X-ray fluorescence. Fe, S, CO<sub>2</sub>, and C were analyzed by wet chemical methods. Specific gravity readings were completed by CAL in later years, although for the 1994 drilling, physical properties of the Haraat samples were determined by Irkutsk State Technical University. Both laboratories are reported to maintain internal quality control programs.

At the time that the GSJV program was wound up, all core samples were buried as part of a clean-up program to prevent any future problems. During the site visits by Scott Wilson RPA in 2005, no core samples were available from the new drilling for duplicative testing. Therefore, no check sampling has been completed in regard to this technical report.

For work presently in progress, samples are prepared in Mongolia at SGS Mongolia XXK, a subsidiary of SGS Analabs, an ISO-accredited Australian company. Laboratory

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

analytical work continues to be conducted at CAL and at the State Technical University in Irkutsk.

The GSJV has completed initial testing to determine the amenability of both the Haraat and Hairhan deposits to ISR recovery. While the tests remain incomplete, it is considered that standard ISR recovery using acid leach will be effective in recovering uranium in both deposits.

Historical mineral resource estimates were prepared for the Haraat deposits in 1997 and 1998, as listed in Table 1-1, for mineralization below the water table. The methodology for the Haraat resource estimate is considered to be reliable and relevant. These mineral resources were classified using the Russian system as C1 and C2. Scott Wilson RPA considers the mineral resources in the Haraat area to be equivalent to inferred under the CIM definition standards.

**TABLE 1-1 HARAAT HISTORICAL MINERAL RESOURCE ESTIMATE**  
**Denison Mines Corp. Mongolia Properties**

Category	Tonnes x10 <sup>6</sup>	Grade %U	Average	
			Thickness (m)	Tonnes U
Inferred Resources	10.60	0.023	1.2 to 12.2	2,461

Notes: 1. These historical mineral resources are not compliant with NI 43-101.

2. Cut-off grade is 0.01% U.

Scott Wilson RPA has estimated mineral resources for the Hairhan property as summarized in Table 1-2. This current estimate supersedes the 1998 historical estimate by Denison. The Hairhan mineral resource has been estimated using the contour method and is based on the Denison drill hole database, which has been reviewed and accepted. The cut-off is 0.1 m-% (Grade x Thickness, or GT) over a minimum of one metre. The average thickness of the indicated resources is 5.2 m and of the inferred resources is 5.7 m.

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

**TABLE 1-2 HAIRHAN CURRENT MINERAL RESOURCE ESTIMATE**  
**Denison Mines Corp. Mongolia Properties**

<b>Category</b>	<b>Tonnes x10<sup>3</sup></b>	<b>Grade % U</b>	<b>Tonnes U</b>	<b>lb U<sub>3</sub>O<sub>8</sub>, x10<sup>3</sup></b>
Indicated	4,726	0.064	3,036	7,891
Inferred	1,848	0.073	1,341	3,484

- Notes.
1. Cut-off grade  
0.02% U
  2. Minimum  
Thickness 1 m
  3. Density 1.65  
tonnes/m<sup>3</sup>

Scott Wilson RPA considers the Denison uranium properties in Mongolia to be of sufficient merit to justify the programs recommended below.

Denison is continuing exploration programs on a number of properties which are at various stages of assessment as exploration targets, as discussed below.

Exploration licences were acquired in 2005 and 2006, and reconnaissance drilling was conducted during those two years to evaluate targets generated from earlier prospecting work. As a result of reconnaissance drilling, several licence areas have been released, and follow up drilling is required on remaining areas with favourable targets.

IUM exploration licences in west central Mongolia are now ready for reconnaissance drilling.

For more advanced properties such as Haraat and Hairhan, the focus shifts to detailed exploration to quantify the mineral resources and to determine the technological parameters necessary for possible ISR exploitation. Continued success would lead to extensive studies of geochemical and metallurgical amenability and pilot plant testing.

Confirmation drilling should be conducted on the Haraat deposits to bring the historical resources to current status and a preliminary assessment of the potential for open pit mining.

At the present time, the various Denison properties are at different stages of testing. Two properties have been advanced beyond pilot plant testing. As uranium exploration has been expanded, new properties have been acquired. The older GSJV properties have received initial reconnaissance exploration.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

The proposed program for 2007 is set out in Table 1-3.

**TABLE 1-3 RECOMMENDED PROGRAM**  
**Denison Mines Corp. Mongolia Properties**

<b>GSJV Properties</b>	22,000 m of resource delineation, core and hydrogeological drilling in the Hairhan Depression. 5,000 m of exploration drilling in the Hairhan Depression to test deep targets. 6,000 m of resource delineation, core and hydrogeological drilling in the Haraat deposits in the Choir Depression 22,000 m of exploration and resource delineation drilling in the Choir Depression. 13,000 m of rotary mud and core drilling in the Urt Tsav target area.
<b>IUM Properties</b>	15,000 m of rotary mud and core drilling on the two Western licence groups.

The total budget for this work is US\$7.0 million.

Denison is continuing its exploration program for uranium resources that are amenable to ISR treatment. Ongoing exploration is not dependent on the results of the recommended program. For this reason, no Stage 2 program is included at this time.



**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

## **2 INTRODUCTION AND TERMS OF REFERENCE**

Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA) has been retained by Denison Mines Corp. (Denison) to prepare an independent technical report on Denison's uranium properties in Mongolia. This report is prepared to conform to National Instrument 43-101 and Form 43-101F1. The report is required for corporate purposes and to report a mineral resource estimate on the Hairhan property.

Denison is exploring in Mongolia through a number of wholly owned subsidiary companies. The term Denison refers to both the parent company and the various subsidiaries. Denison Mines Corp. was formed by the business combination of International Uranium Corporation (IUC) and Denison Mines Inc. Initial work in Mongolia was by Energy Fuels Exploration Company (Energy Fuels), which was acquired by IUC in 1997, and by IUC from 1997 to 2006. IUC is referred to as Denison throughout this report.

The Denison properties are generally located in central Mongolia. Uranium is the major target of interest, and specifically uranium deposits that are amenable to In Situ Recovery (ISR) technology. The company has discovered a number of such deposits in closed basins.

Mr. Neil N. Gow, P.Geol., Associate Consulting Geologist with Scott Wilson RPA, visited Mongolia on September 10-15, 2005. The sites of the major deposits, and the areas in which trial leaching tests were completed, were visited on September 12, 2005.

This report is based on company reports, discussions with company personnel, on publicly available reports and maps, and on a current resource estimate for the Hairhan uranium deposit.

**SCOTT WILSON RPA**

[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)

The various projects of Denison discussed in this report are all considered ongoing exploration projects. None of the headings under Item 25 of Form 43-101F1 are included in this report because none of the properties are considered to be development or production properties at this time.

**LIST OF ABBREVIATIONS**

Metric units and United States dollars are used throughout this report, unless otherwise stated.

μ	micron	kPa	kilopascal
°C	degree Celsius	kVA	kilovolt-amperes
°F	degree Fahrenheit	kW	kilowatt
μg	microgram	kWh	kilowatt-hour
A	ampere	L	litre
a	annum	L/s	litres per second
bbl	barrels	m	metre
Btu	British thermal units	M	mega (million)
C\$	Canadian dollars	m <sup>2</sup>	square metre
cal	calorie	m <sup>3</sup>	cubic metre
cfm	cubic metres per minute	mi	mile
cm	centimetre	min	minute
cm <sup>2</sup>	square centimetre	MASL	metres above sea level
d	day	mm	millimetre
dia	diameter	mph	miles per hour
dmt	dry metric tonne	MVA	megavolt-amperes
dwt	dead-weight ton	MW	megawatt
ft	foot	MWh	megawatt-hour
ft/s	foot per second	m <sup>3</sup> /h	cubic metres per hour
	square foot	opt,	ounce per short ton
ft <sup>2</sup>		oz/st	
ft <sup>3</sup>	cubic foot	oz	Troy ounce (31.1035g)
g	gram	oz/dmt	ounce per dry metric tonne
G	giga (billion)	ppm	part per million
Gal	Imperial gallon	psia	pound per square inch absolute
g/L	gram per litre	psig	pound per square inch gauge
g/t	gram per tonne	RL	relative elevation
Gpm	Imperial gallons per minute	s	second
gr/ft <sup>3</sup>	grain per cubic foot	st	short ton
gr/m <sup>3</sup>	grain per cubic metre	stpa	short ton per year
hr	hour	stpd	short ton per day
ha	hectare	t	metric tonne
hp	horsepower	tpa	metric tonne per year
in	inch	tpd	metric tonne per day
in <sup>2</sup>	square inch	US\$	United States dollar
J	joule	USg	United States gallon
k	kilo (thousand)	USgpm	US gallon per minute
kcal	kilocalorie	V	volt
kg	kilogram	W	watt

Edgar Filing: DENISON MINES CORP. - Form 6-K

km	kilometre	wmt	wet metric tonne
km/h	kilometre per hour	yd <sup>3</sup>	cubic yard
km <sup>2</sup>	square kilometre	yr	year
		2-2	

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

**3 RELIANCE ON OTHER EXPERTS**

This report has been prepared by Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA) for Denison Mines Corp. (Denison). The information, interpretations, conclusions, opinions, and recommendations contained herein are based upon:

Information available to Scott Wilson RPA at the time of preparation of this report,

Assumptions, conditions, and qualifications as set forth in this report, and

Data, reports, and opinions supplied by Denison and other third party sources listed as references. Scott Wilson RPA does not guarantee the accuracy of conclusions, opinions, or estimates that rely on third party sources for information that is outside the areas of technical expertise of Scott Wilson RPA.

Scott Wilson RPA relied on Denison for information regarding the current status of legal title and property agreements. Scott Wilson RPA has not investigated legal title to the properties or the status of the necessary permitting.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

#### **4 PROPERTY DESCRIPTION AND LOCATION**

Denison and its predecessor companies, IUC and Energy Fuels, have been active in Mongolia for more than ten years and initial exploration commenced prior to the promulgation of the 1997 Minerals Law of Mongolia. Property holdings are divided into four groups:

Properties obtained prior to the 1997 Minerals Law and held within the Gurban Saihan Joint Venture (GSJV).

Exploration licences acquired by GSJV since 1997 that are subject to the Minerals Law.

Wholly owned properties of Denison, held by its wholly owned subsidiary International Uranium Mongolia XXK (IUM), are subject to the Minerals Law.

#### **GURVAN SAIHAN JOINT VENTURE PROPERTIES OBTAINED PRIOR TO 1997**

The GSJV was formed in 1994 by Energy Fuels, the Government of Mongolia (currently represented by the Ministry of Industry and Trade of Mongolia), and Geologorazvedka, a Russian state organization for uranium exploration and development. The formation of the joint venture is codified in the Founding Agreement. Denison, through a wholly owned Mongolian subsidiary, acquired the Energy Fuels interest in 1997. Denison currently holds a 70% interest in the GSJV and the Mongolian and Russian participants each hold a 15% interest. Denison is the Managing Director of the GSJV.

The initial properties obtained by the GSJV were granted under a Mineral Agreement with the Government of Mongolia. The Mineral Agreement grants properties exclusively to the GSJV, and establishes the fiscal and operating policies under which the GSJV operates. Under the Founding Agreement between the respective partners and the Mineral Agreement, each of the partners was required to contribute to the venture. The foreign investor was required to provide 100% of the funding until a total of US\$4

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

million had been invested. For various reasons, this level was raised to US\$5.1 million in 1997.

Major undertakings by the joint venture partners under the Founding Agreement were as follows:

The Government of Mongolia granted exclusive rights and permits to five areas without obligations for further licensing fees. This includes the obligation of the Government to provide all necessary authorizations, permits, and licences needed by the joint venture to conduct business.

The Russian participant contributed all of the exploration data, records, and information it possessed for the five areas.

Energy Fuels was obligated to provide 100% of venture funding until the predetermined total had been reached (as noted above, initially it was US\$4 million that then changed to US\$5.1 million).

The Russian partner was also retained by the GSJV as General Contractor to provide technical staff and equipment for the GSJV's programs. The group was experienced in ISR uranium exploration, and had a depth of experience in Mongolia.

The key provisions and terms of the Mineral Agreement between the GSJV and the Mongolian Government include:

Exclusive rights were granted to the GSJV for five areas for a period of 15 years, commencing in 1994.

When Mongolia enacts new laws, the GSJV will not be subject to conditions, restrictions, taxes, or fees more severe than those effective at the time of approval of the Mineral Agreement.

No areas included in the Mineral Agreement can later be designated as closed, restricted, or open to competitive bidding as long as the Mineral Agreement is in effect.

After the first four years of work, the venture may identify certain lands which are no longer of exploration interest and may release such lands from the Mineral Agreement.

The GSJV and the Mongolian Government will negotiate a procedure and a schedule to release any such lands from the Mineral Agreement.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

The initial funding obligation by Energy Fuels was to be fulfilled within four years in accordance with a schedule in the Mineral Agreement.

After the initial funding of the first US\$4 million (subsequently changed to US\$5.1 million) of GSJV expenditures, funding will be on the basis of equity share in the GSJV, and each partner will receive its equity share of net proceeds from mining operations.

Each participant is required to fund its own share of GSJV expenditures.

If a participant fails to fund its share of expenditures, such participant will be suspended from participating in the business and management of the venture, and will give up its rights to its share of profits until the participant providing funding on behalf of any non-funding participant has recovered from net profits of the venture an amount equal to 150% of contributions made on behalf of the non-funding participant.

Specific tax provisions for the GSJV are defined.

Participants cannot assign their interest to another party without the written consent of the other participants.

The Government of Mongolia acknowledges that its 15% interest in the GSJV is its entire interest, and Mongolia will receive a production royalty of 4% and cannot take a greater interest or impose a greater royalty in the future.

The GSJV is entitled to apply to receive benefits or favourable provisions under new laws which contain terms or conditions that are more favourable to the GSJV than the conditions existing when the Mineral Agreement was approved.

Subsequent to the formation of the GSJV, Mongolia enacted the Mineral Law of Mongolia. The Mineral Law contains some conditions and provisions that are not consistent with the Mineral Agreement. However, the Mineral Agreement has been recognized as an International Agreement under the Mineral Law and any inconsistencies between the Mineral Law and the Mineral Agreement have, thus far, been resolved in favour of the provisions of the Mineral Agreement.

Under the Mineral Agreement, the GSJV was granted title to five geological depressions named Choir, Gurvan Saihan, Hairhan, Undurshill, and Ulziit. The GSJV has relinquished title to all of the Undurshill Depression and has reduced its holdings in

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

parts of the other depressions. Table 4-1 lists the four remaining exploration areas and their respective sizes.

**TABLE 4-1 PRE-1997 GURVAN SAIHAN JOINT VENTURE PROPERTIES**  
**Denison Mines Corp. Mongolia Properties**

<b>Property Name</b>	<b>Licence No.</b>	<b>Area (Ha)</b>	<b>Issue Date</b>
Hairhan	1017X	164,351	February 24, 1998
Gurvan Saihan	1018X	54,676	February 24, 1998
Choir	1021X	137,339	February 24, 1998
Ulziit	1068X	314,948	March 19, 1998
<b>Totals</b>		<b>671,314</b>	

The general location of the above four properties is shown in Figure 4-1.

#### **POST-1997 EXPLORATION LICENCES**

The GSJV has conducted reconnaissance in areas of past historical exploration in Mongolia. Based on this past work in prospective uranium areas, additional licences have been obtained by the GSJV. As these properties are acquired under the Mineral Law of Mongolia, they are subject to the normal conditions of that Law.

The Law on Mineral Resources (the Law) was enacted in July 1997 by the Parliament of Mongolia to administer and control access to and utilization of the mineral resources of Mongolia. The Law was amended by Parliament in July 2006. The Law establishes procedures for obtaining exploration rights, which also ensures the right to obtain a mining licence to develop mineral deposits. The Law provides for payment of annual exploration licence fees and requires that local environmental approvals be obtained to conduct disturbance activities and that reclamation of exploration disturbances be performed to the satisfaction of local authorities. Prior to mining, operations and reclamation plans must be approved. The Mineral Law also provides for periods of reduced income taxes for mining operations as an inducement to attract foreign investment.



**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

The recent amendments to the Law have generally resulted in a more restrictive environment for mineral development in Mongolia. Annual exploration licence fees have been increased, although the term of exploration licences can now extend up to nine years (seven initially). Annual work commitments are now required on each exploration licence. Local authorities now have approval authority over certain aspects of licence issuance and mining and environmental rehabilitation work. Favourable income tax provisions have been eliminated, although the amended Law allows for negotiation of an Investment Agreement on a case basis, and the corporate income tax rates have been reduced. New procedures have been implemented for transfer of licences. The royalty on minerals mined has been increased from 2.5% to 5%. One of the potentially more serious amendments provides that the government of Mongolia can acquire up to 50% of any mineral deposits that were located with state funds and up to 34% of deposits that were located by private entities. This would apply to any deposits that are strategically important and are influential to national security, national and regional economy and social development. The amendments also attempt to tighten reclamation and rehabilitation obligations (largely stemming from uncontrolled and unregulated placer gold mining).

The Parliament also enacted in mid 2006 an Excess Profits Tax on copper and gold. At present this new tax is only applicable to copper and gold. This tax is under review by the government and conditions of its application may be modified to make it more acceptable to investors.

**TABLE 4-2 POST-1997 GURVAN SAIHAN JOINT VENTURE PROPERTIES**  
**Denison Mines Corp. Mongolia Properties**

<b>Property Name</b>	<b>Licence No.</b>	<b>Area (Ha)</b>	<b>Issue Date</b>
Urt Tsav	7317X	23,257	April 21, 2004
Hokh Tolgoi	7318X	55,592	April 21, 2004
<b>Totals</b>		<b>78,849</b>	

The general location of the above two properties is shown in Figure 4-1.

4-5

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

4-6

---

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com***WHOLLY HELD DENISON PROPERTIES**

Denison has acquired properties outside the main areas of the GSJV past exploration activities and current licence holdings in Mongolia. These licences were acquired under the Mineral Law of Mongolia and are subject to that Law.

**TABLE 4-3 WHOLLY OWNED DENISON PROPERTIES****Denison Mines Corp. Mongolia Properties**

<b>Property Name</b>	<b>Licence No.</b>	<b>Area (Ha)</b>	<b>Issue Date</b>
Bayankhongor	8685X	159,242	November 3, 2004
Tsagaan Ovoo	8686X	13,529	November 3, 2004
Gobiguulin	8687X	87,957	November 3, 2004
Gobiguulin-2	9051X	24,228	December 31, 2004
Gobiguulin-3	9052X	37,624	December 31, 2004
<b>Totals</b>		<b>322,580</b>	

Scott Wilson RPA is advised by Denison personnel that the company is in full compliance with the environmental laws and regulations of Mongolia.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

Mongolia is a large, landlocked country with an area of about 1,566,000 km<sup>2</sup>. The capital is Ulaanbaatar, which is located in the north central part of the country. Ulaanbaatar is the site of the only international airport in the country. The Trans-Mongolian Railway connects to the Trans-Siberian Railway in the north and the China rail system to the south.

The country of Mongolia is lozenge-shaped and is about 2,500 km east-west and about 950 km north-south. The country has an average elevation of 1,580 m.

The southern third of Mongolia is dominated by the Gobi Desert that continues southward into China. While part of the desert is true desert, much of it is classed as desert steppe and has sufficient grass to support scattered herds of sheep, goats, and camels. Much of the rest of the country is comprised of grasslands and the southern continuation of the Russian steppes. The northern margin of Mongolia is forested. Locally, high mountain ranges are present.

Since much of the country is open, vehicle access is possible to most of the areas. Distances are large, however, and roads are often poor or non-existent. The local airline, MIAT, serves about 20 communities.

The climate in Mongolia is extreme continental. Temperatures are extreme in winter (down to -50° C) and summer (up to 40° C). In Ulaanbaatar, July is the warmest and wettest month, with an average temperature of 17° C and an average rainfall of 76 mm, while January is the coldest and driest month, with an average temperature of -25° C and no precipitation. Rainfall and temperature throughout Mongolia are variable depending on elevation.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

The resident population of Mongolia is reported to be about 2.4 million. More than half of the population is urban, and there is a significant nomadic population (45% of the population in 2000). The economy is dominated by agriculture, and mining provides more than 50% of the foreign earnings. Tourism is a small but significant contributor to the national economy.

Mongolia is divided into 18 aimags (provinces) that are further subdivided into 310 soums (counties). There are also four independent municipalities that are sometimes classed as aimags (Ulaanbaatar, Darkhan-Uul, Orkhon, and Gov-Sumber), bringing the total to 22. The national parliament, the Great Hural, is unicameral and members are elected for 4-year terms.

In the areas where Denison is working, there are essentially no resources currently available for mine development.

5-2

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

## **6 HISTORY**

The following sections are based primarily on the summary prepared by Wetz (2004).

Extensive geological mapping was conducted throughout Mongolia by Russian and Mongolian expeditions between 1943 and 1957. In 1955, exploration for uranium was commenced in the Choir Depression. This early work led to the identification of numerous uranium anomalies and surficial occurrences, mainly in Cretaceous age sediments of the Dzuunbayan Formation.

In 1970, an intergovernmental agreement between Mongolia and Russia led to detailed uranium exploration funded by the state budget of the Soviet Union. Detailed geological mapping was conducted, and previously identified occurrences were evaluated by trenching and exploration drilling. Airborne gamma spectrometry surveys were conducted, with anomalous areas being flown on closer spacing.

Some of the initial success was concentrated in northeastern Mongolia where uranium mineralization is present in veins and stockworks hosted in volcanic flows and volcanogenic sediments of the Dornod and Gurvanbulag regions. The Mineral Resources Authority of Mongolia (MRAM) indicates that the proven uranium resources of Mongolia in these deposit areas are about 62,000 tonnes.

During 1988-1989, regional scale exploration drilling was commenced by Geologorazvedka in the Choir Depression, most notably in the area of the Haraat occurrences. In addition to providing depression-wide stratigraphic profiles, the early drilling confirmed the presence of large areas of continuous, shallow uranium mineralization occurring in sands, siltstones, clays, and coals of the Dzuunbayan Formation. Once identifiable deposits were located, detailed drilling was conducted to delineate resources. More than 1,000 holes, totaling approximately 47,000 m, were drilled in the late 1980s.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

The early exploration clearly established the favourability of the sedimentary basins of the Gobi region as hosts for uranium deposits. The clastic sediments and fluvial deposits were found to be suitable conduits and hosts for the formation of epigenetic uranium deposits. The depressions are surrounded by deeply weathered and dissected crystalline rocks, including granites, metamorphic rocks, and volcanic rocks; the crystalline rocks (especially the granites) are the most likely source of uranium that was subsequently accumulated in the depression sediments.

Following approval of the formation of the GSJV in January 1994, work began immediately on a field program in the summer of 1994. Since the past exploration had concentrated on the Choir Depression, this area, specifically the Haraat deposit, was the subject of the initial work. The focus of the GSJV exploration was for deposits amenable to ISR production method, and previous exploration in the Choir Depression had indicated that the deposits there might be suitable for ISR mining.

The 1994 work consisted of limited delineation drilling at Haraat to expand known resources and to increase confidence in the resources. The drilling totaled 8,430 m. A small ISR field test was run in 1994 to determine the ISR favourability of the Haraat-type mineralization.

In the Choir Depression, greater than 70% of the known mineralization with potentially economic grade occurs above the natural water table. Full saturation of the ore-bearing section is the normal condition for ISR; however, the 1994 ISR test at Haraat included leaching from both saturated and unsaturated horizons. The test demonstrated that acid ISR was applicable to the Haraat deposits, and subsequent, larger scale testing was planned.

The American participant in the GSJV, Energy Fuels was placed in bankruptcy in early 1995. As a result, the GSJV programs planned for 1995 were not carried out. Full scale work resumed in 1996.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

In 1996, the GSJV began a major escalation of exploration work. A total of 30,210 m were drilled, and 6,000 km of gamma spectrometric surveys were run. The drilling was concentrated in the Choir Depression, again mainly in the area of the Haraat deposit. This drilling resulted in addition of substantial resources, but as with the previously identified deposits, the majority of the mineralization was determined to be above the natural water table.

Initial reconnaissance drilling was conducted in the Gurvan Saihan and Hairhan Depressions in 1996, following gamma surveys which delineated favourable, anomalous trends.

The Gurvan Saihan Depression drilling, totaling approximately 3,500 m was conducted in a series of profiles along a 17.5 km anomalous radiometric trend. Uranium mineralization was encountered in all of the profiles, and in several instances ore grade mineralization was discovered. The 1996 Gurvan Saihan drilling was quite shallow; it provided initial reconnaissance information and showed that this depression was highly prospective for uranium.

Initial reconnaissance drilling in the Hairhan Depression totaled slightly over 1,000 m in 22 holes, and was conducted near the end of the 1996 field season. The drilling was in a series of profiles within a portion of a 23 km anomalous trend identified by gamma surveys. The biggest ore discovery encountered by the GSJV to that point in time was made at Hairhan. The discovery hole intersected a 14 m thick ore zone grading 0.144% U.

In 1996, substantial drilling was also conducted in the Choir Depression. The purpose of this drilling was to extend and expand the main known deposits at Haraat. The program met its objective, but as with the existing known deposits, the new resource areas detailed in 1996 tended to be quite low grade, with the majority of the mineralization occurring above the water table.



SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

In May 1997, Denison acquired the assets of Energy Fuels including its interest in the GSJV.

Historical mineral resource estimates were prepared by Geologorazvedka, as General Contractor, in 1997 and 1998 (Budunov et al., 1997b). The results of the estimates are set out in Table 6-1. All of the Haraat historical mineral resource is below the water table.

**TABLE 6-1 HISTORICAL MINERAL RESOURCES, HARAAT DEPOSITS**  
**Denison Mines Corp. Mongolia Properties**

<b>Deposit</b>	<b>Tonnes x10<sup>6</sup></b>	<b>Grade %U</b>	<b>Average Thickness (m)</b>	<b>Tonnes U</b>
N-1	1.49	0.040	12.17	600
N-2	1.24	0.038	5.59	472
<b>Subtotal</b>	<b>2.73</b>	<b>0.039</b>		<b>1,072</b>
Shar Oortsog	5.35	0.015	2.65	826
Haraat West	1.95	0.021	2.16	419
Haraat East	0.57	0.025	1.22	144
<b>Subtotal</b>	<b>7.87</b>	<b>0.018</b>		<b>1,388</b>
<b>Totals</b>	<b>10.60</b>	<b>0.023</b>		<b>2,461</b>

Notes: 1. These historical mineral resources are not compliant with NI 43-101.

2. Cut-off grade is 0.01% U.

These 1997-98 estimates are considered to be historical mineral resources under Section 2.4 of National Instrument 43-101. The methodology for the Haraat resource estimate, discussed below, is considered reliable at the level of classification specified. These mineral resources were classified as C1 (indicated) and C2 (inferred) using the Russian system. Scott Wilson RPA considers the mineral resources in the Haraat area to be equivalent to inferred. Further, because the mineral resource is potentially economic, it is considered relevant.

The methodology used for the historical mineral resource estimation at Haraat is standard in the former Soviet Union. It used Russian gamma logs from the 1988 and 1994 drilling and American gamma logs for the 1996 drilling, which were all converted to a common database and corrected for disequilibrium using the results of 1,950 core

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

sample chemical analysis. A correction was also applied for moisture content for mineralization below the water table. The resource estimate was based on polygons for each drill hole and a density factor of 1.65 tonnes per cubic metre.

Part of the Haraat deposit is above the water table and part is below. The resources below the water table are presently considered potentially exploitable by ISR methods. Mineralization above the water table requires further work to confirm its possible economic potential and is not included in the historical resource estimate.

A major part of the 1996 program was the acquisition, assembly, and operation of an ISR Pilot Plant at Haraat. This plant was a fully integrated facility, capable of producing a final product, although drying and packaging equipment were not included. The plant handled a nominal flow of 20 m<sup>3</sup>/hr, but, under optimal conditions, it could be operated at a higher rate. The Plant consisted of an ion exchange circuit, a resin desorption and regeneration circuit, a uranium precipitation circuit, and all of the necessary ancillary and support facilities.

The testing in 1996 included both a test on mineralization above the water table, as well as a test below the water table, the latter being the normal operating regime for an ISR project. Sulphuric acid was the primary leaching agent used in both tests. These tests confirmed that hydraulic control can be maintained and that uranium solubilization and mobilization can be controlled. Both tests encountered operating circumstances that pointed out the necessity to conduct further commercial scale testing at Haraat. The test above the water table is believed to be the only work of this kind that has been conducted in the world. While in-place leaching of unsaturated mineralization has been shown to be possible, further work is necessary to confirm the economic viability of this method.

Following completion of the 1996 testing, the plant was cleaned, decontaminated, surveyed, disassembled, and put in storage at the Haraat main camp. The test site has been reclaimed and all the wells have been sealed. The Pilot Plant equipment was

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

subsequently relocated from the Haraat site to a secure storage location provided by a contractor.

Work in 1997 expanded beyond the level of 1996, with efforts concentrated on drilling to define potential ore reserves and to test new exploration targets on the GSJV lands. The bulk of the 1997 drilling was in the Hairhan and Choir Depressions, with a modest amount of initial reconnaissance drilling conducted in the Ulziit Depression. The Ulziit drilling followed gamma spectrometric surveys to identify favourable locales. No ISR testing was conducted in 1997.

The initial reconnaissance drilling in the Ulziit Depression in 1997 established the geologic favourability of this area for uranium deposits. The GSJV's land position in the Ulziit Depression is about 150 km long; consequently, adequate reconnaissance of this region will require a long term exploration effort.

Drilling in the Choir Depression continued under the program that had begun in 1996, and had an objective to step out from the main Haraat deposit area and to add to the established resources at Haraat. While this effort was successful in identifying large zones of shallow (<40 m deep) mineralization, the bulk of the resource delineated occurred above the water table and was low grade. While large resources have been confirmed to be present in the Choir Depression, additional work is needed to select targets that might have better quality mineralization and suitable hydrogeologic properties.

Early in the 1997 season, drilling at the new Hairhan discovery confirmed the results of late 1996. Consequently, the 1997 drilling effort was redirected to focus on Hairhan with the goal to delineate and confirm resources by the end of the 1997 season. Hairhan is about 150 km from the GSJV's base of field operations at Haraat; thus a concentrated effort was put forth to establish a camp and implement transportation, power supply, and functional technical and operational programs at Hairhan. In only five months, over 32,000 m were drilled, resulting in delineation of a significant uranium deposit. At

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

Hairhan, the natural water table is near the surface, so all the mineralization of possible commercial interest is below the water table.

Based on the success at Hairhan, the GSJV added eight select parcels to its land holdings, bringing the GSJV total land position to approximately 16,465 km<sup>2</sup> at the end of 1997.

Work in 1998 was once again directed toward the objectives of exploration reconnaissance, resource delineation, and ISR testing. Gamma spectrometric surveys were run on the new lands acquired in 1997. Exploration drilling totaled over 50,000 m for the second year in a row, and the first stage of ISR testing was conducted at the Hairhan deposit.

Geologorazvedka prepared an estimate of the mineral resources for the Hairhan deposit in 1997-1998. The estimate was prepared using Russian methodology that utilized polygonal estimation methods. The following criteria were applied to the estimate:

Cut-off grade of 0.01%U.

Cut-off of 0.02 metre x % was applied.

Minimum average metre x % of 0.05 was applied.

Internal waste up to 5 m thick was included in mineralized intersections.

Minimum coefficient of mineralization within a mineralized block was 0.8.

Density of 1.65 tonnes/m<sup>3</sup>.

The mineral resource statement summing the results of the estimate showed the presence of 6,865 tonnes of uranium grading 0.066% U amenable to ISR recovery. This mineral resource was classified as C2 (equivalent to inferred). This estimate is considered relevant and is reliable within the limits of the methodology.

A mineral resource was estimated for the Hairhan deposit on information available at the end of 1998 (Cunningham and Mathisen, 1999). This estimate has been superceded by the results discussed in this report.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

The Scott Wilson RPA current estimate is included in Section 17 Mineral Resource and Mineral Reserve Estimates.

In 1998, reconnaissance drilling concentrated in the Ulziit Depression to follow up the work that had begun in 1997. This work showed the presence of a 60 km oxidation/reduction system in the central Ulziit Depression. While numerous anomalies were encountered, no substantial uranium mineralization was intersected. The necessary uranium oxidation and mobilization processes appear to be working at Ulziit, but the required trapping and concentrating mechanism has yet to be located. The Ulziit licence area is large, and the work conducted in 1997 and 1998 confirmed the geologic favourability of this depression and the need for further exploration drilling.

A small amount of initial reconnaissance drilling was conducted in the Undurshil Depression in 1998. Follow-up of gamma spectrometry surveys done in 1996 determined that uranium anomalies in the Undurshil Depression generally occurred in calcareous cemented sands and siltstones. The upper Dzuunbayan suite of rocks has apparently been eroded away, or the Undurshil area represents a period of deeper water, quieter marine deposition. Based on the regional geologic setting, the Undurshil Depression was considered a lower priority exploration area for the GSJV, compared to the other GSJV properties. The Undurshil area was also partially overlapped by Protected Areas / Nature Reserves established in 1996 by the Government of Mongolia.

The Hairhan Depression received the bulk of the exploration drilling effort in 1998. This work had dual purposes of expansion and confirmation of the main Hairhan deposit, and exploration to start testing new targets in the Hairhan Depression. The mineralization depth ranges from 10 m to 200 m, with the average depth in the 60 m to 80 m range.

The other major component of the 1998 program was an initial ISR test at Hairhan. A small test was designed to determine the appropriate leach chemistry and to verify it under actual field conditions. The test consisted of a single production well surrounded

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

by four injection wells and associated monitoring wells. The ion exchange and resin desorption and regeneration equipment from the Haraat ISR Pilot Plant was assembled at Hairhan. The test was operated for about three and one-half months, and was terminated with the onset of freezing weather in October since the plant was not enclosed in a building.

The Hairhan 1998 test confirmed the leachability of the mineralization at Hairhan. Although a single, small test may not be completely definitive, the results of the Hairhan test were encouraging, with the well production rate, uranium concentration in produced solutions, chemical usage, and estimated uranium recovery all within ranges expected for normal commercial operations.

With the decline of the world uranium price through 1997 and 1998, Denison as Managing Director of the GSJV, proposed that work be reduced in 1999. No drilling was conducted during 1999; however, an extensive regional geologic reconnaissance program was conducted. A crew consisting of uranium geologists, geophysical specialists (gamma surveys), and a hydrogeologist investigated a wide area of potentially prospective depressions in the central Gobi region. These areas generally had not been extensively explored in past years by Russian expeditions. The main objective of the reconnaissance program was to identify areas that had favourable geologic and hydrologic conditions, as well as broad radiometric anomalies comparable to the Hairhan Depression. The reconnaissance program entailed:

1,721 km of geologic-radiometric traverses by foot

213 water samples from local wells, springs, and seeps

90 samples of surface radiometric anomalies

The 1999 work led to identification of a number of prospective areas and specific targets.

By the end of 1999 and into early 2000, world uranium prices fell into historic low ranges. Prospects for recovery of uranium prices to levels that would have justified

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

resumption of uranium exploration work by the GSJV were not encouraging. Because of this weak market outlook, Denison placed the GSJV program on standby status. Employees were released, the general contractor, Geologorazvedka, was released, and joint venture assets were sold (field equipment, office equipment, etc.).

By the end of 2003, uranium prices had started to recover and reached levels that were double the historic lows witnessed at the end of 2000. In 2004-2005, the GSJV resumed work on uranium exploration and development in Mongolia and applied for additional Exploration Licences in six areas.

In 2005, Denison recommenced exploration with:

34,028 m of drilling,

180 km<sup>2</sup> of gamma spectrometric surveys, and

mapping, prospecting, and radiometric surveys of new properties.

Drilling was conducted only on GSJV licences in 2005. In the Gurvan Saihan depression, previously identified uranium occurrences, as well as additional target areas within the depression, were tested with 159 holes totaling 12,562 m. Results indicated that uranium mineralization was encountered in a variety of settings at Gurvan Saihan, which may indicate that additional exploration drilling is warranted.

Two of the GSJV licence areas, Ikh Khongor and Navtgar, were drilled and found to be unfavourable for sedimentary uranium mineralization. A total of 101 holes, for 10,412 m, were completed in these two licence areas.

The Urt Tsav/Hokh Tolgoi licences were tested with 106 exploration drill holes totaling 11,054 m. Preliminary analysis of the drilling results suggests that follow-up drilling may be warranted in this area.

6-10

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

Gamma spectrometric surveys were conducted over 180 km<sup>2</sup> in the Deren and Mandal Gobi licences held by Denison. This work was conducted to delineate targets areas for initial reconnaissance drilling in 2006.

Exploration drilling increased in 2006 with drilling on the GSJV and IUM exploration licences totaling 55,700 m in 583 holes. Gamma spectrometric surveys totaling 1,160 km<sup>2</sup> were completed in two licence areas in 2006. The 2006 program was directed primarily toward reconnaissance of exploration licence areas that had been prospected, but which had never been drilled.

The following work was conducted on GSJV licences in 2006:

**Deren** Drilling totaled 7,514 m in 77 holes. This basin was found to contain lacustrine, organic, black/gray clay with minor deposits of sand and siltstone. Shallow mineralization was discovered in sands of limited areal extent, but this proved to be a minor local accumulation.

**Mandalgobi, Suman and Ulaan Toiron** Drilling totaled 19,519 m in 194 holes. Deep oxidation was encountered in several locations, and sands were often found to be dense and tightly cemented. Favourable reducing environments in suitable sandstone host rocks were absent.

**Oldokh** Drilling amounted to 7,310 m in 73 holes. This licence was located on trend between the Choir and Hairhan depressions. In most portions of this area, the favourable sequence of Lower Cretaceous rocks was absent under younger sediment cover. No interesting anomalies or favourable host sediments were encountered.

**Oshinuur** Drilling totaled 9,417 m in 91 holes. Sediments in this area are mainly primary red beds, and no favourable host rock or important anomalies were encountered.

The following work was conducted on IUM licences in 2006:

**Alag Tsav** Drilling totaled 2,334 m in 24 holes. Sediments were found to be highly calcareous and dense. No favourable host sediments or strong anomalies were discovered.

**Dorgont** Drilling totaled 3,706 m in 41 holes. As with the Alag Tsav area, the sediments encountered in drilling were found to be dense and calcareous. Only weak anomalies were encountered, and detail testing confirmed that the anomalies are of no further interest.



**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

Tsagaan Ovoo Drilling totaled 5,901 m in 83 holes. Weak uranium mineralization was discovered, but the host sediments are clay-rich. Further exploration, to test deeper extensions of the anomalous sediments, is required. IUM has retained the prospective portion of the Tsagaan Ovoo licence.

At the end of 2006, the Cadastre Office of the Minerals and Petroleum Resources Authority of Mongolia issued an order requiring all exploration licence holders to re-register their licences. Licences that were explored by IUM in 2006, and which did not return encouraging geological results, were not re-registered. Consequently, the number of licences held by the GSJV and IUM was reduced substantially at the end of 2006 (see Tables 4-2 and 4-3 for remaining licences as of January 31, 2006).

6-12

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

## **7 GEOLOGICAL SETTING**

The following geological descriptions are taken from a number of reports cited below and listed in Section 21 References.

### **REGIONAL GEOLOGY**

The geology of Mongolia is dominated by the Altaid orogen – an orogenic collage of subduction and accretion terranes that extend from the Ural Mountains to the Korean Peninsula (Yakubchuk et al., 2001, Dejidmaa and Badarch, 1999). This orogen formed between the Neoproterozoic and the Carboniferous. The Altaid rocks of Mongolia lie between the North China Craton and the Siberian Craton.

The Altaid rocks of Mongolia are a mélangé of Neoproterozoic basement areas separated by various island arc segments and accretionary wedges. These various sedimentary and volcanic terranes have been intruded by mafic and felsic plutons ranging in age from Cambrian to Mesozoic.

Cretaceous and younger basins unconformably overlie the Altaid rocks.

### **LOCAL GEOLOGY**

Late Mesozoic extensional basins are a prominent geological and topographic feature of central east Asia. The basins are interpreted as having formed in an intracontinental, back-arc tectonic setting in response to extensional faulting. These basins, likely fault bounded grabens and half grabens, were filled by eroded sediment during the Jurassic and Cretaceous periods.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**PROPERTY GEOLOGY**  
**GURVAN SAIHAN JOINT VENTURE**

The GSJV licences cover a number of the internal basins, or depressions, located in central Mongolia. The most advanced exploration has been completed on four of the depressions from the original Mineral Agreement. These are the Choir, Ulziit, Gurvan Saihan, and Hairhan Depressions. All of these depressions appear to have similar geological features. The depression that has received most testing to date is the Choir Depression. Budunov (1997a) prepared the following description.

The Choir Depression is a linear depression about 150 km long and from 10 km to 20 km wide. The elevation of the depression varies from about 1,100 m to 1,140 m a.s.l., while the surrounding upland is from 300 m to 500 m higher. Basement around the Choir Depression comprises Proterozoic schist, gneiss and limestone, Paleozoic granitic rocks, Permian acid volcanic rocks, and Mesozoic leucogranitic rocks and associated volcanic rocks.

The depression fill is composed of non-lithified sediments with a total thickness of approximately 1,500 m. The Lower Cretaceous sediments of the Dzuunbayan Formation are divided into two facies, with the first typically variegated and the second normally grey. The variegated section is comprised of conglomerate, sandstone, and siltstone, and occurs mainly on the margins of the depression. The second facies is comprised of lacustrine sediments, typically clays and argillaceous sandstone, with interbeds of brown coal and disseminated iron sulphides. The Upper Cretaceous section is comparatively thin in the Choir Depression and is generally from 5 m to 40 m thick. It is typically composed of variegated sand and gravel with limonite-goethite cementation.

The post-1997 Licences were selected by the GSJV to cover various depressions that were considered prospective. The amount of geological information available for these depressions is significantly less than for the Choir Depression.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

## **8 DEPOSIT TYPES**

Denison has implemented a corporate policy that it is seeking sandstone-hosted uranium deposits, and specifically those amenable to ISR technology. Details of the sandstone-hosted deposit type are set out in Model 30c in Cox and Singer (1992). There are a range of deposit shapes and controls included in this model, and a number of deposit styles, such as tabular, roll-front, etc., are possible.

Typically, sandstone uranium deposits contain microcrystalline uranium oxides and silicates that are deposited during diagenesis in localized reduced environments within fine- to medium-grained sandstone beds. Uranium may also be redistributed by ground water at the interface between oxidized and reduced ground (Cox and Singer, 1992).

ISR technology tends to be deposit specific. Different leaching technologies are available, and the process selected may be dependent on deposit criteria or environmental factors.

8-1

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

## **9 MINERALIZATION**

### **GENERAL**

Denison has identified uranium deposits in the Choir and Hairhan Depressions. Drill testing has been advanced to a stage that historical and current mineral resource statements have been prepared. Initial recovery testing has been carried out on deposits in the Haraat area in both the Choir and Hairhan Depressions.

### **CHOIR DEPRESSION**

Mineralization in the Choir Depression is contained in a number of separate deposits. Mineralization is present in significant concentrations both above and below the water table. While mineralization above the water table is generally considered not to be amenable to recovery by ISR techniques, testing completed by the GSJV has shown that recovery is possible above the water table in the Haraat context. None of the mineralization above the water table, however, is included in the historical mineral resource estimates for the five Haraat uranium deposits discussed in Section 6 History.

At a 0.02% U cut-off, the central part of the N-1 deposit above the water table is about 2,000 m long, up to 200 m wide, and about 5 m thick. Subsidiary lenses of mineralization extend the deposit to a length of about 3,000 m. The largest part of the deposit below the water table is approximately 700 m long, 100 m wide, and up to 5.7 m thick.

At a 0.02 cut-off grade, the dimensions of the N-2 deposit are similar to those of N-1. Figure 9-1 presents a plan of the Haraat N-2 deposit with drill hole location, and Figure 9-2 is a vertical cross section through the central part of the deposit showing the extension of the mineralization above and below the water table.

The GSJV has outlined three other deposits in the Choir Depression that are considered too small for stand-alone operations but should be able to be treated as

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

satellite deposits to N-1 and N-2, in the event of production. These deposits are Shar Oortsog, Haraat West, and Haraat East. Their dimensions are given in Table 9-1 and their locations are shown in Figure 9-3.

**TABLE 9-1 DIMENSIONS OF SMALLER CHOIR DEPRESSION URANIUM DEPOSITS**

**Denison Mines Corp. Mongolia Properties**

<b>Deposit</b>	<b>Length (m)</b>	<b>Average Width (m)</b>	<b>Thickness (m)</b>
Shar Oortsog	800	200	2.65
Haraat West	400	200	2.16
Haraat East	400	200	1.22

Typically, mineralization below the water table occurs in grey-coloured rocks or at the interface of the red oxidized rocks. Mineralization below the water table occurs primarily as uraninite with smaller amounts of coffinite. The uranium minerals occur as films and diffuse haloes on and between individual rock fragments and sand grains. In the oxidizing environment above the water table, secondary uranium minerals are present and include autunite, bergenite, phosphuranylite, schroeckingerite, torbenite, and minor amounts of other uranophosphates.

9-2

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

9-3

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

9-4

---



**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

9-5

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

### **HAIRHAN DEPRESSION**

The Hairhan deposit is located in the northwest part of the Hairhan Depression (Figure 9-4). It was discovered by drilling at the end of the 1996 field season. The discovery was followed up by exploration and resource delineation drilling in 1997, and further drilling was continued in 1998. Figure 9-5 shows the extent of the drill sections in the northwest portion of the depression.

The mineralization at Hairhan occurs in stacked horizons, within an area of about 1,500 m by 2,000 m. Cross section P-156 (Figure 9-6) shows that mineralization is preferentially contained in sandstone units, with some mineralization in clay units. Figure 9-7 presents a composite plan of the various lenses of mineralization, showing the overall dimensions of the deposit. Mineralization contained in clay units and in a coal unit was excluded from the mineral resource estimate. Thickness of individual mineralized units varies from a nominal 1 m to over 20 m. Various mineralized lenses occur at depths from 10 m to 200 m, with an average depth in the 60 m to 80 m range.

Local controls of the Hairhan mineralization appear to include the presence of a down-dropped fault block, with faults essentially orthogonal to the basin margins. The faults are interpreted as having controlled the stream patterns during deposition. The sediments in the fault-controlled block appear to be better hosts of mineralization than the rocks outside the fault-bounded block.

The Hairhan mineralized zones are divided into a South Block and a North Block, with uncertain correlation across the fault that separates them. A total of 21 sand-shale interfaces were identified (f2 through f21) in the South Block. These formation markers were consolidated and used to define seven sand packages, as set out in Table 9-2. The mineralized zones, or horizons, are defined by reference to the formation markers at their top and bottom. The main mineralized zones are denoted F2-5, F5.25-7, F7.5-8, F8.5-11, and F12-17.

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

**TABLE 9-2 SOUTH BLOCK SAND PACKAGES**  
**Denison Mines Corp. Mongolia Properties**

<b>Sand Package Top</b>	<b>Sand Package Base</b>	<b>Sand Package Name</b>
f marker 2	f marker 5	Formation 2
f marker 5.25	f marker 7	Formation 5.25
f marker 7.5	f marker 8	Formation 7.5
f marker 8.5	f marker 11	Formation 8.5
f marker 12	f marker 17	Formation 12
f marker 18	f marker 19	Formation 18
f marker 20	f marker 21	Formation 20

By the same stratigraphic approach, there are 21 sand-shale interfaces identified in the North Block (Table 9-3). The formation (f) markers were consolidated into nine sand packages and three mineralized horizons. Similarly to the South Block, the mineralized units are defined by their upper and lower formation markers.

**TABLE 9-3 NORTH BLOCK SAND PACKAGES**  
**Denison Mines Corp. Mongolia Properties**

<b>Sand Package Top</b>	<b>Sand Package Base</b>	<b>Sand Package Name</b>	<b>Horizon Name</b>
f marker B	f marker C	Formation B	Upper Zone
f marker D	f marker G	Formation D	
f marker H	f marker I	Formation H	Coal Zone
f marker J	f marker L	Formation J	Lower Zone
f marker L	f marker M	Formation L	
f marker N	f marker O	Formation N	
f marker P	f marker Q	Formation P	
f marker R	f marker S	Formation R	
f marker T	f marker U	Formation T	

The host sedimentary rocks to the Hairhan deposit consist of unconformable clastic and lacustrine sandstones and shales that dip south at about 5° to 7° off the Precambrian granites and Paleozoic and Mesozoic rocks that form the northern edge of the depression. The deposit is contained in a paleochannel system that flowed from northwest to southeast. Evidence of channeling is demonstrated by younger marker beds cutting down into older designated formation boundaries. Intermittent playa deposits are present to the east, west, and south of the Hairhan deposit, and lignitic coals are present in the northern portion of the deposit area.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

While the exact nature of the mineralized paleochannel system is not yet fully understood, the part of the system that contains the bulk of the mineralized host rock (f2 through f17) appears to be controlled by low-magnitude faulting (tens of metres) within a graben fault block. Correlation of formation and rock types along profile lines and mineralization trends change and disappear abruptly from north to south. This correlation also indicates that very recent deposits to depths of about 15 m may cover surface evidence, if any, of these fault trends.

9-8

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

9-9

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

9-10

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

9-11

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

**10 EXPLORATION**

After a hiatus caused by low metal prices, Denison recommenced exploration on its various landholdings in 2004-2005. The results of the 2005 and 2006 programs are discussed above under Section 6 History.

10-1

---



SCOTT WILSON RPA

www.rpacan.com  
www.scottwilson.com**11 DRILLING****GURVAN SAIHAN JOINT VENTURE**

A significant amount of drilling has been completed on the GSJV. The aggregate lengths of the historical drilling completed in the period 1994-1998 in various areas are set out in Table 11-1.

**TABLE 11-1 DRILLING BY PROPERTY AND YEAR****Denison Mines Corp. Mongolia Properties**

Depression/Licence	Exploration Drilling (m)				Totals
	1994	1996	1997	1998	
Choir	8,439	25,699	18,816		52,954
Hairhan		1,014	32,426	33,058	66,498
Gurvan Saihan		3,495			3,495
Ulziit			4,179	16,900	21,079
Undurshil				2,360	2,360
Exploration Areas (Ulziit)				672	672
<b>Totals</b>	<b>8,439</b>	<b>30,208</b>	<b>55,421</b>	<b>52,990</b>	<b>147,058</b>

These data are restated in Table 11-2 to show the type and purpose of drilling.

**TABLE 11-2 DRILLING BY LOCATION AND TYPE****Denison Mines Corp. Mongolia Properties**

Depression/Licence	Exploration Drilling (m)					Total
	Rotary Non-Core	Rotary Core	Hydrology	ISR Test Wells	Water Wells	
Choir	45,453	4,163	1,368	1,536	434	52,954
Hairhan	61,555	2,531	1,678	605	129	66,498
Gurvan Saihan	3,362	133				3,495
Ulziit	15,839	5,096			144	21,079
Undurshil	1,650	710				2,360
Exploration Areas (Ulziit)	497	175				672
<b>Totals</b>	<b>128,356</b>	<b>12,808</b>	<b>3,046</b>	<b>2,141</b>	<b>707</b>	<b>147,058</b>

11-1

SCOTT WILSON RPA

www.rpacan.com  
www.scottwilson.com

Following the hiatus resulting from low uranium prices, the GSJV recommenced drilling in 2005. Drilling completed during the 2005 and 2006 seasons are set out in Tables 11-3 and 11-4, respectively.

**TABLE 11-3 GSV DRILLING IN 2005 AND 2006****Denison Mines Corp. Mongolia Properties**

Depression/Licence	Rotary Non-Core (Holes/Metres)	Exploration Drilling		Totals (Holes/Metres)
		Rotary Core (Holes/Metres)	Water Wells (Holes/Metres)	
Gurvan Saihan	154 / 12,264	4 / 208	1 / 90	159 / 12,562
Urt Tsav/ Hokh Tolgoi	103 / 10,949	0	3 / 105	106 / 11,054
Ikh Hongor	48 / 4,315	0	0	48 / 4,315
Navgar	62 / 6,050	1 / 48	0	63 / 6,097
Deren	75 / 7,422	1 / 53	1 / 39	77 / 7,514
Ulaan Toiron	193 / 19,439	1 / 80	0	194 / 19,519
Oshinuur	86 / 9,037	1 / 29	4 / 351	91 / 9,417
Oldokh	73 / 7,310	0	0	73 / 7,310
<b>Total</b>	<b>794 / 76,786</b>	<b>8 / 418</b>	<b>9 / 585</b>	<b>811 / 77,788</b>

**TABLE 11-4 IUM DRILLING IN 2006****Denison Mines Corp. Mongolia Properties**

Depression/Licence	Rotary Non-Core (Holes/Metres)	Exploration Drilling		Totals (Holes/Metres)
		Rotary Core (Holes/Metres)	Water Wells (Holes/Metres)	
Alag Tsav	23 / 2,257	0	1 / 76	24 / 2,333
Dorgont	39 / 3,643	1 / 46	1 / 17	41 / 3,706
Oldokh	79 / 5,675	1 / 78	3 / 148	83 / 5,901
<b>Total</b>	<b>141 / 11,575</b>	<b>2 / 124</b>	<b>5 / 241</b>	<b>148 / 11,940</b>

Drilling was carried out by Geologorazvedka working as a drilling contractor to the venture in the period 1994 to 1998. In the period from 1994 to 1996, hole logging was carried out by Geologorazvedka. In the period 1996 to 1998, down hole logging was carried out in-house. Holes are now logged by a Mongolian contractor using Mount Sopris equipment. Some of the early drilling was logged using Russian equipment, but the Mount Sopris equipment was in place relatively early in the program.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

## **12 SAMPLING METHOD AND APPROACH**

As shown in Tables 11-3 and 11-4 of Section 11 Drilling, a percentage of the rotary drill holes completed were cored. The purpose of this coring was to provide samples for testing to allow determination of specific gravity and disequilibrium factors for the deposits. Coring also allows analysis of various elements and a check of the reliability of the electric logging equipment.

Samples were selected on the basis of down-hole radiometric surveys, the presence of alteration in the cores, and handheld spectrometry results. Cores were split by hand. Samples ranged in length from 0.2 m to 0.9 m, but the bulk of the samples were either 0.2 m or 0.3 m. Samples were transported to the camp near Haraat for sample preparation.

12-1

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

**13 SAMPLE PREPARATION, ANALYSES AND SECURITY**

Core samples were crushed in the GSJV camp to -200, +300 mesh size and transported to the Central Analytical Laboratory (CAL) of Sosnovgeology, a state geological enterprise in Irkutsk, Russia. CAL is registered by the Russian Federation and is certified to standard N 41083-95. Analyses performed by CAL were carried out at a level suitable for the estimation of reserves. U and Th, and a package of 26 elements were determined by X-ray fluorescence. Fe, S, CO<sub>2</sub>, and C were analyzed by wet chemical methods. Specific gravity readings were completed by CAL in later years, although physical properties of the 1994 Haraat drill samples were determined by Irkutsk State Technical University. Reports translated from Russian indicate that the laboratory maintained internal quality control programs.

13-1

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

#### **14 DATA VERIFICATION**

Uranium data acquisition for the Hairhan ISR project was focused primarily on gamma logging of rotary non-core drill holes with a small percentage of rotary core holes and accompanying chemical assays of core as a means of validating the gamma logging process. This is a standard means of data verification for such projects.

The Hairhan database includes approximately 62,000 m of rotary non-core drilling and 2,500 m of core drilling; a satisfactory 4.0 percent of core. Denison has compiled a substantial data set consisting of chemical assays of core and the respective gamma log interpretation values. This data set consists of some 438 individual comparisons of chemical assays and gamma log interpretation values. This data set is illustrated in Figure 14-1, while a typical down-hole comparison is set forth in Figure 14-2.

The overall average of chemical assays for the complete data set is 0.085% U, while the average gamma log interpretation value is 0.072% eU, with an imbalance in favour of chemical assays of about 18%. Given, however, the notorious variability of both gamma and chemical results at very low grades, i.e., less than 0.02% U and eU, Scott Wilson RPA has elected to assess only those gamma values equal to or greater than 0.02% eU. On this basis, chemical assays average 0.118% U while gamma values average 0.108% U, with an imbalance of 9% in favour of chemical assays.

Because the resources for this project are calculated on the basis of gamma log interpretations, an imbalance in favour of the chemical indicates a potential understatement of similar magnitude in the resource calculation. Given, however, the extremely wide variability in individual comparisons, an average of  $\pm 75\%$ , Scott Wilson RPA is of the opinion that a correction to the resource figures set forth in this report is not warranted. Rather, it is preferable to believe that resource figures may offer some degree of conservatism.

14-1

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

It is recommended that future drilling operations at Hairhan incorporate additional core drilling with a high degree of quality control in sampling and analysis. The ratio of core drilling to non-core drilling should be maintained at no less than the current 4%.

**FIGURE 14-1 COMPARISON OF CHEMICAL ASSAYS AND GAMMA LOG  
INTERPRETATION VALUES HAIRHAN DEPOSIT**

**Hairhan Data Comparison Chemical vs. Gamma**

Other data verifications exercises completed by Scott Wilson RPA included:

Location of drill hole collars in the field.

Manual checking of the algorithm for converting down hole gamma readings to uranium grades.

14-2

---

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

**FIGURE 14-2 TYPICAL DOWNHOLE COMPARISON HAIRHAN DEPOSIT**  
**Hairhan Uranium Project Core vs Gamma Comparison Hole #145G**  
14-3

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

**15 ADJACENT PROPERTIES**

This section is not applicable.

15-1

---



**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

## **16 MINERAL PROCESSING AND METALLURGICAL TESTING**

### **GENERAL**

The GSJV deposits in Mongolia have been shown to be amenable to acid leach (sulphuric acid) with the addition of an oxidizing agent. Acid leach is commonly used in ISR mines in Eastern Europe, central Asia, and Australia. No commercial acid leach mines exist in the USA, and there have been no efforts to permit the technology for many years because of the potential for increased and indeterminate groundwater restoration costs. Carbonate leach systems have been utilized in the USA because roll-front deposits have been shown to be metallurgically amenable to carbonate leach and the US. roll-front systems often occur in aquifers with high quality groundwater, necessitating restoration to satisfy competing beneficial uses.

Generally, water quality in the sedimentary basins of the Gobi Desert is quite poor. The basins are closed, have almost no live, flowing water, and show extremely high evaporation rates. Salt playas are common in low areas. Water quality is good near the sources of recharge, with total dissolved solids (TDS) of less than 500 mg/l. The water quality in the area of the Haraat deposits is already marginal. Analysis of groundwater showed 4 g/l to 7 g/l TDS, pH of 3.5 to 5.5, and high salinity. During testing, it was noted that stock would not drink the water. Water quality at Hairhan is marginally better than at Haraat. At Hairhan, TDS range from 3.5 g/l to 5.1 g/l, pH is 7.4 to 8.4, and there is a strong smell of hydrogen sulphide. High contents of sodium chloride and sulphate are reported. The water exceeds existing standards for livestock use, although cattle were observed drinking formation water discharged on the surface during pump tests. The fact that Hairhan water may have a marginal beneficial use needs to be addressed in assessing mining impacts and mitigation efforts.

16-1

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**HARAAT DEPOSIT**

In 1994, a small ISR test was run at Haraat to determine the amenability of the deposits to ISR technology. The success of this work led to more significant testing in 1996. This involved the acquisition, assembly, and operation of an ISR Pilot Plant at Haraat. The plant was a fully-integrated facility, capable of producing final product, although drying and packaging equipment were not included. The plant handled a nominal flow rate of 20 m<sup>3</sup>/hr, although under optimal conditions, it could be operated at a higher rate. The plant consisted of an ion exchange circuit, a resin desorption and regeneration circuit, a uranium precipitation circuit, and all of the necessary ancillary and support facilities.

The testing in 1996 included tests of the recovery of mineralization both above and below the water table, the latter being the normal operating regime for an ISR project. Sulphuric acid was the primary leaching agent used in both tests. These tests confirmed that hydraulic control can be maintained and that the uranium solubilization and mobilization can be controlled. Both tests encountered operating circumstances that pointed out the necessity to conduct further commercial scale testing at Haraat. The test above the water table is believed to be the only work of this kind that has been conducted in the world. While in-place leaching of unsaturated mineralization has been shown to be possible, further work is necessary to confirm the economic viability of this method.

**HAIRHAN DEPOSIT**

As discussed above, the Hairhan deposit is comprised of multiple stacked lenses within an area of about 1,500 m by 2,000 m. An initial ISR test was completed in 1998 to determine the appropriate leach chemistry and to verify it under actual field conditions. The test consisted of a single production well surrounded by four injection wells and associated monitoring wells. The ion exchange and resin desorption and regeneration equipment from the Haraat ISR Pilot Plant was assembled at Hairhan. The test was operated for about fourteen weeks and was terminated with the onset of freezing weather.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

The 1998 Hairhan test confirmed the leachability of the mineralization at Hairhan. Although a single, small test may not be completely definitive, the results of the Hairhan test were encouraging, with the well production rate, uranium concentration in produced solutions, chemical usage, and estimated uranium recovery all within ranges expected for normal commercial operations.

16-3

---

**SCOTT WILSON RPA**

**17 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES**  
**GENERAL STATEMENT**

Scott Wilson RPA has estimated mineral resources for the Hairhan property as summarized in Table 17-1. There are no mineral reserves estimated for any of the Denison Mongolia uranium properties at this time.

**TABLE 17-1 HAIRHAN MINERAL RESOURCE ESTIMATE**  
**Denison Mines Corp. Mongolia Properties**

<b>Category</b>	<b>Zones</b>	<b>Tonnes x10<sup>3</sup></b>	<b>Grade % U</b>	<b>Tonnes U</b>	<b>Ib U<sub>3</sub>O<sub>8</sub> x10<sup>3</sup></b>
Indicated	5	4,726	0.064	3,036	7,891
Inferred	7	1,848	0.073	1,341	3,484

Notes. 1. Cut-off grade 0.02% U  
2. Minimum Thickness 1 m  
3. Density 1.65 tonnes/m<sup>3</sup>

The database, methodology, parameters, and classification are described in the following sections.

**DATABASE**

For this mineral resource estimate, Scott Wilson RPA accepted and used the drill hole database compiled by Denison for its 1999 historical estimate, as summarized below (Cunningham and Mathisen, 1999).

Denison carried out a detailed correlation of approximately 520 drill holes within the Hairhan deposit. Correlation of the geophysical logs was accomplished using commonly accepted subsurface exploration methods with a primary emphasis on identifying sands, interbedded shales, and lignites and assigning them formation marker designations, as described in Section 9 Mineralization. It was apparent from this work that the Hairhan deposit can be divided into two depositional blocks designated North Block and South Block, separated by an east-west or ENE trending fault. Scott Wilson RPA reviewed the

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

geological interpretation of the mineralized zones bounded by the marker horizons and found it reasonable.

The raw borehole natural gamma data (counts per second, CPS) were processed using the Denison in-house GAMLOG program (based on Scott's AEC Algorithm), with output generated on 10 cm intervals in percent U.

Upon completion of the initial data processing, the borehole logging information was uploaded into TECHBASE®. This software package allows geological and calculated uranium grade information to be added to the data, which facilitates:

Construction of profile cross-sections, including stratigraphic boundaries and percent grade uranium histograms at 0.01%, 0.02%, and 0.03% cut-offs;

Generation of drill hole location and grade by thickness product (GT) intercept maps;

Compositing of 10 cm grade (%U) data on selected formations and mineralized horizons.

For each mineralized zone and for each drill hole, thickness (TH) and grade X thickness (GT) were calculated using the following parameters:

Cut-off Grade 0.02% U  
Minimum 1 m  
Thickness  
(TH)  
Grade x 0.02  
Thickness  
(GT)  
Waste 2 m  
Thickness

The values for the density and disequilibrium factor are based on calculations completed by Geologorazvedka. Density is 1.65 tonnes/m<sup>3</sup> and the disequilibrium factor is 1.0.

**RESOURCE ESTIMATION**

Scott Wilson RPA reviewed the correlations of sandstone units hosting the uranium mineralization and found them to be reasonable. The Denison database was used to plot

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

plans for each mineralized zone (F02-5, F5.25-7, etc.) showing the GT and TH values for each drill hole that penetrated the zone, with a minimum GT value of 0.05 m-%.

The GT value and the TH values were contoured by hand on separate plans and the contours were digitized into AutoCAD. The contours intervals for both GT and TH were chosen in a geometric progression since both parameters displayed a skewed distribution, with many low values and few high values. Contour intervals for GT were 0.05, 0.1, 0.2, 0.4, 0.8, and 1.6 m-%, and for TH were 1, 2, 4, 8, and 16 m. This resulted in a fairly even spacing of the contours.

Each mineralized zone contained one or more areas defined by at least one drill hole over the minimum cut-off of 0.1 m-% GT value and a minimum thickness (TH) of 1 m. Such areas inside the 0.1 m-% GT contours were numbered as lenses within each mineralized zone. The number of lenses per mineralized zone or horizon varied from one to fourteen.

For each lens, the areas between each contour interval were measured using AutoCAD. The outer boundary of each lens was defined by the 0.1 m-% GT contour for both the GT and TH plots. Figure 17-1 is an example of a thickness contour map for one of the layers of mineralization, while Figure 17-2 is an example of a GT contour map for the same horizon.

The next step was to multiply the area between each contour by the average GT or TH value for each contour interval. The average GT and TH values were derived from the overall statistics of the whole GT and TH data sets. In most cases, the average GT and TH values were slightly lower than the mid-point of the contour interval. This is because of the skewed distribution of the GT and TH data; for example, the average GT value for the area between the 0.4 and 0.8 contours is 0.56 m-%, and the average TH value for the area between the 2 and 4 contour intervals is 2.8 m.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

17-4

---

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)*  
*[www.scottwilson.com](http://www.scottwilson.com)*

17-5

---



**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

The TH\*area products for each contour interval were summed for each lens to determine the volume in cubic metres. This was converted to tonnes using a factor of 1.65 tonnes/m<sup>3</sup>, which is the tonnage factor used by Denison that appears to be reasonable.

The GT\*area products for each contour interval were summed for each lens. The total was converted to tonnes of contained uranium using the density factor of 1.65 tonnes/m<sup>3</sup>. The grade of each lens is calculated from the contained uranium and the tonnage.

Some of the mineralized lenses were defined by a single drill hole or two widely spaced drill holes, and it was difficult to contour the GT and TH values with any confidence. Such lenses, which were subsequently classified as inferred resources, were not estimated by the contour method. Instead, the tonnes were determined from the area of the lens and the thickness of the drill hole intersection. Grade and GT were as per the drill hole intersection. A number of such lenses were defined by two drill holes, in which case the tonnes and grade were estimated from the average TH values and GT values of the drill holes.

#### **CLASSIFICATION**

Each lens within each mineralized zone was classified by the number of drill holes and spacing of the holes, to reflect confidence in the lens resource estimate. In general, drill hole spacing is in the order of 100 m. In some areas where good mineralization was encountered, drill hole spacing was closed up, and in a few locations, clusters of several holes were drilled at a spacing of tens of metres. In other areas, two holes are plotted very close together and appear to be twinned holes.

Indicated resource lenses were generally defined by a minimum of three drill holes. Some lenses had up to twenty or more drill holes. In one case, an indicated resource lens was defined by two holes spaced in the order of 50 m apart. In general, the indicated

SCOTT WILSON RPA

www.rpacan.com  
www.scottwilson.com

resource lenses were contourable and were estimated by the contour method described above.

Inferred resource lenses were mostly defined by a single drill hole or by two drill holes clustered closely together. In a few cases, indicated resource lenses were defined by two drill holes in the order of 100 m apart. All mineralized lenses in the North Block were classified as inferred, including some with two to five drill holes, because of the scattered nature and small size of the lenses.

Table 17-2 lists the Hairhan mineral resources by mineralized zones and resource category. The North Block resources comprise a number of small lenses in several zones. All other mineral resource zones are in the South Block. The cut-off is 0.1 m-% GT over a minimum of 1 m. The average thickness of the indicated resources is 5.2 m and of the inferred resources is 5.7 m.

**TABLE 17-2 HAIRHAN MINERAL RESOURCE ESTIMATE**  
**Denison Mines Corp. Mongolia Properties**

Category	Zone	Tonnes x10 <sup>3</sup>	Grade % U	Tonnes U	lb U <sub>3</sub> O <sub>8</sub> x10 <sup>3</sup>
Indicated	F02-05	423	0.061	258	670
Indicated	F05.25-07	1,624	0.060	982	2,554
Indicated	F7.5-08	1,712	0.067	1,140	2,963
Indicated	F8.5-11	349	0.069	241	628
Indicated	F12-17	617	0.067	414	1,076
<b>Total Indicated</b>		<b>4,726</b>	<b>0.064</b>	<b>3,036</b>	<b>7,891</b>
Inferred	F02-05	35	0.056	19	50
Inferred	F05.25-07	436	0.074	322	838
Inferred	F7.5-08	31	0.051	16	41
Inferred	F8.5-11	213	0.104	221	574
Inferred	F12-17	781	0.068	532	1,384
Inferred	F20-21	130	0.043	56	146
Inferred	North Block	223	0.078	174	451
<b>Total Inferred</b>		<b>1,848</b>	<b>0.073</b>	<b>1,341</b>	<b>3,484</b>

Notes: 1. Cut-off grade 0.02% U  
2. Minimum Thickness 1 m  
3. Density 1.65 tonnes/m<sup>3</sup>

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

**18 OTHER RELEVANT DATA AND INFORMATION**

Scott Wilson RPA is not aware of any other information that is germane to this report.

18-1

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

## **19 INTERPRETATION AND CONCLUSIONS**

Energy Fuels, a predecessor company to Denison, commenced uranium exploration in Mongolia in 1994. Denison has continued exploration during 1997-2007. Denison continues to pursue a policy of concentrating on uranium deposits amenable to ISR treatment. The Denison licences are either held through joint ventures or are wholly owned. When Energy Fuels commenced uranium exploration in Mongolia, it established a joint venture (GSJV) with Geologoravedka, a Russian state company, and the Mongolian Government. The initial group of exploration licences was obtained prior to the promulgation of the Mining Law of Mongolia in 1997. The GSJV has subsequently acquired other licences that are subject to the 1997 Mining Law. Denison has also staked exploration licences through its Mongolian affiliate, International Uranium Mongolia XXK, which are 100% owned by Denison.

The target areas for Denison are Cretaceous basins, also known as depressions. Uranium derived from the weathering of Paleozoic and Precambrian basement rocks has been concentrated in permeable rocks within the basins.

Uranium exploration in Mongolia commenced in 1943, and exploration for sandstone-hosted deposits in the Cretaceous depressions commenced in 1955. This work started in the northeast of the country and progressed to the southwest. There has been little work in the southwest of the country to date.

GSJV has outlined significant uranium deposits in two of the basins: the Choir Depression and the Hairhan Depression. Much of the testing in the Choir Depression was completed using Russian technology and methodologies, while the testing of the Hairhan deposit follows methods that are standard practice in North America.

Historical mineral resource estimates were prepared for the Haraat deposits in 1997 and 1998, as listed in Table 19-1, for mineralization below the water table. The

## SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

methodology for the Haraat resource estimate is considered to be reliable and relevant. Scott Wilson RPA has classified the mineral resources in the Haraat area as inferred.

**TABLE 19-1 HARAAT HISTORICAL MINERAL RESOURCE ESTIMATE**  
**Denison Mines Corp. Mongolia Properties**

<b>Category</b>	<b>Tonnes x10<sup>6</sup></b>	<b>Grade %U</b>	<b>Average Thickness (m)</b>	<b>Tonnes U</b>
Inferred Resources	10.60	0.023	1.2 to 12.2	2,461

Scott Wilson RPA has estimated mineral resources for the Hairhan property as summarized in Table 19-2. This current estimate supersedes the 1998 historical estimate by Denison. The Hairhan mineral resource has been estimated using the contour method and is based on the Denison drill hole database, which has been reviewed and accepted. The cut-off is 0.1 m-% GT over a minimum of one metre. The average thickness of the indicated resources is 5.2 m and of the inferred resources 5.7 m.

**TABLE 19-2 HAIRHAN CURRENT MINERAL RESOURCE ESTIMATE**  
**Denison Mines Corp. Mongolia Properties**

<b>Category</b>	<b>Tonnes x10<sup>3</sup></b>	<b>Grade%U</b>	<b>Tonnes U</b>	<b>lb U<sub>3</sub>O<sub>8</sub> x10<sup>3</sup></b>
Indicated	4,726	0.064	3,036	7,891
Inferred	1,848	0.073	1,341	3,484

Notes. 1. Cut-off grade 0.02% U  
 2. Minimum Thickness 1 m  
 3. Density 1.65 tonnes/m<sup>3</sup>

Scott Wilson RPA has been advised that Denison is in full compliance with Mongolian laws and regulations in regard to all of its properties.

Denison has recommenced mineral exploration after a hiatus resulting from low metal prices. This recommencement has included applying for new exploration licences on behalf of the GSJV and applying for licences that are wholly owned by Denison. Historically, exploration on behalf of the GSJV was carried out by employees of Geologorazvedka, which acted as General Contractor. Denison is now managing all of its exploration in-house.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

## **20 RECOMMENDATIONS**

Scott Wilson RPA considers the various Denison uranium properties in Mongolia to be of sufficient merit to justify the programs discussed in this section.

Denison has conducted exploration on a number of properties which are at various stages of assessment as exploration targets:

A group of licences were acquired which require an initial regional investigation. The work proposed includes reconnaissance drilling to determine regional stratigraphy and locate anomalies and favourable target areas.

Initial reconnaissance drilling was conducted on several properties in 2005 and 2006, and, as a result, many of these areas have been released and are not favourable for further uranium exploration. The properties that have demonstrated favourable conditions as the result of the 2005 and 2006 drilling should now enter more advanced exploration and specific target testing.

For more advanced properties, focus should now shift to detailed exploration for resource delineation and determination of technological parameters for possible ISR exploitation. Continued positive results will lead to extensive studies of geochemical and metallurgical amenability and commercial-scale pilot operations.

Confirmation drilling should be conducted on the Haraat deposits to bring historical resources to current status and to support a preliminary assessment of the potential for open pit mining.

The proposed program for 2007 is set out in Table 20-1.

20-1

---

SCOTT WILSON RPA

*www.rpacan.com*  
*www.scottwilson.com*

**TABLE 20-1 RECOMMENDED PROGRAM**  
**Denison Mines Corp. Mongolia Properties**

**GSJV Properties** 22,000 m of resource delineation, core and hydrogeological drilling in the Hairhan Depression.  
5,000 m of exploration drilling in the Hairhan Depression to test deep targets.  
6,000 m of resource delineation, core and hydrogeological drilling in the Haraat deposits in the Choir Depression  
22,000 m of exploration and resource delineation drilling in the Choir Depression.  
13,000 m of rotary mud and core drilling in the Urt Tsav target area.

**IUM Properties** 15,000 m of rotary mud and core drilling on the two Western licence groups.

The total budget for this work is US\$7.0 million.

Denison is continuing its exploration program for uranium resources that are amenable to ISR treatment. Ongoing exploration is not dependent on the results of the recommended program. For this reason, no Stage 2 program is included at this time.

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**21 REFERENCES**

Budunov, A.A., et al, 1997a, Summary Report of Results of Prospecting Work in the Gobi Region of Mongolia for 1994-1996. Private Report to the Gurvan Saihan Joint Venture.

Budunov, A.A., et al, 1997b, 1996 Reserve Report, Haraat N-1 and N-2 Deposits. Private Report to the Gurvan Saihan Joint Venture.

Budunov, A.A., et al, 1997c, Report of Geological Exploration Work on Uranium in the Gobi Region of Mongolia for the period of 1997. Private Report to the Gurvan Saihan Joint Venture.

Budunov, A.A., et al, 1998, Report o the Results of Geological Exploration Work on Uranium in the Gobi Region of Mongolia for the period of 1998. Private Report to the Gurvan Saihan Joint Venture.

Budunov, A.A., et al, 1999, Report on Result of Geological Exploration Work on Uranium in the Gobi Region of Mongolia for the Period of 1998. Private Report to the Gurvan Saihan Joint Venture.

Budunov, A.A., et al., 2006, Report on the Results of Uranium Exploration Completed in the Gobi Region of Mongolia in 2006. Private Report to the Gurvan Saihan Joint Venture.

Cox, D.P., and Singer, D.A., 1992, Mineral Deposit Models. U.S. Geological Survey Bulletin 1693.

Cunningham, A.D. and Mathisen, M.B., 1999, 1998 Reserve Report on the Gurvan Saihan Joint Venture, Hairhan Uranium Deposit, Dungobi Aimag, Mongolia. Report to International Uranium (USA) Corporation.

Dejidmaa, G. and Badarch, G., 1999, Summary of Pre-Accretionary and Accretionary Metallogenic Belts of Mongolia. In Nockleberg, W.J. et al. USGS Open File Report 99-165.

Wetz, T.V., 1998, Summary Report, Mongolian-Russian-American Joint Venture, Gurvan Saihan HHK. Private Report to the Gurvan Saihan Joint Venture.

Wetz, T.V., 2000, General Feasibility Analysis of Hairhan Uranium Deposit. Private Report to the Gurvan Saihan Joint Venture.

Wetz, T.V., 2004, Overview Memorandum, Gurvan Saihan Joint Venture.

Yakubchuk, A., et al, 2001, The Altaids: Tectonic Evolution and Metallogeny. Econ. Geol Newsletter No. 46, pp 1-14.



**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**22 SIGNATURE PAGE**

This report titled Technical Report on Uranium Exploration Properties in Mongolia , prepared for International Uranium Corporation with an effective date of February 1, 2007 and dated February 27, 2007, was prepared and signed by the following authors:

**(Signed and Sealed)**

Dated at Toronto, Ontario February 27, 2007

Neil N. Gow, P.Geo.  
Associate Consulting Geologist

**(Signed and Sealed)**

Dated at Toronto, Ontario February 27, 2007

Thomas C. Pool, P.E.  
Associate Mining Engineer  
22-1

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**23 CERTIFICATE OF QUALIFICATIONS**

**NEIL N. GOW**

As an author of this report entitled Technical Report on Uranium Exploration Properties in Mongolia prepared for International Uranium Corporation and dated February 27, 2007, I hereby make the following statements:

1. I am Associate Consulting Geologist with Scott Wilson Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.
2. I am a graduate of University of New England, Armidale, NSW, Australia, in 1965 with a Bachelor of Science degree in Geological Sciences.
3. I am registered as a Professional Geologist in the Province of Ontario (Membership 433). I have worked as a geologist for a total of 30 years since my graduation. My relevant experience for the purpose of the Technical Report is:

Supervision of uranium exploration in the eastern Pine Creek Basin, Northern Territory, Australia.

Examination of sandstone-hosted uranium deposits in the Amadeus Basin, Northern Territory, Australia.

Numerous other mineral resource estimates for a variety of commodities.

4. I have read the definition of qualified person set out in National Instrument 43-101 ( NI43-101 ) and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI43-101.
5. I visited the property on September 10 to 15, 2005.
6. I am responsible for overall preparation of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.4 of National Instrument 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read National Instrument 43-101, and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

10. To the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this 27<sup>th</sup> day of February, 2007

**(Signed and Sealed)**

Neil N. Gow, P.Geo.

23-2

---

**SCOTT WILSON RPA**

*www.rpacan.com*  
*www.scottwilson.com*

**THOMAS C. POOL**

I, Thomas C. Pool, P.E., as an author of this report titled "Technical Report on Uranium Exploration Properties in Mongolia" prepared for International Uranium Corporation and dated February 27, 2007, do hereby certify that:

1. I am an Associate Mining Engineer with Scott Wilson Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.
2. I am a graduate of Colorado School of Mines with a professional degree in Mining Engineering.
3. I am registered as a Professional Engineer in the State of Colorado (Reg.#12108 ). I have worked as a mining engineer for a total of 36 years since my graduation. My relevant experience for the purpose of the Technical Report is: approximately 30 years as a consultant in the uranium industry having evaluated scores of projects throughout the world.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 ( "NI 43-101" ) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I did not visit the property.
6. I am responsible for preparation of Section 14 of this Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.4 of National Instrument 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report other than my employment with Energy Fuels Nuclear and the Concord group of companies in the late 1980s and early 1990s.
9. I have read National Instrument 43-101, and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

**SCOTT WILSON RPA**

*[www.rpacan.com](http://www.rpacan.com)  
[www.scottwilson.com](http://www.scottwilson.com)*

10. To the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this 27<sup>th</sup> day of February, 2007

**(Signed and Sealed)**

Thomas C. Pool, P.E.

23-4

---

**SCOTT WILSON RPA**

***www.rpacan.com***  
***www.scottwilson.com***

Suite 501  
55 University Ave.  
Toronto, Ontario  
M5J 2H7  
Tel: (416) 947-0907  
Fax: (416)947-0395  
Email:  
*neiLgow@scottwilson.com*

**FILED BY SEDAR**

March 13, 2007

British Columbia Securities Commission

Alberta Securities Commission

Saskatchewan Financial Services Commission

The Manitoba Securities Commission

Ontario Securities Commission

Autorité des marchés financiers

New Brunswick Securities Commission

Nova Scotia Securities Commission

Prince Edward Island Department of Provincial Affairs and Attorney General

Securities Division, Department of Justice Government of Newfoundland and Labrador

Dear Sirs/Mesdames:

**Re: Denison Mines Corp. (the Company ) Filing of Technical Report dated February 27, 2007**

I, Neil N. Gow, P.Ge., consent to the public filing of the technical report titled *Technical Report on the Uranium Exploration Properties in Mongolia* (the Technical Report ) prepared by Scott Wilson Roscoe Postle Associates Inc. for the Company.

I further confirm that I have read the written disclosure in the Company s news release titled *Denison Announces NI 43-101 Resource Estimate on Hairhan Deposit in Mongolia* dated March 13, 2007 and that it fairly and accurately represents the information in the Technical Report that supports the disclosure.

This letter is provided to the securities regulatory authorities to whom it is addressed pursuant to the requirements of applicable securities legislation and not for any other purpose.

Sincerely,

**SCOTT WILSON ROSCOE POSTLE  
ASSOCIATES INC.**

Neil N. Gow, P.Ge.

**SCOTT WILSON RPA**

*www.scottwilson.com*

Suite 501  
55 University Avenue  
P.O. Box 55  
Toronto, Ontario M5J 2H7  
Tel: (416) 947-0907  
Fax:(416)947-0395

**FILED BY SEDAR**

March 13, 2007

British Columbia Securities Commission  
Alberta Securities Commission  
Saskatchewan Financial Services Commission  
The Manitoba Securities Commission  
Ontario Securities Commission  
Autorité des marchés financiers  
New Brunswick Securities Commission  
Nova Scotia Securities Commission

Prince Edward Island Department of Provincial Affairs and Attorney General  
Securities Division, Department of Justice Government of Newfoundland and Labrador

Dear Sirs/Mesdames:

**Re: Denison Mines Corp. (the Company )**

**Filing of Technical Report dated February 27, 2007**

I, Thomas C. Pool, P.E., consent to the public filing of the technical report titled *Technical Report on the Uranium Exploration Properties in Mongolia* (the Technical Report ) prepared by Scott Wilson Roscoe Postle Associates Inc. for the Company.

I further confirm that I have read the written disclosure in the Company's news release titled *Denison Announces NI 43-101 Resource Estimate on Hairhan Deposit in Mongolia* dated March 13, 2007 and that it fairly and accurately represents the information in the Technical Report that supports the disclosure.

This letter is provided to the securities regulatory authorities to whom it is addressed pursuant to the requirements of applicable securities legislation and not for any other purpose.

Sincerely,

**SCOTT WILSON ROSCOE POSTLE  
ASSOCIATES INC.**

Thomas C. Pool, P.E.

---

**DENISON MINES CORP.**  
**CODE OF ETHICS FOR DIRECTORS, OFFICERS AND EMPLOYEES**

**1. Introduction**

Denison Mines Corp., and its subsidiaries (collectively, Denison ), is committed to conducting its business in compliance with the law and the highest ethical standards. This Code of Ethics (the Code ) summarizes the standards that must guide the actions of Denison s directors, officers and all employees.

This Code sets out written standards that are designed to deter wrongdoing and to promote:

Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;

Full, fair, accurate, timely and understandable disclosure in reports and documents that Denison files with, or submits to, applicable securities regulators and in other public communications made by Denison;

Compliance with applicable governmental laws, rules and regulations;

The prompt internal reporting to an appropriate person or persons of violations of this Code; and

Accountability for adherence to this Code.

While covering a wide range of business practices and procedures, this Code cannot and does not cover every issue that may arise, or every situation in which ethical decisions must be made, but rather sets forth key guiding principles of business conduct that Denison expects of all of its directors, officers and employees. This Code should be read in conjunction with Denison s other corporate policies and procedures, including those related to corporate disclosure, insider trading, and the protection of confidential information.

This Code is pursuant to the provisions of National Policy 58-201 promulgated by the Canadian Securities Administrators and to Section 406 of the Sarbanes-Oxley Act of 2002 and related rules of the U.S. Securities and Exchange Commission.

**2. Compliance with Laws, Rules, and Regulations**

Denison is strongly committed to conducting its business affairs with honesty and integrity and in full compliance with all applicable laws, rules, and regulations. No director, officer or employee may commit an illegal or unethical act, or instruct or authorize others to do so, for any reason, in connection with any act, decision or activity that is or may appear to be related to his or her employment by or position with Denison.

**3. Conflicts of Interest**

All directors, officers and employees have an obligation to act in the best interest of Denison. Any situation that presents an actual or potential conflict between a director, officer or employee s personal interests and the interests of Denison should be reported to the Chair of Denison s Audit Committee. Any director, officer or employee has a conflict of interest when his or her personal interests, relationships or activities, or those of a member of his or her immediate family, interfere or conflict, or even appear to interfere or conflict, with Denison s interests. A conflict of interest can arise when any director, officer or

---



employee takes an action or has a personal interest that may adversely influence his or her objectivity or the exercise of sound, ethical business judgment. Conflicts of interest can also arise when any director, officer or employee, or a member of his or her immediate family, receives improper personal benefits as a result of his or her position at Denison. No director, officer or employee should improperly benefit, directly or indirectly, from his or her status as director, officer or employee of Denison, or from any decision or action by Denison that he or she is in a position to influence. By way of example, a conflict of interest may arise if any director, officer or employee:

Has a material personal interest in a transaction or agreement involving Denison;

Accepts a gift, service, payment or other benefit (other than a nominal gift) from a competitor, supplier, or customer of Denison, or any entity or organization with which Denison does business or seeks or expects to do business;

Lends to, borrows from, or has a material interest in a competitor, supplier, or customer of Denison, or any entity or organization with which Denison does business or seeks or expects to do business (other than routine investments in publicly traded companies);

Knowingly competes with Denison or diverts a business opportunity from Denison;

Serves as an officer, director, employee, consultant, or in any management capacity, in an entity or organization with which Denison does business or seeks or expects to do business (other than routine business involving immaterial amounts, in which the director, officer or employee has no decision-making or other role);

Knowingly acquires, or seeks to acquire an interest in property (such as real estate, patent rights, securities, or other properties) where Denison has, or might have, an interest;

Has a material interest in an entity or organization with which Denison does business or seeks or expects to do business; or

Participates in a venture in which Denison has expressed an interest.

Directors, officers and employees are expected to use common sense and good judgment in deciding whether a potential conflict of interest may exist.

#### **4. Insider Trading**

All non-public information about Denison or its partners should be considered confidential information. To use non-public information for personal financial benefit or to tip others who might make an investment decision on the basis of this information is not only unethical but also illegal. If you have any questions, please consult the Chair of Denison's Audit Committee.

#### **5. Protection and Proper Use of Corporate Assets and Opportunities**

Directors, officers and employees owe a duty to Denison to advance its legitimate interests when the opportunity to do so arises. All directors, officers and employees should endeavor to protect Denison's assets and ensure their efficient use. Theft, carelessness and waste have a direct, negative impact on Denison's image and profitability. All of Denison's assets should only be used for legitimate business purposes.

Directors, officers and employees are prohibited from (a) taking for themselves personally opportunities that are discovered through the use of Denison property, information or position; and (b) using Denison property, information, or position for personal gain. By way of example, the following types of activities are prohibited:

Using Denison assets for other business or personal endeavors; or

Obtaining or seeking to obtain any personal benefit from the use or disclosure of information that is confidential or proprietary to Denison, or from the use or disclosure of confidential or proprietary information about another entity acquired as a result of or in the course of his or her employment with Denison.

**6. Confidentiality of Corporate Information**

Directors, officers and employees must maintain the confidentiality of information entrusted to them by Denison or its customers, except when disclosure is authorized or legally mandated. Confidential

---

information includes all non-public information that might be of use to competitors or might be harmful to Denison or its partners and associates, if disclosed.

#### **7. Fair Dealing With Denison's Security Holders, Customers, Suppliers, Competitors and Employees**

Directors, officers and employees shall deal honestly, fairly and ethically with all of Denison's security holders, customers, suppliers, competitors and employees. In all such dealings, directors, officers and employees shall comply with all laws, rules and regulations and not take any actions that would bring into question the integrity of Denison or any of its directors, officers or employees.

#### **8. Quality of Public Disclosure**

Denison is committed to providing information about Denison to the public in a manner that is consistent with all applicable legal and regulatory requirements and that promotes investor confidence by facilitating fair, orderly, and efficient behavior. Denison's reports and documents filed with or submitted to securities regulators in Canada and the United States, and Denison's other public communications, must include full, fair, accurate, timely, and understandable disclosure. All directors, officers and employees who are involved in Denison's disclosure process are responsible for using their best efforts to ensure that Denison meets such requirements. Directors, officers and employees are prohibited from knowingly misrepresenting, omitting or causing others to misrepresent or omit material information about Denison to others, including to Denison's independent auditors.

Denison maintains all records in accordance with laws and regulations regarding retention of business records. The term "business records" covers a broad range of files, reports, business plans, receipts, policies and communications, including hard copy and electronic whether maintained at work or at home. Denison prohibits the unauthorized destruction of or tampering with any records, whether written or in electronic form, where Denison is required by law or government regulation to maintain such records or where it has reason to know of a threatened or pending government investigation or litigation relating to such records.

#### **9. Health and Safety**

Denison is committed to making the work environment safe, secure and healthy for its employees and others. Denison complies with all applicable laws and regulations relating to safety and health and the environment in the workplace. Denison expects each employee and director to promote a positive working environment for all and to comply with Denison's policies concerning environmental, health and safety matters. An employee should immediately report any unsafe or hazardous conditions or materials, injuries and accidents connected with Denison's business and any activity that compromises his or her security to his or her supervisor. No employee shall work under the influence of any substances that would impair the safety of others. All threats or acts of physical violence or intimidation are prohibited.

#### **10. Respect for Our Employees**

Denison's employment decisions will be based on reasons related to its business, such as job performance, individual skills and talents, and other business/related factors. Denison requires adherence to all applicable federal, provincial and state employment laws. In addition to any other requirements of applicable laws in a particular jurisdiction, Denison prohibits discrimination in any aspect of employment based on race, color, religion, sex, national origin, disability or age, within the meaning of applicable laws.

#### **11. Abusive or Harassing Conduct Prohibited**

Denison policy prohibits abusive or harassing conduct by its employees toward others, such as unwelcome sexual advances, comments based on ethnicity, religion or race, or other non-business, personal comments

---

or conduct that make others uncomfortable in their employment with Denison. Denison encourages and expects all employees to report harassment or other inappropriate conduct as soon as it occurs.

#### **12. Privacy**

Denison, and third parties who may be authorized by Denison, collect and maintain personal information that relates to each employee's employment, including compensation, medical and benefit information. Denison follows procedures and applicable laws to protect information wherever it is stored or processed, and access to employees' personal information is restricted. Employee personal information will only be released to outside parties in accordance with Denison's policies and applicable legal requirements. Employees who have access to personal information must ensure that personal information is not disclosed in violation of Denison's policies or practices or applicable laws.

#### **13. Compliance with This Code and Reporting of Any Illegal or Unethical Behavior**

Directors, officers and employees are expected to comply with all of the provisions of this Code. This Code will be strictly enforced and violations will be dealt with immediately, including subjecting the director, officer or employee to corrective and/or disciplinary action, including without limitation, dismissal or removal from office. Violations of this Code that involve unlawful conduct will be reported to the appropriate authorities. Situations that may involve a violation of ethics, laws, or this Code may not always be clear and may require difficult judgment.

Directors, officers or employees who have concerns or questions about violations of laws, rules or regulations, or of this Code, should report them to the Corporate Secretary or to the Chair of Denison's Audit Committee. If the concerns involve accounting, internal controls and auditing matters, such concerns may also be reported by employees on a confidential and anonymous basis under Denison's Whistle Blowing Complaint Procedures. Following receipt of any complaints submitted hereunder, the Corporate Secretary or Chair of the Audit Committee, as the case may be, will investigate each matter so reported and report to the Audit Committee. The Audit Committee will have primary authority and responsibility for the enforcement of this Code, subject to the supervision of the Board of Directors. Denison encourages all directors, officers, and employees to report promptly any suspected violation of this Code to the Corporate Secretary or Chair of the Audit Committee. Denison will tolerate no retaliation for reports or complaints regarding suspected violations of this Code that were made in good faith. Open communication of issues and concerns without fear of retribution or retaliation is vital to the successful implementation of this Code. Denison will take such disciplinary or preventive action as it deems appropriate to address any violations of this Code that are brought to its attention.

#### **14. Waivers and Amendments**

Any waivers from this Code that are granted for the benefit of Denison's directors or executive officers (including without limitation, Denison's Chief Executive Officer, Chief Financial Officer, Controller and persons performing similar functions) shall be granted by the Audit Committee or by the Board of Directors. Any waivers for all other employees shall be granted exclusively by the Chief Executive Officer or by any other senior officer as may be designated by the Audit Committee. Amendments to or waivers of the provisions in this Code will be promptly publicly disclosed in accordance with applicable laws and regulations.

#### **15. Affirmation by Directors and Officers**

This Code will be circulated to all directors, officers and employees of the Corporation on an annual basis and whenever changes are made. New directors, officers and employees will be provided with a copy of this Code and will be advised of its importance.

**At the time of each annual meeting of shareholders, the directors and officers of Denison will affirm their compliance with this Code in writing.**