



# Annual Information Form

For the Financial Year Ended December 31, 2008

March 26, 2009

## TABLE OF CONTENTS

CURRENCY.....1	North Wedge Project.....79
BASIS OF PRESENTATION.....1	JNR Operated Projects.....79
NOTE REGARDING FORWARD-LOOKING INFORMATION.....1	Gold Properties.....79
NOTE TO UNITED STATES INVESTORS CONCERNING ESTIMATES OF MEASURED, INDICATED AND INFERRED RESOURCES.....2	U.S. Properties.....79
INCORPORATION AND SUBSIDIARIES.....3	Mongolia.....80
GENERAL DEVELOPMENT OF THE BUSINESS THREE-YEAR HIGHLIGHTS.....4	Mutanga.....80
DENISON'S BUSINESS	Quality Assurance and Quality Control Procedures and Protocols.....81
OVERVIEW.....9	MANAGER OF UPC.....88
MARKETING.....11	URIZON JOINT VENTURE.....89
OPERATIONS	DENISON ENVIRONMENTAL SERVICES.....90
McClellan Lake Mining and Processing Facilities.....15	ENVIRONMENTAL AND SAFETY MATTERS
Mining Equipment Development Program.....18	Canada.....91
Midwest Project	U.S. Environmental Regulation.....92
Development.....18	Mongolia.....93
White Mesa Mill.....20	Zambia.....93
Alternate Feed Processing.....22	EMPLOYEES.....93
U.S. Mines.....22	GOVERNMENT REGULATION
MINERAL PROPERTIES	Canadian Uranium Industry.....93
Summary of Reserves and Resources.....31	U.S. Uranium Industry.....94
McClellan Lake.....36	Land Tenure.....95
Midwest.....40	Canadian Royalties.....95
Henry Mountains Complex.....46	Canadian Income and Other Taxes.....96
Arizona Strip.....53	U.S. Income and Other Taxes.....96
Colorado Plateau.....59	RISK FACTORS.....96
Gurvan Saihan Joint Venture.....60	DESCRIPTION OF SECURITIES
Mutanga Project.....68	COMMON SHARES.....105
MINERAL EXPLORATION	2004 WARRANTS.....105
General.....73	2006 WARRANTS.....106
McClellan Lake.....74	DIVIDEND POLICY.....106
Midwest.....74	MARKET FOR SECURITIES.....106
Moore Lake.....74	DIRECTORS AND OFFICERS.....107
Wheeler River.....75	STANDING COMMITTEES
Wolly.....76	THE AUDIT COMMITTEE.....110
Park Creek.....76	OTHER BOARD COMMITTEES.....112
Bell Lake Joint Venture.....77	LEGAL PROCEEDINGS.....112
Huard-Kirsch.....77	INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS.....112
Murphy Lake Project.....77	REGISTRAR AND TRANSFER AGENT.....112
Hatchet Lake Project.....77	MATERIAL CONTRACTS.....112
Bachman Lake Project.....78	NAMES AND INTERESTS OF EXPERTS.....113
Crawford Lake Project.....78	ADDITIONAL INFORMATION.....114
Brown Lake Project.....78	EXHIBIT 1 – ORGANIZATIONAL STRUCTURE
Ford Lake Project.....78	SCHEDULE A
Jasper Lake Project.....78	Audit Committee Mandate and Charter
Stevenson River Project.....78	SCHEDULE B
Ahenakew Lake Project.....78	Glossary of Terms

## CURRENCY

---

All amounts stated in this Annual Information Form (“AIF”) are in United States dollars, unless otherwise indicated.

## BASIS OF PRESENTATION

---

Financial information is presented in accordance with Canadian generally accepted accounting principles. Differences between generally accepted accounting principles in Canada and in the United States, as applicable to Denison Mines Corp. (“Denison” or the “Company”), are explained in Note 29 in the consolidated financial statements of the Company for the year ended December 31, 2008, which note is incorporated herein by reference.

## NOTE REGARDING FORWARD-LOOKING INFORMATION

---

Certain information contained in this AIF and certain documents incorporated by reference into it constitutes forward looking information within the meaning of the United States Private Securities Litigation Reform Act of 1995 and similar Canadian legislation, concerning the business, operations and financial performance and condition of Denison.

The use of any of the words "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe" and similar expressions are intended to identify forward-looking information. This information involves known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Denison believes that the expectations reflected in this forward-looking information is reasonable but no assurance can be given that these expectations will prove to be correct and such forward-looking information included in, or incorporated by reference into, this AIF should not be unduly relied upon. This information speaks only as of the date of this AIF or as of the date specified in the documents incorporated by reference.

In particular, this AIF and the documents incorporated by reference contain forward-looking information pertaining to the following:

- the estimates of Denison's mineral reserves and mineral resources;
- expectations regarding future uranium and vanadium production levels;
- capital expenditure programs, estimated production costs, exploration expenditures and reclamation costs;
- expectations of market prices and costs;
- supply and demand for uranium and vanadium;
- possible impacts of litigation on Denison;
- exploration, development and expansion plans and objectives;
- Denison's expectations regarding raising capital and adding to its mineral reserves through acquisitions and development; and
- receipt of regulatory approvals, permits and licenses and treatment under governmental regulatory regimes.

Denison's actual results could differ materially from those anticipated in this forward-looking information as a result of the following and as a result of the risk factors set forth below and elsewhere in this AIF and the documents incorporated by reference herein:

- volatility in market prices for uranium and vanadium;
- ability to access capital;
- changes in foreign currency exchange rates;
- liabilities inherent in mining operations;
- uncertainties associated with estimating mineral reserves and resources;
- failure to obtain industry partner, government and other third party consents and approvals, when required;
- delays in obtaining permits and licenses for development properties;
- competition for, among other things, capital, acquisitions of mineral reserves, undeveloped lands and skilled personnel;
- incorrect assessments of the value of acquisitions; and
- geological, technical and processing problems.

These factors are not, and should not be construed as being, exhaustive. Statements relating to "mineral reserves" or "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions, that the mineral reserves and mineral resources described can be profitably produced in the future. The forward-looking information contained in this AIF and the documents incorporated by reference herein are expressly qualified by this cautionary statement. Denison does not undertake any obligation to publicly update or revise any forward-looking information after the date of this AIF to conform such information to actual results or to changes in Denison's expectations except as otherwise required by applicable legislation.

#### **NOTE TO UNITED STATES INVESTORS CONCERNING ESTIMATES OF MEASURED, INDICATED AND INFERRED RESOURCES**

---

This AIF uses the terms "Measured," "Indicated" and "Inferred" Resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize them. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies. **United States investors are cautioned not to assume that all or any part of Measured or Indicated Mineral Resources will ever be converted into Mineral Reserves. United States investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable.**

The definitions of certain technical terms used in this AIF are set forth in Schedule B – Glossary of Technical Terms.

This AIF is dated March 26, 2009. Except as otherwise indicated, the information contained in this AIF is stated as at December 31, 2008.

## INCORPORATION AND SUBSIDIARIES

---

### *Incorporation*

Denison, formerly International Uranium Corporation, was formed by articles of amalgamation effective May 9, 1997 pursuant to an amalgamation under the *Ontario Business Corporations Act* (the “**OBCA**”) involving two companies: International Uranium Corporation, incorporated on October 3, 1996 under the OBCA, and Thornbury Capital Corporation, incorporated under the laws of the Province of Ontario by Letters Patent on September 29, 1950. The amalgamated companies were continued under the name “International Uranium Corporation” (“**IUC**”).

On December 1, 2006, IUC and Denison Mines Inc. (“**DMI**”) combined their business operations by way of arrangement under the OBCA (the “**Denison Arrangement**”). Pursuant to the Denison Arrangement, DMI amalgamated with a subsidiary of IUC, 2113537 Ontario Inc. (“**IUC Subco**”). The amalgamated companies continued as “Denison Mines Inc.” Under the Denison Arrangement, IUC acquired all of the shares of the newly amalgamated DMI in exchange for IUC shares on the basis of 2.88 IUC shares for each DMI share. Effective December 1, 2006, IUC’s articles were amended to change its name to “Denison Mines Corp.”

The registered and head office of Denison is located at Atrium on Bay, Suite 402, 595 Bay Street, Toronto, Ontario, M5G 2C2, Canada.

Denison is a reporting issuer in all of the Canadian provinces. Denison’s common shares (the “**Common Shares**”) are listed on the Toronto Stock Exchange (the “**TSX**”) under the symbol “DML” and on the NYSE Amex (formerly the American Stock Exchange) under the symbol “DNN.”

Denison’s Common Shares are registered under the Securities Exchange Act of 1934, as amended, and Denison files periodic reports with the United States Securities and Exchange Commission.

### *Subsidiaries*

The Company conducts its business through a number of subsidiaries. A diagram depicting the organizational structure of the Company and its subsidiaries, including the name, country of incorporation and proportion of ownership interest is included as Exhibit 1 to this AIF.

All of the Company’s U.S. assets are held directly or indirectly through the Company’s wholly-owned subsidiary Denison Mines Holdings Corp. (“**DMH**”). DMH holds its uranium mining and milling assets through a series of Colorado limited liability companies, as follows:

- the White Mesa mill, a 2,000-ton per day uranium and vanadium processing plant near Blanding, Utah through Denison White Mesa LLC;
- the Colorado Plateau mines, straddling the Colorado and Utah border, through Denison Colorado Plateau LLC;
- the Arizona Strip properties through Denison Arizona Strip LLC;
- the Henry Mountains uranium complex in southern Utah and other exploration properties through Denison Henry Mountains LLC; and
- miscellaneous properties through Denison Properties LLC.

All of the U.S. properties are operated by Denison Mines (USA) Corp., a wholly-owned subsidiary of DMH.

The Company's 70% interest in the Gurban Saihan Joint Venture in Mongolia is held through International Uranium Company (Mongolia) Ltd, which is wholly owned by Denison Mines (Bermuda) I Ltd., a wholly-owned subsidiary of the Company. The remaining interests in this Joint Venture are held by the Mongolian Government and Geologorazvedka, a Russian government entity, as to 15% each. In addition to its interest in the Gurban Saihan Joint Venture, the Company also holds other uranium exploration licenses in Mongolia through Denison Mines Mongolia XXX, which is also wholly owned by International Uranium Company (Mongolia) Ltd.

Denison's Mutanga project in Zambia is held through a wholly-owned subsidiary of OmegaCorp Limited ("**OmegaCorp**"), which, in turn, is a wholly-owned subsidiary of the Company. Denison acquired this project in 2007 upon completion of its acquisition of OmegaCorp.

The Company's Canadian uranium exploration properties are held directly, except those properties which belonged to DMI prior to the Denison Arrangement; these are still held through DMI. DMI is a wholly-owned subsidiary of the Company. It holds a 22.5% interest in the McClean Lake project and a 25.17% interest in the Midwest project, both of which are operated by Denison's joint venture partner, AREVA Resources Canada Inc. ("**ARC**"), a subsidiary of the AREVA Group ("**AREVA**").

DMI owns 30% of the outstanding common shares of McClean Uranium Limited ("**MUL**"). The balance of the common shares of MUL is held by ARC. ARC and Denison jointly marketed their respective shares of Canadian production from McClean Lake to electrical utilities around the world through MUL. The marketing activities of MUL were terminated effective the end of 2008. ARC and DMI continue to deliver a limited amount of uranium through MUL under one contract which will be completed at the end of 2010. See "Denison's Business – Marketing".

The Company's 50% interest in Urizon Recovery Systems, LLC is held through Denison Recovery LLC, which is owned as to 1% by DMH and as to 99% by DMH's wholly-owned subsidiary, Denison Mines Recovery Corp. See "Denison's Business – Urizon Joint Venture."

In 2008 the Company established Denison Mines Argentina S.A. to pursue potential opportunities in Argentina. This corporation is held by two wholly-owned subsidiaries of Denison, Denison Mines (Argentina I) Ltd. and Denison Mines (Argentina II) Ltd., holding 95% and 5% of the Argentine subsidiary respectively.

## **GENERAL DEVELOPMENT OF THE BUSINESS**

---

### *Three-Year Highlights*

#### **2006**

Spot uranium prices continued to steadily increase during 2006 from \$36.25 to \$72.00 per pound of triuranium octoxide ("**U<sub>3</sub>O<sub>8</sub>**") by year-end.

In March, the Company signed a letter of intent with Cameco Corporation ("**Cameco**") to earn an aggregate 75% interest in the Park Creek uranium property in the Athabasca Basin, Saskatchewan. The earn-in agreement required the Company to spend Cdn\$2.8 million over 3 years to earn 49%, and then an

option to earn an additional 26% by incurring expenditures of Cdn\$3.0 million over the next two years. The Company is the operator during the earn-in period.

In March, new estimates of mineral resources at the Sue D deposit on the McClean Lake lease were prepared by Scott Wilson Roscoe Postle Associates Inc. (“**Scott Wilson RPA**”), which was retained to independently review and audit the resources in accordance with the requirements of National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*, Companion Policy 43-101CP and Form 43-101F (collectively, “**NI 43-101**”) of the Canadian Securities Administrators. The report identified indicated mineral resources for the Sue D deposit of 2.8 million pounds of U<sub>3</sub>O<sub>8</sub> (the Company’s share, 0.6 million pounds) and inferred mineral resources containing 0.2 million pounds (the Company’s share, 0.05 million pounds) based on a 0.1% U<sub>3</sub>O<sub>8</sub> cut-off grade. See “Denison’s Business – Mineral Properties – McClean Lake.”

In May, the Company initiated a 65,000 meter drilling campaign in Mongolia after years of reduced activity in that country due to depressed U<sub>3</sub>O<sub>8</sub> prices.

In June, the Company announced the re-opening of its U.S. uranium/vanadium mines in the south western United States, including the Pandora, Topaz, Sunday/St. Jude and West Sunday mines in the Colorado Plateau.

In June, the Utah Department of Environmental Quality (“**UDEQ**”) issued an amendment to the Company’s radioactive materials licence, allowing the mill to receive and process up to 32,000 tons of alternate feed material from FMRI Inc.’s Muskogee Facility, located in Oklahoma. The amendment was challenged by the Glen Canyon Group of the Utah Chapter of the Sierra Club. In February 2007, the State of Utah Radiation Control Board voted in favour of upholding the licence amendment.

In October, new estimates of mineral resources at the Henry Mountains Complex, in south eastern Utah, were prepared by Scott Wilson RPA, which was retained to independently review and audit the resources in accordance with the requirements of NI 43-101. Scott Wilson RPA reported an indicated mineral resource of 6.87 million pounds U<sub>3</sub>O<sub>8</sub> and an inferred mineral resource of 6.05 million pounds at its Bullfrog deposit at a cut-off grade of 0.20% eU<sub>3</sub>O<sub>8</sub>. The report also identified historical mineral resources of 5.3 million pounds U<sub>3</sub>O<sub>8</sub>, at a 0.15% eU<sub>3</sub>O<sub>8</sub> cut-off grade, at the Tony M deposit, which are considered to be equivalent to indicated under the definition standards of the Canadian Institute of Mining, Metallurgy and Petroleum (“**CIM**”). See “Denison’s Business – Mineral Properties – Henry Mountains Complex.”

On November 20, the Company’s shareholders approved certain matters relating to the Denison Arrangement and amendments to the Company’s stock option plan. At the same time, shareholders of DMI also approved matters pertaining to the Denison Arrangement. Shortly thereafter, the Ontario Superior Court of Justice approved the Denison Arrangement.

On December 1, IUC and DMI combined their businesses and operations. Pursuant to the Denison Arrangement, DMI amalgamated with IUC Subco and the amalgamated company continued as DMI. IUC acquired all of the shares of DMI on the basis of 2.88 IUC shares for each DMI share. Effective December 1, IUC’s articles were amended to change its name to “Denison Mines Corp.” On December 7, the Common Shares started trading on the TSX under the symbol “DML.”

## 2007

Spot uranium prices during 2007 continued to rise during the first half of the year from \$72.00 per pound  $U_3O_8$  to a record high of \$136.00 per pound in June. Prices subsequently weakened to \$75.00 per pound before recovering to end the year at \$90.00 per pound  $U_3O_8$ .

In January, Denison closed a private placement of 9,010,700 Common Shares at a price of Cdn\$11.75 per share for gross proceeds of approximately Cdn\$105.9 million. Net proceeds of the private placement were used by the Company towards the acquisition of OmegaCorp, the purchase of other uranium assets, and for general working capital purposes.

In February, Denison acquired five uranium deposits from Pathfinder Mines Corporation (“**Pathfinder**”), a subsidiary of AREVA, located in the Arizona Strip district in north eastern Arizona for cash consideration of \$5.5 million plus a 1% yellowcake royalty. The historical resource estimates of these deposits are 1.3 million tons at an average grade of 0.28%  $U_3O_8$ , containing an estimated 7.1 million pounds of  $U_3O_8$ . The deposits are located within hauling distance of Denison’s White Mesa mill and near its existing Arizona Strip mines. See “Denison’s Business – Mineral Properties – Arizona Strip”. Denison also entered into an agreement to sell to AREVA up to 6.5 million pounds of production from the White Mesa mill. The sales agreement provides for a price equal to 95% of the long-term uranium price with a floor price of \$45.00 per pound.

In March, new estimates of mineral resources at the McClean North deposit, on the McClean Lake property, were received from Scott Wilson RPA, which was retained to independently review and audit the resources in accordance with the requirements of NI 43-101. The report identified indicated mineral resources for the McClean North deposit containing 11.48 million pounds of  $U_3O_8$  (the Company’s share 2.58 million pounds) and inferred mineral resources containing 0.05 million pounds (the Company’s share 0.01 million pounds) based on a 0.1%  $U_3O_8$  cut-off grade using an open pit mining method. The McClean North deposit resources had previously been estimated based on mining by blind boring. See “Denison’s Business – Mineral Properties – McClean Lake.”

In March, new estimates of mineral resources at the Hairhan deposit in Mongolia were received from Scott Wilson RPA, which was retained to independently review and audit the resources in accordance with the requirements of NI 43-101. The report identified indicated mineral resources for the Hairhan deposit containing 7.89 million pounds of  $U_3O_8$  (Denison’s share 5.52 million pounds) and inferred mineral resources containing 3.48 million pounds (Denison’s share 2.44 million pounds) based on a 0.02%  $U_3O_8$  cut-off grade. The report also identifies historical mineral resources of 6.4 million pounds  $U_3O_8$  (Denison portion 4.48 million pounds) at a 0.01%  $U_3O_8$  cut-off grade at the Haraat deposit, which are considered to be equivalent to inferred mineral resources under the definition standards of the CIM. See “Denison’s Business – Mineral Properties – Gurvan Saihan Joint Venture.”

In March, new estimates of mineral resources at the breccia pipe deposits in Arizona were prepared by Scott Wilson RPA, which was retained in accordance with the requirements of NI 43-101. The report identified inferred mineral resources for the Arizona 1, Canyon, and Pinenut deposits of 0.96 million pounds of  $U_3O_8$ , 1.52 million pounds of  $U_3O_8$  and 0.87 million pounds of  $U_3O_8$  respectively, based on a 0.2%  $eU_3O_8$  cut-off grade. See “Denison’s Business – Mineral Properties – Arizona Strip.”

In April, Denison closed a non-brokered private placement of 1,104,295 flow-through Common Shares priced at Cdn\$16.30, for gross proceeds of approximately Cdn\$18 million. Proceeds of the private placement were used for the Company’s exploration program in Saskatchewan.

In April, the Company commenced trading its Common Shares on the NYSE Amex under the ticker symbol "DNN."

In June, historical estimates of mineral resources on the Company's Elliot Lake properties were prepared by Scott Wilson RPA which was retained to independently review and audit the resources in accordance with the requirements of NI 43-101. The report identified a historical mineral resource of 205 million pounds of U<sub>3</sub>O<sub>8</sub>, based on a cut-off grade of 0.04% U<sub>3</sub>O<sub>8</sub>. See "Denison's Business – Mineral Properties-Elliot Lake."

In July, the Company announced the start of a uranium and uranium/vanadium ore buying program to supplement feed for the White Mesa mill, which involves the Company purchasing ore from independent third parties at a price based on a published schedule, providing an additional source of mill feed.

Effective September 4, 2007 Denison acquired 98.45% of the shares of OmegaCorp and proceeded with compulsory acquisition of the remaining shares of OmegaCorp. OmegaCorp was de-listed from the Australian Securities Exchange on September 14, 2007. OmegaCorp became a wholly-owned subsidiary of the Company. The total amount paid for the shares of OmegaCorp was \$167.2 million dollars. Denison is now the sole owner of a 946 square kilometre prospecting licence in southern Zambia, which includes the advanced stage Mutanga uranium project. See "Denison's Business – Mineral Properties-Mutanga Project."

In December, Denison, together with its joint venture partners, ARC and OURD (Canada) Co., Ltd. ("OURD"), made the decision to proceed with the development of the Midwest Project in northern Saskatchewan. Denison has a 25.17% interest in Midwest, which is located approximately 15 kilometres west of the McClean Lake mill and is proposed to be mined by open pit methods.

## **2008**

Since the beginning of 2008, the spot price and long term-price for U<sub>3</sub>O<sub>8</sub> decreased significantly. Spot prices decreased from \$90.00 per pound at December 31, 2007 to as low as \$44.00 in October 2008, and ended the year at \$53.00 per pound. The long-term price for U<sub>3</sub>O<sub>8</sub> also decreased from \$95.00 per pound at December 31, 2007 to as low as \$70.00 in October, 2008 and remained at this level through year end. The decrease in the market price of uranium has had a negative effect on the financial condition and outlook of uranium producers such as Denison compared to the condition and outlook of these companies in 2007 and early 2008. The reduction in market price has also made the development of uranium projects, including certain of Denison's projects, less economical. See "Risk Factors."

On February 22, Denison announced an independent resource estimate on the Midwest A deposit (formerly called the Mae Zone) on the Midwest joint venture property in the Athabasca Basin of northern Saskatchewan. The resource estimate was prepared by Geostat Systems International Inc. ("Geostat") in accordance with the requirements of NI 43-101. The report identified indicated mineral resources for the Midwest A deposit of 5.8 million pounds of U<sub>3</sub>O<sub>8</sub> (the Company's share, 1.5 million pounds) at an average grade of 0.57% U<sub>3</sub>O<sub>8</sub> and inferred mineral resources containing 4.3 million pounds (the Company's share, 1.1 million pounds) at an average grade of 21.2% U<sub>3</sub>O<sub>8</sub> based on a 0.05% eU (or 0.06% U<sub>3</sub>O<sub>8</sub>) cut-off grade. See "Denison's Business – Mineral Properties – McClean Lake."

On April 15, Denison purchased 5,465,000 units of Uranerz Energy Corporation ("Uranerz"), each unit consisting of one common share and one-half of one common share purchase warrant, for \$2.40 per unit or \$13,116,000. As a result, Denison owns approximately 9.9% of the issued and outstanding common shares of Uranerz as of the date hereof.

During 2008, Denison completed the major refurbishment of its White Mesa mill and expansion of its tailings capacity. Processing of conventional ore began on April 28, 2008. Production of vanadium began in July 2008 following completion of the refurbishment of the vanadium circuit.

Effective June 30, Denison entered into a credit agreement with The Bank of Nova Scotia (“**Credit Facility**”) with respect to a \$125,000,000 revolving term credit facility. The Credit Facility is repayable in full on June 30, 2011. The borrower under the Credit Facility is DMI and the Company has provided an unlimited full recourse guarantee and a pledge of all of the shares of DMI. DMI has provided a first priority security interest in all present and future personal property and an assignment of its rights and interests under all material agreements relative to the McClean Lake and the Midwest projects. In addition, each of the Company’s material U.S. subsidiaries has provided an unlimited full recourse guarantee secured by a pledge of all of its shares and a first priority security interest in all of its present and future personal property.

Denison Environmental Services (“**DES**”), a division of DMI, was awarded a three-year contract for care and maintenance at the Faro Mine Complex in the Yukon Territory.

On November 25, 2008 the Company and its partners in the Midwest joint venture determined that the development of the Midwest project would be postponed due to economic conditions, delays and uncertainties associated with the regulatory approval process and the increasing capital and operating costs. At the same time, the Company announced that production at Denison's Tony M mine located in Ticaboo, Utah would be placed on stand-by due to economic conditions.

On December 23, Denison closed an underwritten private placement offering of 7,275,000 Common Shares at a price of Cdn\$1.10 per share for gross proceeds of Cdn\$8,002,500. The common shares were issued on a "flow-through" basis for the purposes of the *Income Tax Act* (Canada). Gross proceeds of the offering are being used to advance Denison’s Canadian exploration programs.

Denison's production for 2008 was 1,616,000 pounds of U<sub>3</sub>O<sub>8</sub> and 1,223,000 pounds of vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>).

## **2009 – Recent Developments**

On January 27, Denison completed a public offering of 28,750,000 Common Shares at an issue price of Cdn\$1.65 per share for gross proceeds of Cdn\$47,437,500.

On February 17, Denison announced positive results from its 2009 drilling campaign in the newly identified zone of unconformity hosted mineralization at its 60% owned Wheeler River Project, which included two high-grade intercepts. See “Denison’s Business – Mineral Exploration – Wheeler River”.

On March 12, Denison announced that it had received independent estimates of mineral resources of its Mutanga project in Zambia prepared by CSA Global (UK) Pty Ltd. (“**CSA Global**”), which was retained to independently review and audit the resources in accordance with the requirements of NI 43-101. For the Mutanga deposit, the report identified measured resources of 1.9 million tonnes at 481 ppm U<sub>3</sub>O<sub>8</sub> for 1,992,000 pounds U<sub>3</sub>O<sub>8</sub>, indicated resources of 8.4 million tonnes at 314 ppm U<sub>3</sub>O<sub>8</sub> for 5,817,000 pounds, and inferred resources of 7.23 million tonnes at 206 ppm U<sub>3</sub>O<sub>8</sub> for 3,287,000 pounds U<sub>3</sub>O<sub>8</sub>. For the Dibwe deposit, the report identified an inferred mineral resource containing 9.0 million pounds at an average grade of 234 ppm U<sub>3</sub>O<sub>8</sub> based on a 100 ppm U<sub>3</sub>O<sub>8</sub> cut-off grade. In addition, inferred mineral resources of 400,000 pounds U<sub>3</sub>O<sub>8</sub> for the Mutanga Extension, 100,000 pounds for the Mutanga East deposit and 400,000 pounds U<sub>3</sub>O<sub>8</sub> for the Mutanga West deposit, based on a 200 ppm U<sub>3</sub>O<sub>8</sub> cut-off, were reported. See “Denison’s Business – Mineral Properties – Mutanga Project.”

On March 18, Denison announced that it was placing the Rim and Sunday mines on stand-by. The Company also announced that the White Mesa mill would suspend processing of conventional ore in 2009 once it has reached production of 500,000 pounds  $U_3O_8$ , unless new sales contracts are signed.

On March 23, Peter Farmer, the Chief Executive Officer of Denison, announced his resignation effective April 30.

On March 26, Denison announced that it had received independent estimates of mineral resources at its Tony M and Southwest deposits, which are part of the Henry Mountains complex in southeastern Utah. Scott Wilson RPA, retained to independently review and audit the resources in accordance with the requirements of NI 43-101, reported an indicated mineral resource of 8.1 million pounds  $U_3O_8$  and an inferred mineral resource of 2.8 million pounds at a cut-off of 0.10%  $eU_3O_8$ . See "Denison's Business – Mineral Properties – Henry Mountains Complex."

## **DENISON'S BUSINESS**

---

### *Overview*

Denison is engaged in uranium exploration, development, mining and milling with active uranium mining projects in both the United States and Canada and development projects in Canada, Zambia and Mongolia. Denison's assets include an interest in two of the four licensed and operating conventional uranium mills in North America, with its 100% ownership of the White Mesa mill in Utah and its 22.5% ownership of the McClean Lake mill in Saskatchewan. Both mills are fully permitted and operating. Denison also produces vanadium as a co-product from some of its mines in Colorado and Utah and recycles uranium-bearing waste materials, referred to as "alternate feed materials", for the recovery of uranium, alone or in combination with other metals, at its White Mesa mill.

The Company entered the uranium industry in May 1997 by acquiring substantially all of the uranium producing assets of Energy Fuels Ltd., Energy Fuels Exploration Company and Energy Fuels Nuclear, Inc. (collectively "EFN"). EFN was a uranium producer with properties in the United States and Mongolia. EFN went bankrupt in 1995 and ceased to carry on business at that time. The Company acquired EFN's uranium assets as part of EFN's bankruptcy proceedings.

The EFN assets acquired included several developed mines that were shut down, several partially developed properties and exploration properties within the states of Colorado, Utah, Arizona, Wyoming and South Dakota, as well as the 2,000 ton per day White Mesa mill near Blanding, Utah. In addition to the U.S. properties, the Company also acquired a 70% interest in the Gurvan Saihan Joint Venture with the government of Mongolia and a Russian government entity to explore for uranium in Mongolia.

Due to deteriorating commodity prices at the time and other factors, the Company ceased its uranium mining and exploration activities in 1999, shut down all of its mines and suspended its Mongolian uranium joint venture activities. The Company also sold its uranium property in Wyoming and released its properties in South Dakota.

As a result of subsequent increases in uranium prices, the Company acquired and staked uranium exploration properties in Canada and commenced exploration on a number of those properties. The Company also recommenced its uranium exploration program in Mongolia. In addition, the Company purchased uranium properties in the U.S. and recommenced its U.S. mining activities.

In December 2006, the Company combined its business and operations with DMI by way of the Denison Arrangement whereby DMI became a wholly-owned subsidiary of the Company. DMI or its predecessor companies have been in the uranium exploration, development, mining and milling business since 1954. As a result of the combination, the Company, through DMI, holds a 22.5% interest in the McClean Lake uranium project, a 25.17% interest in the Midwest uranium project in northern Saskatchewan, interests in a number of exploration properties for uranium and other minerals and DES. DES provides services such as ongoing monitoring of closed mine sites, effluent treatment and maintenance services, hazardous material abatement and demolition of closed mines. See "Denison Environmental Services". The Company, through DMI, is also the manager of Uranium Participation Corporation ("UPC"). UPC is an investment holding company which invests substantially all of its assets in uranium, either in the form of U<sub>3</sub>O<sub>8</sub> or uranium hexafluoride ("UF<sub>6</sub>"), with the primary investment objective of achieving appreciation in the value of its uranium holdings. See "Manager of UPC".

The Company's principal assets as at December 31, 2008 include the following:

In United States:

- the White Mesa mill, a 2,000 ton per day uranium and vanadium processing plant near Blanding, Utah;
- the Arizona Strip uranium properties, in north central Arizona;
- the Colorado Plateau uranium/vanadium properties, straddling the south western Colorado and Utah border;
- the Henry Mountains Complex uranium properties, in south central Utah; and
- various uranium alternate feed processing contracts and joint venture contracts.

In Canada:

- 22.50% interest in the McClean Lake uranium processing facility in northern Saskatchewan;
- 22.50% interest in the McClean Lake uranium deposits;
- a 25.17% interest in the Midwest uranium project, including the Midwest and the Midwest A deposits;
- 60% interest in the Wheeler River Project;
- 13% interest in the Wolly project with an option to earn a further 9.5% interest therein;
- 75% interest in the Moore Lake property;
- 49% interest in the Park Creek property;
- various exploration properties in the Athabasca Basin;
- management services agreement with UPC; and
- environmental services business (DES).

In Mongolia:

- a 70% interest in the Gurvan Saihan Joint Venture, which holds 686,000 hectares of uranium exploration properties in Mongolia; and
- an exploration licence held by Denison Mines Mongolia XXK totalling 13,500 hectares.

In Zambia:

- a 100% interest in the Mutanga uranium project, which holds a 946 square kilometre prospecting licence in the southern part of Zambia.

Others:

- an 8.1% equity interest in Energy Metals Limited, an exploration company whose securities are listed on the Australian Stock Exchange. Energy Metals Limited has uranium exploration

and development properties in both Western Australia and the Northern Territory of Australia; and

- a 9.9% interest in Uranerz Energy Corporation, an exploration company whose securities are listed on the TSX, NYSE Amex and Frankfurt stock exchanges. The Company has uranium properties in Saskatchewan and Wyoming.

### ***Marketing***

#### **The Uranium Industry**

Commercial nuclear power generation began over 50 years ago and now generates as much global electricity as was produced in 1960 by all sources. The low operating cost of nuclear power generation and the increasing concern for the environment and climate change are driving a nuclear renaissance. China, India and Russia are proceeding with ambitious plans for new nuclear power plants. Many companies in the United States have filed applications for a combined construction and operating licence to build new nuclear reactors. Countries such as Egypt, the United Arab Emirates, Thailand and Turkey are actively considering building nuclear power plants.

There are now 104 operating nuclear reactors in the United States and a total of 436 operating worldwide in 30 countries, representing a total world nuclear capacity of 371.9 gigawatts. A further 43 reactors with a capacity of 37.7 gigawatts are under construction in 12 countries and an additional 106 reactors (118.1 gigawatts) are planned. With the only significant commercial use for uranium being fuel for nuclear reactors, it follows that the nuclear renaissance will have a significant effect on future uranium demand.

#### **Uranium Supply and Demand**

The world's operating nuclear power reactors currently require an average of approximately 180 million pounds of  $U_3O_8$  per year. As nuclear power capacity increases, the world's uranium fuel requirement also increases and is estimated to rise to approximately 193 million pounds  $U_3O_8$  by 2014 and approximately 234 million pounds  $U_3O_8$  by 2020. Demand for uranium can be supplied through either primary production (newly mined uranium) or secondary sources (inventories, down blending of weapons grade material and reprocessing spent fuel rods). Secondary sources are of particular importance to the uranium industry when compared to other commodity markets.

Over the four-year period from 2000 through 2003, annual global primary uranium production averaged 93.1 million pounds of uranium. In response to increasing uranium prices, worldwide uranium production rose to 104.6 million pounds in 2004 and to 108.4 million pounds in 2005 before decreasing, in 2006, to 102.5 million pounds as a result of problems at several production centres. In 2007, production increased to 107.3 million pounds with the start-up of the Langer Heinrich mine and ramp-up of production in Kazakhstan. Global production in 2008 is estimated at 114 million pounds. Canada and Australia currently account for 40% of the world's production. The United States' production represents about 4.0%. During the last decade, takeovers, mergers and closures have consolidated the uranium production industry. Based on 2008 production figures, seven companies accounted for over 82% of primary production while the five largest uranium mines produced over 48% of the aggregate global production.

Primary uranium production only supplies approximately 63% of the total annual requirements of nuclear power generators. The balance of requirements are met from secondary sources of supply, which include inventories held by producers and utilities, government inventories, uranium recycled from government stockpiles and uranium recycled from nuclear weapons. The recycling of highly enriched uranium ("HEU") from former warheads in the Russian Federation is a unique subset of secondary supply. Surplus fissile military materials are converted in Russia from HEU into low enriched uranium ("LEU")

suitable for use in nuclear reactors. In February 1993, the United States and Russia entered into an agreement (“**Russian HEU Agreement**”) which provided for the United States to purchase 500 metric tons of Russian HEU over a 20-year period. In April 1996, the USEC Privatization Act gave Russia and three western companies, Cameco, AREVA and NUKEM, Inc. (the “**Western Companies**”), the authority to sell the natural uranium feed component (in the form of  $UF_6$ ) derived from the LEU (“**HEU Feed**”) in the United States over the 20-year period into the commercial U.S. uranium market under defined annual quotas. The USEC Privatization Act provides a framework for the introduction of this Russian HEU Feed into the U.S. commercial uranium market. Russia has been selling approximately 18.0 to 24.0 million pounds  $U_3O_8$  equivalent of this HEU Feed through long-term supply agreements directly with U.S. utilities and the Western Companies.

The Russian HEU Agreement terminates in 2013, and Russia has formally stated that the agreement will not be renewed, as had once been anticipated.

Based upon recent assessments of future secondary uranium supply, the uranium industry’s scheduled uranium production forecast and expected nuclear generating capacity, there is a growing requirement for increased uranium production to meet the forecasted needs of reactors world-wide. Based upon the Q1 2009 edition of “The Uranium Market Outlook” published by The U<sub>x</sub> Consulting Company LLC, world uranium demand, in the base case, is forecast to increase from its 2008 level of 181 million pounds to 234 million pounds by 2020. At the same time, supply from secondary sources, such as HEU Feed, government inventories and reprocessing, is expected to drop from 47 million pounds in 2008 to 15 million pounds in 2020. As a consequence, uranium production will need to expand significantly to meet the increasing demand.

### **Uranium Prices**

Most of the countries that use nuclear-generated electricity do not have a sufficient domestic uranium supply to fuel their nuclear power reactors, and their electric utilities secure most of their required uranium supply by entering into medium-term and long-term contracts with foreign uranium producers and other suppliers. These contracts usually provide for deliveries to begin one to three years after they are signed and to continue for several years thereafter. In awarding medium-term and long-term contracts, electric utilities consider, in addition to the commercial terms offered, the producer’s uranium reserves, record of performance and costs, all of which are important to the producer’s or supplier’s ability to fulfill long-term supply commitments. Under medium-term and long-term contracts, prices are established by a number of methods, including base prices adjusted by inflation indices, reference prices (generally spot price indicators, but also long-term reference prices) and annual price negotiations. Contracts may also contain floor prices, ceiling prices and other negotiated provisions which affect the amount paid by the buyer to the seller. Under these contracts, the actual price mechanisms are usually confidential.

Electric utilities procure their remaining requirements through spot and near-term purchases from uranium producers and other suppliers, including other utilities holding excess inventory and governments.

Over the period from 1996 through 2004, annual spot market demand averaged just under 20 million pounds  $U_3O_8$  or about 12% of the annual world consumption, but had jumped to about 35 million pounds in 2005 and 2006 as the rebuilding of utility inventories commenced and investors and hedge funds entered the market as significant buyers. Spot market volume returned to its traditional level of approximately 20 million pounds in 2007. In 2008, spot market volume increased to a record level of 43 million pounds, driven in large part by the world financial crisis which forced investment and hedge funds to push a sizeable amount of material into the market. Nearly half of the 2008 spot market volume occurred during the three months from September to November.

Historically, spot prices have been more volatile than long-term contract prices. In December 2000, the spot price reached an all time low of \$7.10 per pound. The uranium price then increased at a moderate rate reaching \$14.50 per pound U<sub>3</sub>O<sub>8</sub> by the end of 2003. The spot price increased steadily from that date, influenced by the entrance of investment and hedge funds into the market, reaching \$72.00 by the end of 2006. A further market impact in October 2006 was the announcement of the flooding and indefinite postponement of the start-up of the Cigar Lake mine in northern Saskatchewan. The Cigar Lake mine was scheduled to ramp-up to an annual production rate of 18.0 million pounds by 2008. Producers were also active in the spot market, purchasing material to fill contractual demand, which they could not supply due to production issues at their respective operations. During the first half of 2007, the spot price continued its rapid rise, reaching a peak of \$136.00 in June 2007. At the end of June 2007, the spot price dropped \$3.00, the first decline in the spot price since May of 2003. In the last half of the year, the spot price was very volatile, dropping to \$75.00 in October, then rebounding to \$95.00 in December. Prices continued to be volatile in 2008. The spot price started the year at \$90.00 per pound U<sub>3</sub>O<sub>8</sub>, followed by a steep decline to \$57.00 per pound by June. It recovered briefly in July to \$64.50 per pound before declining again to \$44.00 per pound U<sub>3</sub>O<sub>8</sub> in September, as investment and hedge funds began destocking. The spot price ended the year at \$53.00 per pound.

The long-term uranium price has undergone a similar pattern over the past several years, but with significantly less volatility, rising from just under \$11.00 per pound U<sub>3</sub>O<sub>8</sub>, at the end of 2002, to \$95.00 per pound in May 2007. The long-term price remained at this level until May 2008, when it dropped to \$85.00. The long-term price dropped steadily over the rest of the year, reaching \$70.00 at the end of 2008.

Future uranium prices will be influenced by increased demand from new reactors being constructed or planned in many parts of the world, as well as the amount of incremental supply made available to the market from the remaining excess inventories, HEU feed supplies, other stockpiles and the availability of increased or new production from other uranium producers. All of these factors will be influenced by the world financial crisis and the availability of financing for the construction of reactors and the exploration and development of new production.

### **Competition**

Uranium production is international in scope and is characterized by a relatively small number of companies operating in only a few countries. In 2008, four Western companies, Cameco, AREVA, Rio Tinto plc and BHP Billiton Limited produced approximately 56% of total world output. Most of the world's production was from Canada and Australia which produced a combined 40% of global uranium output in 2008. In 2008, Kazakhstan, Russia and Uzbekistan produced a combined 26% of worldwide uranium while supplying significant quantities of uranium into Western World markets. The Canadian uranium industry has been the leading world supplier in recent years, producing over 21% of the world supply.

### **Marketing Uranium**

The sale of Denison's uranium has traditionally been through long-term contracts and not on the spot market. These long-term contracts have a variety of pricing methods, including fixed prices, base prices adjusted by inflation indices, changes in reference prices (spot price indicators or long-term contract reference prices) and annual price negotiations. Prices in the long-term market have normally been higher than those in the spot market at the time the contracts are entered into and are normally less volatile.

Denison marketed its uranium from the McClean Lake joint venture jointly with ARC until the end of 2008. Commencing in 2009, Denison will market its share of McClean Lake production directly except for one joint contract under which it will deliver approximately 400,000 pounds in 2009 and 40,000 pounds in 2010, all of which is priced at 80% to 85% of the quoted spot price.

The Company currently has two other long-term contracts in place, as follows:

- (1) The first is for the sale of 17% of the White Mesa mill production commencing in 2008 up to a total of 6.5 million pounds with a minimum of 250,000 pounds in 2008, 500,000 pounds in 2009, 750,000 pounds in 2010 and 1,000,000 pounds in 2011. The sales price is 95% of the published long-term price for the month prior to delivery with a floor price of \$45.00.
- (2) The second contract is for 20% of production from the White Mesa mill during the years 2012 to 2017 inclusive, but not less than 200,000 pounds per year. Pricing under this contract is 95% of the long-term price at the time of delivery with an escalated floor price of \$50.00 per pound.

Delivery scheduling (or timing) under long-term contracts is at the discretion of the customer so the Company's delivery obligations may vary markedly from quarter to quarter.

Future long-term sales agreements for the Company's uranium inventory and production are expected to be primarily under market related contracts.

### **The Vanadium Market**

Vanadium is an essential alloying element for steels and titanium, and its chemical compounds are indispensable for many industrial and domestic products and processes. The principal uses for vanadium are: (i) carbon steels used for reinforcing bars; (ii) high strength, low alloy steels used in construction and pipelines; (iii) full alloy steels used in castings; (iv) tool steels used for high speed tools and wear resistant parts; (v) titanium alloys used for jet engine parts and air frames; and (vi) various chemicals used as catalysts.

Principal sources of vanadium are (i) titaniferous magnetites found in Russia, China, Australia and South Africa; (ii) sludges and fly ash from the refining and burning of U.S., Caribbean and Middle Eastern oils; and (iii) uranium co-product production from the Colorado Plateau. While produced and sold in a variety of ways, vanadium production figures and prices are typically reported in pounds of an intermediate product, vanadium pentoxide (" $V_2O_5$ ," "flake," "black flake," or "tech flake"). The White Mesa mill is capable of producing three products, ammonium metavanadate ("**AMV**") and vanadium pregnant liquor ("**VPL**"), both intermediate products, and vanadium pentoxide. The majority of sales are as  $V_2O_5$ , with AMV and VPL produced and sold on a request basis only.

In the United States, although vanadium is produced through processing petroleum residues, spent catalysts, utility ash, and vanadium bearing iron slag, the most significant source of production historically has been as a by-product of uranium production from ores in the Colorado Plateau District, accounting for more than half of historic U.S. production. Vanadium in these deposits typically occurs at an average ratio of five to six pounds of vanadium for every pound of uranium, and the financial benefit derived from the by-product sales has helped make the mines in this area profitable in the past.

The market for vanadium has fluctuated greatly over the last 20 years. During the early 1980s, quoted prices were in the range of \$3.00 per pound  $V_2O_5$ , but increased exports from China and Australia, coupled with the continued economic recession of the 1980s, drove prices to as low as \$1.30 per pound. Prices stabilized in the \$2.00 to \$2.45 per pound range until perceived supply problems in 1988 caused by cancellation of contracts by China and rumours of South African production problems resulted in a price run-up to a high of nearly \$12.00 per pound in February of 1989. This enticed new producers to construct additional capacity, and oversupply problems again depressed the price in the early 1990s to \$2.00 per pound and below. Late in 1994, a reduction in supplies from Russia and China, coupled with concerns about the political climate in South Africa and a stronger steel market, caused the price to climb to \$4.50 per pound early in 1995. In the beginning of 1998, prices had climbed to a nine-year high of \$7.00 per pound caused by supply being unable to keep pace with record demand from steel and aerospace industries. However, during the second half of 1998, prices began to decline to \$2.56 per pound by

December 1998. This was due to sudden decreases in Far East steel production, along with suppliers from Russia and China selling available inventories at low prices in order to receive cash. Since that time, prices fell dramatically to a range of \$1.20 to \$1.50 per pound  $V_2O_5$  due in part to the difficult economic conditions being experienced throughout the Pacific Rim and new sources of supply coming into the market. In the third quarter of 2003, vanadium prices started to increase because of increased steel consumption and the shutdown of an Australian primary producer. This trend continued through 2004. In 2005, demand from China resulted in a significant price run-up culminating in all time highs of \$23.00 to \$27.00 per pound  $V_2O_5$ . Subsequently, prices declined to a range of \$8.00 to \$10.00 per pound  $V_2O_5$ , at the end of 2005, due to the ramp-up of Chinese vanadium production. Prices continued to decline during 2006 to the \$7.00 to \$8.00 range and remained in that range throughout 2007. In early 2008, vanadium prices increased significantly to \$14.00 to \$15.00 per pound due to South African producers claiming *force majeure* as a result of power supply issues in South Africa. South Africa is a major supply source of vanadium, representing approximately 39% of the world's production. The vanadium price remained in the \$14.00 to \$16.00 pound range until September and then it began to decline due to a drop in steel production in response to the world economic decline. By the end of 2008, vanadium prices were \$6.50 to \$7.00 per pound  $V_2O_5$ .

World demand will continue to fluctuate in response to changes in steel production. Supply and demand, however, are difficult to predict, as vanadium consumption and production are both inextricably linked to steel production, with a significant quantity of vanadium coming from refinement of steel slag.

### **Marketing Vanadium**

Prices for the products that are produced by the Company are generally based on weekly quotations published in Ryan's Notes or Platt's Metals Weekly. Vanadium production from the White Mesa mill has and will be sold into the worldwide market both through traders, who take a 2% to 3% commission for their efforts and, to a lesser extent, through direct contacts with domestic converters and consumers. While priced in U.S. dollars per pound of  $V_2O_5$ , the product is typically sold by the container, which contains nominally 40,000 pounds of product packed in 55 gallon drums, each containing approximately 660 pounds of product.

### ***Operations***

#### **McClellan Lake Mining and Processing Facilities**

McClellan Lake is a state-of-the-art uranium mining and processing facility located on the eastern edge of the Athabasca Basin in northern Saskatchewan approximately 26 kilometres west of the Rabbit Lake mine and approximately 750 kilometres north of Saskatoon. Development of the McClellan Lake project began in March 1995. Construction and commissioning were completed in 1997. The JEB deposit was mined out and the ore stockpiled. The JEB pit was then converted in 1999 into the JEB Tailings Management Facility ("TMF"). The McClellan Lake uranium processing facility ("McClellan Lake mill") began production of uranium concentrates in 1999, processing ore from the JEB deposit. The first ore was fed to the processing facilities on June 22, 1999 and commercial production was achieved on November 1, 1999.

McClellan Lake is owned by Denison (22.5%) and its joint venture partners, ARC (70.0%) and OURD (7.5%). ARC is the operator/manager of the facility. Denison, ARC and OURD also jointly own the nearby Midwest project, although ownership ratios are slightly different. See "Mineral Properties – Midwest." It is planned that the Midwest ore will be milled at the McClellan Lake mill.

#### **McClellan Lake Mill**

The McClellan Lake surface facilities consist of a modern mill licensed to produce 8.0 million pounds of uranium per year. The McClellan Lake mill uses sulphuric acid and hydrogen peroxide leaching and a

solvent extraction recovery process to extract and recover the uranium product from the ore. In addition to the mill facility, other infrastructure on the site includes a sulphuric acid plant, a ferric sulphate plant, an oxygen plant, warehouses, shops, offices and living accommodations for site personnel. The facilities have been expanded to a capacity of 12.0 million pounds per year to permit the processing of ore from Cigar Lake. Construction of this expansion was completed in 2008.

### Mining

The McClean Lake facility consists of at least eight ore deposits classified as reserves or resources, five of which have been mined out with some of the ore still stockpiled on the surface. The JEB pit was converted into the TMF designed to receive tailings from Midwest and Cigar Lake ores in addition to the tailings from the McClean Lake deposits.

Mining of the Sue C ore body was completed in February 2002 and all of the ore was stockpiled on the surface. Approximately 24% more uranium than had been expected from the results of the surface drilling was recovered during the mining operations. Mining was suspended following completion of the mining of the Sue C deposit until the third quarter of 2005 when mining began on the Sue A, Sue E and Sue B deposits. Mining was completed at Sue A in the first quarter of 2006, at Sue E in the first quarter of 2008 and at Sue B at the end of 2008. The Caribou deposit is the next deposit to be mined by open pit. Mining of this deposit, which was originally expected to commence in 2009, has been delayed at least a year after a review of the project economics at current uranium prices. Ore from the Sue E, Sue A and Sue B deposits is stockpiled at the McClean Lake mill and will be processed through 2009 and 2010.

Low-grade special waste from the mining of the JEB, Sue C, Sue A, Sue E and Sue B deposits has been disposed of in the mined-out Sue C pit. There is also an agreement with the Cigar Lake joint venture to dispose of special waste from its mining operations in the Sue C pit. The costs of dewatering the Sue C pit at that time and the handling and disposing of the Cigar Lake wastes will be paid by the Cigar Lake joint venture.

Test mining had been successfully conducted on the McClean North deposit using hydraulic borehole mining methods being developed under the Mining Equipment Development Program (“MED”). See “Mining Equipment Development Program.” Studies are now underway to review underground methods, as well as the MED method, to determine the preferred method for the exploitation of this deposit.

### Operations

The stockpiled ore from JEB and Sue C and a small amount of Sue A ore provided the mill feed from start-up through to the end of 2005. In 2006, the grade of ore being fed to the McClean Lake mill declined considerably due to a combination of the remaining low-grade portion of Sue C ore and the Sue A ore. This low-grade feed continued through 2007 with Sue E material being added to the mix toward the end of the year. The grade of ore processed during 2008 improved somewhat over the 2006-2007 levels, as mill feed consisted primarily of the higher grade Sue E ore.

Unit operating costs had generally declined until the end of 2005; however, these costs increased significantly in 2006 and 2007 as very low-grade ore was processed with a resulting sharp drop in production. The majority of the mill operating costs are fixed; therefore, the reduced production from processing lower grade ores resulted in a significant increase in unit costs. Unit milling costs declined in 2008 as the ore feed grade improved, but were negatively affected by high prices for petroleum products and reagents.

The table below shows the operation of the McClean Lake uranium facilities over the last five years of production:

	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>
Ore Milled (thousand tonnes)	161	170	131	177	152
Average Grade (% U <sub>3</sub> O <sub>8</sub> )	0.96	0.53	0.68	1.45	1.86
Production (thousand pounds U <sub>3</sub> O <sub>8</sub> )	3,248	1,907	1,794	5,490	6,005

Production in 2009 is expected to be approximately 3.4 million pounds with the mill feed consisting principally of Sue E ore combined with a small amount of the stockpiled Sue A and Sue B ores.

For information pertaining to markets and the sale of production, see “Marketing.” For taxes and royalties, see “Government Regulation – Canadian Royalties” and “Government Regulation – Canadian Income and Other Taxes.”

#### Tailings Disposal

The disposal of mill tailings in an environmentally acceptable manner has led to advances in the design and construction of new tailings management facilities. In the state-of-the-art TMF, tailings are deposited subaqueously in a paste form from a barge. This procedure minimizes tailings segregation, eliminates concerns of freezing and dust generation, and controls radiation and radon emissions from the pond. This facility has been designed to receive tailings from processing high-grade Midwest and Cigar Lake ores in addition to tailings from the McClean Lake deposits.

#### Property

All of the surface facilities and the mine sites are located on lands owned by the Province of Saskatchewan. The right to use and occupy the lands was granted in a surface lease agreement with the Province of Saskatchewan. The original surface lease agreement of 1991 was replaced by a new agreement in 2002. This new surface lease is valid for a period of 33 years. Obligations under the surface lease agreement primarily relate to annual reporting regarding the status of the environment, the land development and progress made on northern employment and business development. The McClean Lake surface lease covers an area of approximately 3,677 hectares.

#### Mill Licence

The McClean Lake site is operated under various permits, licences, leases and claims granted and renewed from time to time, all of which are currently in good standing. On July 25, 2005, the Canadian Nuclear Safety Commission (“CNSC”) issued Mine Operating Licence, UMOL – MINEMILL – McCLEAN.02/2009 for a four year term which will expire on May 30, 2009. In September, 2008 ARC submitted the renewal application for a ten year licence to operate the McClean Lake mill. A Day One Hearing for the Licence Renewal took place on February 18, 2009. At this hearing, the CNSC’s questions related to the term of the Licence and on the Fire Protection Program. A Day Two Hearing is scheduled for April 30, 2009. The final decision on the application is expected prior to the expiry of the current term. The Approval to Operate Pollutant Control Facilities 10–205 has been issued by Saskatchewan Environment and is valid until August 31, 2010. For additional information on licensing, see “Government Regulation – Canadian Uranium Industry.”

#### Environmental

During the original licensing process, a significant amount of attention was paid to environmental matters. As a result, a number of design changes were made in the processing facilities, both to address environmental concerns and to enable the facilities to process much higher grade ores from Midwest and Cigar Lake in the future. Special attention was given to providing protection for the workers from exposure to high levels of radiation. Environmental results have continued to improve and to exceed regulatory expectations. See “Environmental and Safety Matters - Canada.”

### Cigar Lake Toll Milling

In 2002, Denison and its partners entered into an agreement with the Cigar Lake joint venture to process Cigar Lake ore at the McClean Lake mill. Pursuant to that agreement, all Cigar Lake ore is to be leached at the McClean Lake mill with the pregnant aqueous solution being divided between the McClean Lake and Rabbit Lake facilities for processing into uranium concentrates. In order to process this Cigar Lake ore, an expansion of the McClean Lake mill was required. All costs of the expansion and modifications of the McClean Lake mill have been paid for by the Cigar Lake joint venture. This expansion was completed in 2008.

As a result of the flood that occurred at Cigar Lake in October 2006 and subsequent problems with the water inflows, the Cigar Lake joint venture announced that processing of its ore at the McClean Lake mill will be delayed. The exact date has not been determined due to the uncertain nature of the dewatering efforts. In the meantime, the expanded capacity will be available for use by the McClean Lake joint venture.

### **Mining Equipment Development Program**

The MED Program was designed to develop a mechanical prototype to achieve a viable alternate mining method from surface drilling using drilling and bore hole mining technology. The system has low capital costs and has a number of benefits, including safety, ease of licensing and a small environmental footprint.

Hydraulic borehole mining is a technique used to extract materials through a small access borehole, typically less than one-half of a metre in diameter, resulting in a very small disturbance to the surface. A mining tool containing a high-pressure water jet nozzle is lowered through the access borehole in the overburden and sandstone to the mineralized horizon. The high-pressure water jet is used to cut or erode the mineral bearing ore and create a slurry, enlarging the hole to three to four metres in diameter. The slurry is sent to surface using a slurry pump or an air lift system. On the surface, through a series of settling ponds, the water is separated from the cuttings and returned back to the hole. Each mined out cavity is backfilled after completion with a cemented mixture in the mineralized horizon, and with unmineralized drill cuttings in the remainder of the hole through the overlying sandstone and glacial overburden layers.

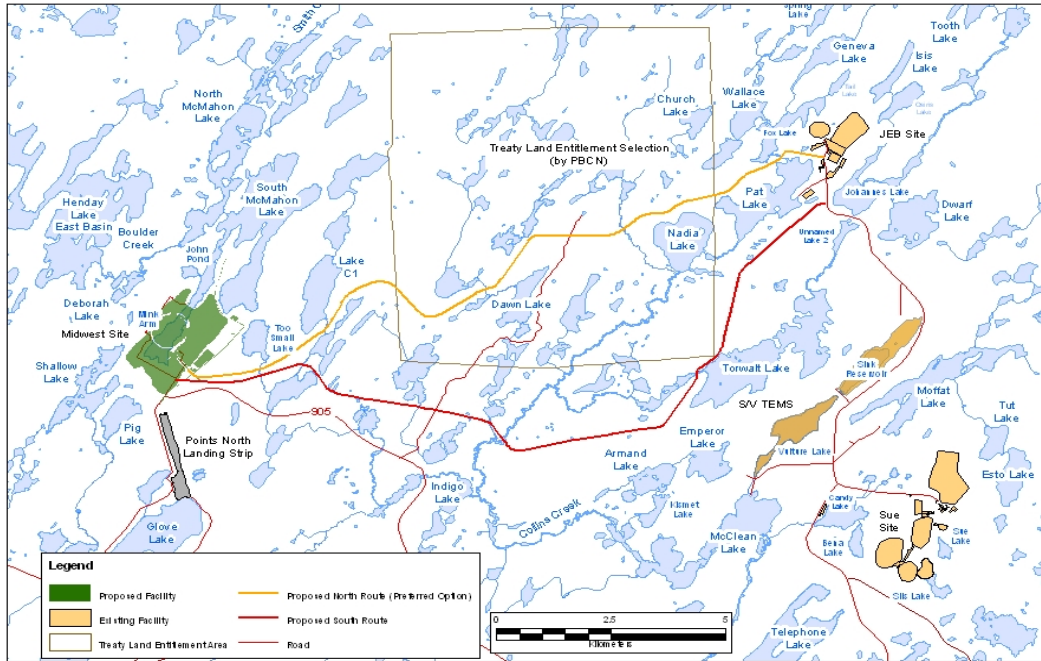
The MED Program focused on developing and optimizing the mining tool system. As a result of this work, patents were obtained on the resulting bore hole mining design.

During 2008, three access holes were cased and cemented at the McClean North deposit ready to mine. The MED optimized mining system will be field tested in the summer of 2009 and, if successful, mining at McClean North could begin immediately.

### **Midwest Project Development**

The Midwest Project, owned 25.17% by Denison, 69.16% by ARC and 5.67% by OURD, is host to two significant uranium deposits. The Midwest deposit, discovered in 1978, was followed in 2004/2005, by the discovery of the Midwest A deposit. Several other mineralized intersections, located between the Midwest and Midwest A deposits, are the subject of ongoing exploration activities.

Midwest is located approximately 15 kilometres from the McClean Lake mill where the Midwest ore is planned to be processed. See “McClean Lake Mining and Processing Facilities”.



### Ore Deposits

The Midwest ore deposit (see “Mineral Properties – Midwest”) will be the first to be mined. Various studies since its discovery in 1978 have examined the feasibility of mining by open pit, hydraulic bore-hole mining and underground methods. Mining by open pit has been selected as the preferred method.

Following the significant increase in the price of uranium since 2001, exploration resumed in an area about 3 kilometres north-east of the Midwest deposit as a follow-up to a hole drilled in the early 1980s which reported an intersection of 6.9%  $U_3O_8$  over 3.8 metres. This work led to the discovery of the Midwest A deposit (see “Mineral Properties – Midwest”) as well as a number of other significant mineralized zones. An active exploration and development drilling program is continuing in this area. See “Mineral Exploration – Midwest.”

### Development

In December 2005, the project description for the development of the Midwest deposit was submitted to the CNSC, the Environmental Assessment Branch of Saskatchewan Environment and the Canadian Environmental Assessment Agency. This project description contemplated the Midwest deposit being mined by open pit and a further expansion of the McClean Lake mill.

The development of this deposit involves draining the Mink Arm of the South McMahon Lake in northern Saskatchewan to construct an open pit mine. The pit, as currently designed, is expected to produce an estimated 36 million pounds of  $U_3O_8$ . Other deposits and extensions located to the north, south and in the basement could be developed once the pit is nearing completion. Ore from this deposit will be trucked over a dedicated haul road to the McClean Lake mill.

In November 2007, the Midwest joint venture partners made the formal production decision to proceed with development of the Midwest deposit. The capital cost, including surface facilities, the water treatment plant, the haul road and the related mill expansion, was estimated at approximately Cdn\$435 million. Expenditures were estimated to be as follows: Cdn\$75 million for the water treatment plant, Cdn\$115 million for de-watering wells, Cdn\$100 million for infrastructure, Cdn\$35 million for mobile equipment and maintenance facilities, Cdn\$100 million for modification to the mill and Cdn\$10 million for miscellaneous capital expenses.

In November 2008, the Midwest joint venture partners announced that the development of the Midwest project will be delayed for an indefinite period. The status of the project will be reviewed every six months. The delay was the result of the global economic climate, delays and uncertainties associated with the regulatory approval process, increasing capital and operating costs and the depressed state of the uranium market. Based on an update of the capital cost estimates completed in 2008, the capital cost increased approximately 50% from the previous estimate of Cdn\$435 million. Efforts to optimize the capital expenditures will continue to be made.

The Midwest partners decided to complete the environmental assessment for the project, which has been ongoing since December 2005, and to complete the engineering for the Midwest site. This will enable the project to be advanced to the stage that it is ready to be developed quickly when the market conditions improve. Expenditures on Midwest will be approximately Cdn\$12.4 million in 2009, of which Denison's share is Cdn\$3.1 million.

The infrastructure for the Midwest deposit – haul road, power, water treatment and mill expansion – will also serve for the future development for the Midwest A deposit.

### **White Mesa Mill**

The White Mesa mill, a fully licensed uranium mill with a vanadium co-product recovery circuit, is located in south eastern Utah near the Colorado Plateau District, the Henry Mountains Complex and the Arizona Strip. The mill is approximately six miles south of the city of Blanding, Utah. Access is by state highway.

Construction of the White Mesa mill started in 1979, and conventionally-mined, uranium/vanadium ore was first processed in May 1980. To the end of 2007, the mill has produced over 30 million pounds of  $U_3O_8$  and 33 million pounds of  $V_2O_5$ . The mill uses sulphuric acid leaching and a solvent extraction recovery process to extract and recover uranium and vanadium. The mill has been operated on a campaign basis since its construction due to variable uranium market conditions.

The mill is licensed to process an average of 2,000 tons per day of ore and produce up to 8.0 million pounds of  $U_3O_8$  per year. In full operation, the mill employs approximately 130 people.

### Current Condition and Operating Status

The mill was on standby from June 2003, following completion of an alternate feed processing campaign, to mid-March 2005. The mill began processing alternate feed materials in March 2005 which continued through to March 2008.

The Company began a program to refurbish the mill in late 2006. The mill capital program included the purchase of mobile equipment, restoration of the vanadium roasting, fusion and packaging circuits, replacement of major pumps and component drives, modernization of the mill's instrumentation and process control systems, and completion of the relining of tailings Cell 4A. The total cost of the refurbishment program was approximately \$31.0 million.

Processing of conventional ore at the White Mesa mill began on April 28, 2008 and production of vanadium began in July 2008, following completion of the refurbishment of the vanadium circuit. The mill is currently operating, processing ores from Denison's Colorado Plateau and Henry Mountains Complex mines.

Production at the mill over the past five years is shown below.

	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>
Alternate Feed Milled (tons)	-	44,136	214	50	-
Conventional Ore Milled (tons)	248,744	-	-	-	-
Uranium Production ( '000's pounds U <sub>3</sub> O <sub>8</sub> )					
Alternate Feed	94	254	242	-	-
Conventional Ore	791	-	-	-	-
Total Uranium Production	885	254	242	-	-
Vanadium Production ( '000s pounds V <sub>2</sub> O <sub>5</sub> )	1,223	-	-	-	-
Year-end Ore Stockpile (tons)	122,477	84,943	-	-	-

#### Mill Licence

The mill operates under a Radioactive Materials Licence issued by the State of Utah. The mill's licence expired on March 31, 2007. The Licence Renewal Application was submitted to the UDEQ, Division of Radiation Control ("DRC") on February 28, 2007. The licence remains in effect in its current form during the licence renewal process.

#### Tailings Disposal

Synthetic lined cells are used to contain tailings and, in one case, solutions for evaporation. As each tailings cell is filled with tailings, the water is drawn off and pumped to the evaporation pond and the tailings solids allowed to dry. As each cell reaches final capacity, reclamation will begin with the placement of interim cover over the tailings. Additional cells are excavated, and the overburden is used to reclaim previous cells. In this way, there is an ongoing reclamation process.

In June 2007, the Company began refurbishment of Cell 4A, which was originally built in 1989. The refurbishment was completed in August 2008 and Denison received the operating permit from the DRC in September 2008. The cell has been in operation since that time and provides approximately 2.0 million tons of tailings capacity.

To ensure sufficient volume for tailings and area for tailings solution evaporation, the Company has begun the licensing for tailings cell 4B. The design documents, a licence amendment application and an environmental assessment have been submitted to the DRC in support of the approval for the construction of Cell 4B adjacent to Cell 4A. Based on current estimates, this cell will be needed by 2011.

The Environmental Statement for the mill currently contemplates construction of two additional tailings cells, including Cell 4B, each of which can provide further tailings capacity of approximately 2 million tons, when necessary.

#### Environmental

The Company has detected some chloroform contamination at the White Mesa mill site that appears to have resulted from the operation of a temporary laboratory facility that was located at the site prior to and during the construction of the mill facility, and from septic drain fields that were used for laboratory and

sanitary wastes prior to construction of the mill's tailings cells. In April 2003, the Company commenced an interim remedial program of pumping the chloroform contaminated water from the groundwater to the mill's tailings cells. This will enable the Company to begin clean up of the contaminated areas and to take a further step towards resolution of this outstanding issue. Pumping from the wells continued in 2008. Denison is continuing to work with the State of Utah to develop a long-term corrective action plan. A draft of an action plan was submitted by Denison and is currently being reviewed by the State.

Associated with the chloroform contamination are some elevated concentrations of nitrate, which have been assumed to have resulted from the septic drain fields and which have been included in the investigation and remedial action to date. Recent sample results suggest, however, that there may be other contributing historic or off-site sources of nitrate, which are currently under investigation, although at this time there has been no change to the interim remedial action. While the investigations to date indicate that this chloroform and nitrate contamination appears to be contained in a manageable area, the scope and costs of final remediation have not yet been determined and could be significant. See "Environmental and Safety Matters - U.S. Environmental Regulation."

### **Alternate Feed Processing**

The Company's State of Utah Radioactive Materials Licence gives the Company the right to process other uranium-bearing materials known as "alternate feed materials" pursuant to an Alternate Feed Guidance adopted by the U.S. Nuclear Regulatory Commission ("NRC") in 1995 and amended in 2000. Alternate feed materials are uranium-bearing materials, which usually are classified as waste products by the generators of the materials. Requiring a routine amendment to its licence for each different alternate feed, the Company can process these uranium-bearing materials and recover uranium, in some cases, at a fraction of the cost of processing conventional ore, alone or together with other valuable metals such as niobium, tantalum and zirconium. In other cases, the generators of the alternate feed materials are willing to pay a recycling fee to the Company to process these materials to recover uranium and then dispose of the remaining by-product in the mill's licensed tailings cells, rather than directly disposing of the materials at a disposal site. By working with the Company and taking the recycling approach, the suppliers of alternate feed materials can significantly reduce their remediation costs, as there are only a limited number of disposal sites for uranium-bearing materials in the United States.

To date, the mill has received 15 licence amendments, authorizing the mill to process 18 different alternate feed materials. Of these amendments, nine involve the processing of feeds provided by nuclear fuel cycle facilities and private industry and one has involved the processing of material from the United States Department of Energy ("DOE"). These ten feed materials have been relatively high in uranium content and relatively low in volume. The remaining five amendments have been to allow the mill to process uranium-bearing soils from former defence sites, known as FUSRAP sites, which are being remediated by the U.S. Army Corps of Engineers. These materials are typically relatively low in uranium content but relatively high in volume.

The Company intends to continue to devote resources to the development of the alternate feed business as a source of feed for the White Mesa mill. The Company has announced that it is constructing a parallel alternate feed circuit to enable the mill to process conventional ore and alternate feeds simultaneously. The capital cost is estimated to be approximately \$5.2 million and production is scheduled to start-up in June 2009.

### **U.S. Mines**

#### Colorado Plateau District

The Colorado Plateau district is an area encompassing approximately 20,000 square miles and straddles the border of south eastern Utah and south western Colorado. The Company's principal mining complexes in the Colorado Plateau District consist of the La Sal, Van 4, Sunday, and East Canyon (Rim)

zones. The bulk of the mineral deposits in the Colorado Plateau District are contained in three areas: the Sunday Mine complex, which includes the Sunday/St. Jude, West Sunday, Topaz and Carnation mines; the La Sal complex, which includes the La Sal, Beaver and Pandora mines; and the East Canyon Area, which includes the Rim mine. All of these areas have developed permitted mines that had been shut down in the 1990's. There was limited mining activity on the Sunday Mine complex in 1998 and 1999.

The mines are located approximately 65 to 100 miles northwest of the Company's White Mesa mill. Haulage of the ore from the mines to the mill is along County and State highways.

The Uravan mineral belt in the Colorado Plateau ("**Colorado Plateau District**") has a lengthy mining history, with the first shipment of mined materials made to France in 1898. World War II brought increased attention to the uranium mineralization in the Uravan area, and by the 1950s this district was one of the world's foremost producers of both uranium and vanadium. Production continued more or less uninterrupted until 1984 when low uranium prices forced the closure of all operations. Production resumed in 1987, but ceased in 1990. Except for limited production in 1998 and 1999, all operations were shut down until 2006 when several of the mines re-opened. Total historical production, prior to 2000, from the Union Carbide mines in the Uravan area (many of which were later acquired by EFN, and hence the Company) is reported at 47 million pounds of  $U_3O_8$  and 273 million pounds of vanadium, yielding an overall  $V_2O_5/U_3O_8$  ratio of 5.79:1.

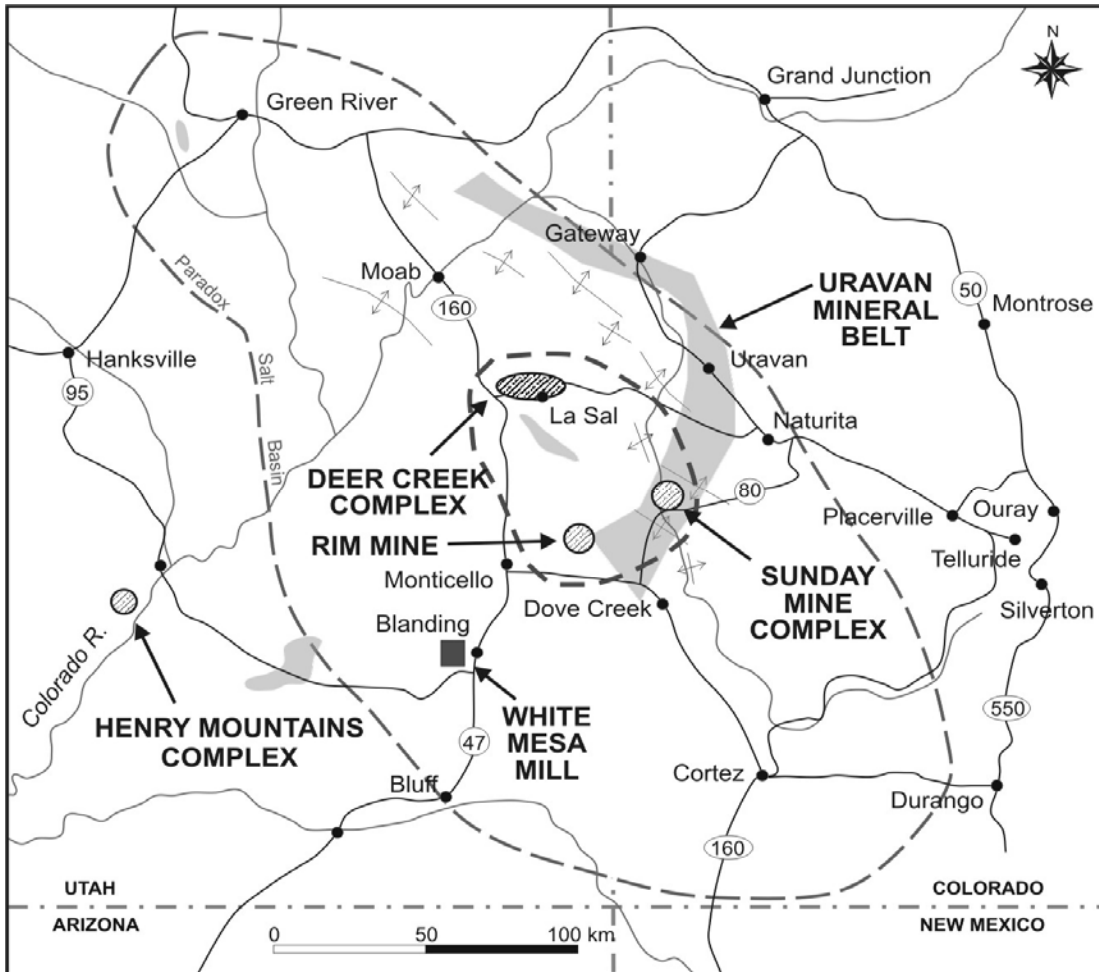
The uranium/vanadium deposits in the Colorado Plateau District were deposited as alluvial fans by braided streams. The shape and size of the mineralized seams are extremely variable. As a result, exploration and mining have historically involved conducting exploration to find a seam and then merely following its erratic path, with little exploration other than development drilling in the course of following the seam. The unusual nature of these deposits has therefore traditionally resulted in a limited amount of resources being dedicated to delineate mineral resources or reserves prior to mining.

The Colorado Plateau District mining properties are held by a combination of U.S. Bureau of Land Management ("**BLM**") unpatented claims and leases with third parties. On the leased properties, there are uranium royalties payable ranging from 2.5% to 10.0% and vanadium royalties payable ranging from 4% to 12.5%. It should be noted that these royalties are only payable on ore recovered from specific claim areas and do not necessarily apply to the entire deposit.

### *Operations*

In June 2006, the Company announced that it was restarting mining activity in the United States with the re-opening of several mines on the Colorado Plateau.

## Colorado Plateau



The Sunday/St. Jude, Topaz, West Sunday and Pandora mines are all accessed by declines from the surface. The Beaver mine is accessed by a shaft and is connected underground to the Pandora mine. The Rim mine is a combination of a shaft and decline access. At the present time, this mine is only being accessed through the decline. The Sunday/St. Jude, West Sunday, Pandora, Rim and Beaver mines are mature operating mines with extensive underground workings. The Topaz mine is relatively new with the initial development drift completed in 2007. The mining method is random room and pillar in which no set pillar pattern is established but rather both the size of the rooms and the pillars are variable and are defined by the deposit geometry. A typical room is about 20 feet wide with pillars as small as 12 feet square in highly mined areas.

Because of the limited height of the ore, mining must be quite selective in order to maintain a satisfactory production grade. This is done by following the mineralized zones closely and by the technique of “split shooting” wherein the ore and waste are blasted separately in a two-stage operation.

In September 2006, the Company reached an agreement with an independent mining contractor, Reliance Resources LLC, to conduct contract mining at the Pandora mine, and with another independent contractor, Tomcat Mining Corporation, for the Topaz and West Sunday mines. After some development work, mining began and the first ore shipments were received and stockpiled at the White Mesa mill in the fourth quarter of 2006. At the Sunday/St. Jude mine, the Company engaged E & D Mining LLC as its

contract miner early in 2007. First ore shipments from the Sunday mine were received at the mill in October 2007, after several months of rehabilitation work.

Late in 2007, rehabilitation work began at the Rim mine, and this mine was brought into production in June 2008. The Rim mine is operated directly by Denison. In addition to the Rim mine, the Company also began rehabilitation of the Beaver mine in late 2008, and this mine began shipping ore in February 2009.

The ore production by mine for 2007 and 2008 is shown in the table below.

	2007			2008		
	Tons	% U <sub>3</sub> O <sub>8</sub>	% V <sub>2</sub> O <sub>5</sub>	Tons	% U <sub>3</sub> O <sub>8</sub>	% V <sub>2</sub> O <sub>5</sub>
Pandora	32,444	0.25%	1.34%	52,623	0.23%	1.22%
Sunday/St. Jude	10,879	0.16%	0.86%	27,497	0.19%	1.04%
West Sunday	16,526	0.17%	0.92%	30,121	0.21%	1.13%
Topaz	7,753	0.16%	0.86%	9,707	0.13%	0.70%
Rim	-	-	-	2,238	0.04%	0.40%
Beaver	-	-	-	729	0.26%	1.41%

The uranium grades in the above table are based on probe grades taken when the ore arrives at the White Mesa mill. The vanadium grades are based on historical uranium/vanadium ratios.

In addition to the mine production detailed above, a number of low grade stockpiles from the Colorado Plateau mines have been transported to the mill. During 2007 a total of 7,973 tons were shipped to the mill grading 0.08% U<sub>3</sub>O<sub>8</sub> and 0.43% V<sub>2</sub>O<sub>5</sub> and in 2008 a total of 6,801 tons were shipped to the mill grading 0.08% U<sub>3</sub>O<sub>8</sub> and 0.39% V<sub>2</sub>O<sub>5</sub>.

In January 2009, the Company placed the Topaz mine on temporary standby. In March 2009, the Company also placed the Rim and Sunday/St. Jude mines on standby. Until new sales contracts are negotiated, these higher cost mines will remain on standby. The mines will be maintained so that they can be restarted with minimal effort.

The Company currently has no plans to bring the Van 4 into production, the last remaining mine on the Colorado Plateau.

#### *Permitting*

The Colorado Division of Reclamation, Mining and Safety (“**CDRMS**”) has approved the conversion of the Topaz mine 110 permit to a 112 Permit, which allows additional disturbance as needed for development and production at Topaz. In February 2009, the BLM approved an amended Plan of Operations (“**PO**”) for the Topaz mine, which incorporated all of the mines in the Sunday Complex. The BLM also determined that there was a Finding of No Significant Impact (“**FONSI**”), in performing the Environmental Assessment (“**EA**”) on the project.

On March 2, 2009 the Sheep Mountain Alliance, the Colorado Environmental Coalition, the Information Network for Responsible Mining and the Center for Biological Diversity jointly filed a petition to the BLM State Director for review of the approved PO and the FONSI and requested a stay of the Decision Record. The petition is focused on BLM’s alleged failure to review indirect and cumulative impacts, as well as inadequate review of water quality impacts. The State Director has 45 days to respond.

The Pandora/Snowball, La Sal/Beaver Complex and the Rim mine are all permitted for operations. At all the Colorado Plateau mines, air permits have been obtained or are in process. The air permits are not

generally needed prior to resuming operations, but are needed to sustain ongoing operations. Storm Water as well as Spill Prevention and Pollution Control Plans were also updated for all Colorado Plateau mines. These Plans require regular monitoring and reporting.

During 2008, operating permit amendments were obtained for the Pandora mine to allow installation of two new ventilation shafts. These amendments required approvals from the US Forest Service, the BLM and the Utah Division of Oil, Gas and Mining (“**UDOGM**”). On several occasions, the Forest Service, BLM, and UDOGM also allowed replacement of existing ventilation shafts, which had become unusable over time. These replacement shafts were located on the same sites as the unusable shafts, and after completing the new shafts, the old shafts were plugged and sealed. This rapid turnaround on approval of replacement ventilation shafts facilitated ongoing operations.

The State of Colorado has passed a law that provides that the CDRMS can determine that a mine is a Designated Mining Operation (“**DMO**”) if it is a mining operation at which “toxic or acidic chemicals used in extractive metallurgical processing are present on site or acid or toxic forming materials will be exposed or disturbed as a result of mining operations.” If a mine is determined to be a DMO, the most significant result is the requirement that it submit an Environmental Protection Plan (“**EPP**”). The EPP must identify the methods the operator will utilize for the protection of human health, wildlife, property and the environment from the potential toxic or acid forming material or acid mine drainage associated with the operations. The EPP must be submitted to the CDRMS for review and, after approval by CDRMS, will be subject to public comment.

On February 11, 2008, the Company was notified that CDRMS has designated operations at the Sunday Mine Complex and the Van 4 mine as DMOs. The Company is eligible to file for an exemption from the need to prepare an EPP if materials characterization and testing, to be performed by the Company, can demonstrate that any toxic materials exposed or disturbed at the mines will not adversely affect human health, property or the environment. Upon joint consultation with CDRMS, plans were developed to collect the necessary data and perform characterization testing and prepare assessments of toxic substance exposures and transport.

Representative samples were collected of ore, waste rock, and soils surrounding the mine sites. These samples were analyzed, and generally the only constituent of possible concern is arsenic. Studies are continuing on the mechanisms of arsenic liberation, transport, and possible exposure to the environment and biota. The surface and ground water environments are also being investigated under the DMO assessment. Groundwater sampling wells have been installed in the West Sunday mine to obtain samples of undisturbed groundwater and to assess possible impacts to water in contact with mine workings and the atmosphere.

The deadline for submittal of the EPP has been extended to June 2009 to allow for continuation of groundwater data collection. The Company is also drafting the EPP in the event that it is not eligible for an exemption to file an EPP; this will help ensure that operations are not later affected while the EPP is undergoing final approval.

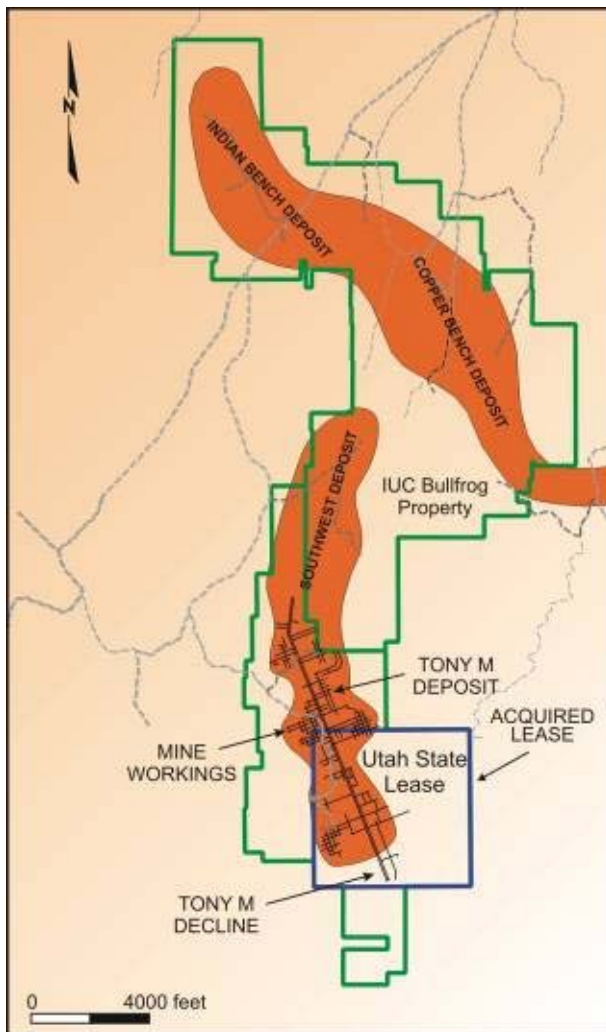
Notice level activities were approved for three exploration drilling programs during 2008. At the Pandora mine, drilling was conducted late in the year to avoid disruptions to seasonal spring wildlife activities and migratory birds. Drilling was conducted under a BLM and CDRMS Approved Notice on Monogram Mesa and under a UDOGM approved Notice at the Rim mine in Utah. In all cases where exploration drilling was conducted in 2008, drill hole plugging and reclamation bonds were provided by the Company in amounts established by the various agencies.

Notice was received in September 2008 from the San Miguel County Planning Commission that the Company was in violation of its Special Use Permit and Road Permit for Country Road 20R. This is the county road travelled by ore haul trucks from the Sunday Complex operations to the White Mesa mill. The notice stated that the Company had been exceeding the 12 trucks per day limitation imposed under the Permit.

Following two public comment hearings on this issue, the San Miguel County Planning Commission issued Denison an amended Special Use Permit and Road Permit for Country Road 20R. The amended permit enables Denison to haul an average of 22 to 26 trucks per day with a maximum of 34 trucks in any 24 hour period. Denison also accepted responsibility for gravelling and watering the road to minimize dusting from the mine operations.

### Henry Mountains Complex

The Henry Mountains Complex is one contiguous property located in eastern Garfield County, Utah, 15 to 20 miles north of Bullfrog Basin Marina on Lake Powell and approximately 40 air miles south of the village of Hanksville, Utah. It is situated three miles west of Utah State Highway 276. The Henry Mountains Complex includes Bullfrog on the north end of the property, hosting the Indian Bench, Copper Bench and Southwest uranium deposits, and Tony M located on the south end of the property, hosting the Tony M deposit and mine. See “Mineral Properties – Henry Mountains Complex.”



The Bullfrog property was extensively explored by Exxon and Atlas Minerals in the period from 1974 to 1990. Development of the Tony M mine started in September, 1977. By mid-1984, nearly 17 miles of underground workings had been developed in the Tony M mine. In or around 1985, when work on the mine was suspended, the mine was allowed to flood. The Tony M mine is located approximately 117 miles west of the Company’s White Mesa mill. Haulage of the ore from the mine to the mill is along County and State highways.

Denison acquired the Bullfrog property when it purchased substantially all of the uranium producing assets of EFN in 1997. In February 2005, Denison acquired the Tony M property, thus bringing it under common ownership with the Bullfrog property. Prior to 2005, all exploration, mine development and related activities for the two properties were conducted independently.

The Henry Mountains Complex is comprised of 202 unpatented BLM mining claims and one 640 acre Utah State Mineral Lease. Seventeen of the claims, comprising a portion of the Tony M property, are subject to an escalating annual advance minimum royalty based on the uranium spot price, which totalled approximately \$207,000 in 2008, and a 4% yellowcake royalty, less taxes and certain other deductions. There is also a vanadium production

royalty which is a 2% gross royalty less certain deductions. The advance minimum royalties are

deductible against the uranium and vanadium royalties payable. The Utah State Mineral Lease has an annual rental of \$640 and is subject to royalties set by the State of Utah including: an escalating annual advance minimum royalty based on the uranium spot price, which in 2008 totalled \$504,000; a uranium royalty of 8% of gross value less certain deductions; and a vanadium royalty of 4% of gross value less certain deductions. The advance royalties on the State Lease are only deductible against the uranium and vanadium royalties paid within the same year.

### *Operations*

Upon receipt of the initial exploration permit, the Company engaged Dynatec Mining Corporation (“DMC”) as its mine contractor for the Tony M operation. In May 2007, DMC began limited rehabilitation work on the existing Tony M workings.

With the receipt of the operating permit in September 2007, DMC shifted from rehabilitation work to mining of the Tony M deposit. As of the end of 2007, 9,368 tons of ore grading 0.10% U<sub>3</sub>O<sub>8</sub> has been shipped to the White Mesa mill from the Tony M mine.

In 2008 87,421 tons grading 0.15% U<sub>3</sub>O<sub>8</sub> was shipped to the White Mesa mill, as well as 64,755 tons of ore from the historic stockpiles, grading 0.11% U<sub>3</sub>O<sub>8</sub>.

In addition to re-opening the mine, the Company also constructed a number of surface facilities including a power generation station, compressor station, fuel storage facilities, maintenance building, offices and dry. An evaporation pond, which was originally constructed when the Tony M mine was in operation in the 1980’s, which is used for storage and evaporation of mine water, was reconstructed to allow for dewatering of the mine.

In November 2008, the Company announced that operations at the Tony M mine were being placed on temporary stand-by due to high operating costs and the weakening of the uranium spot price. The mine was put on care and maintenance, and dewatering activities are continuing so that mining operations can resume quickly, if and when Denison is able to obtain favourable uranium contracts. In March 2009, shipping of the ore stockpile to the White Mesa mill was completed.

### *Permitting*

The Tony M mine permit was allowed to lapse by the previous operator. The Company filed for exploration permits with the UDOGM and the BLM. These permits were granted by UDOGM and the BLM on December 2, 2005 and March 6, 2006, respectively. These permits enabled the Company to regain access, inspect and begin rehabilitation of the Tony M underground workings. The Company also began the permitting process for a mine permit for the Henry Mountains Complex, which comprises both the Tony M mine and the Bullfrog property. The permit application was submitted in November 2006 and a Record of Decision and approved PO was received in September 2007.

The PO was challenged by the Center for Water Advocacy and the Utah Chapter of the Sierra Club, which requested a Utah State BLM Director Review and a Stay of the decision approving the Final Plan of Operations for the Tony M Mine. On November 21, 2007, the BLM State Director issued a decision vacating the previously issued permit and remanded the case to the Field Office in order that the Environmental Assessment for the Tony M Mine PO could be amended and a new Record of Decision issued. As a result of this decision to vacate and renew, the request for stay was considered moot. The new decision was issued by the BLM on November 23, 2007 approving the PO for the mine. The new decision was once again appealed by the Center for Water Advocacy and the Utah Chapter of the Sierra Club. The Utah State Director issued a decision denying the appeal and upholding the PO on February 19, 2008.

The Phase 2 PO has been filed with the BLM and UDOGM. The Phase 2 activities will include addition of ventilation shafts, upgrading of the shaft and site access road, installation of a production shaft and expansion of the mine water evaporation reservoir.

### Arizona Strip

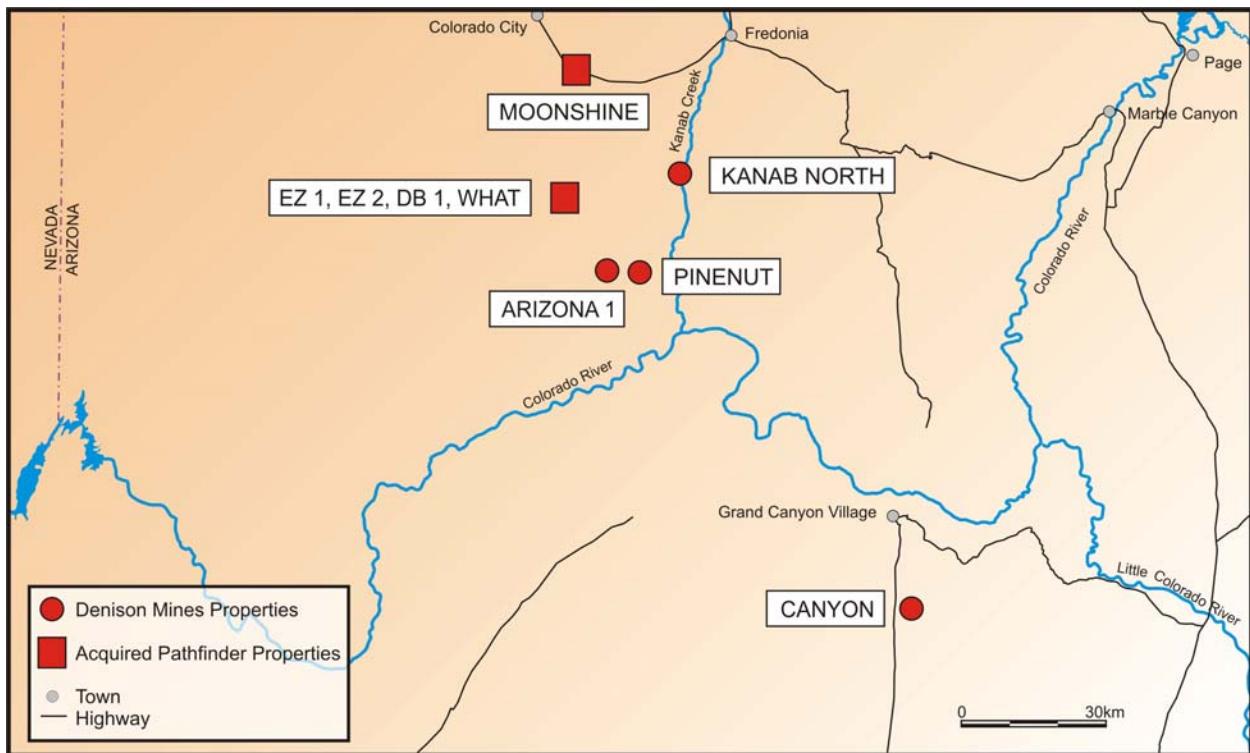
The Arizona Strip is an area largely bounded on the north by the Arizona/Utah state line; on the east by the Colorado River and Marble Canyon; on the West by the Grand Wash cliffs; and on the south by a midpoint between the city of Flagstaff and the Grand Canyon. The area encompasses approximately 13,000 square miles.

The Company owns four developed and partially developed mines in the Arizona Strip, being the Arizona 1, Canyon, Pinenut and Kanab North mines, all of which had been shut down since the 1980s. In February 2007, the Company purchased from Pathfinder five additional uranium deposits in the Arizona Strip: the EZ1, EZ2, DB, WHAT and Moonshine Springs properties. The Company recommenced development work on the Arizona 1 mine in April 2007.

Since 1980, when mine development first began at Hack Canyon II, the Arizona Strip has produced in excess of 19 million pounds of uranium from seven mines, each of which was owned and operated by EFN. Of these mines, Hack Canyon I, II, and III, Pigeon and Hermit are mined out and have been reclaimed.

Ore from the Arizona Strip mines is hauled by truck from the mine sites to the White Mesa mill. The Arizona 1 and Pinenut mines are approximately 307 road miles, and the Canyon Mine is 325 road miles from the mill.

### Arizona Strip



The Arizona 1, Pinenut and Canyon mines are held by unpatented BLM claims. There is a 3.5% yellowcake royalty on the Canyon property.

#### *Operations*

Denison engaged J.S. Redpath Corporation (“**Redpath**”) as its mining contractor for the Arizona 1 operation. In April 2007, Redpath began work on site including rehabilitation of the surface facilities and the hoist and headframe.

In the mid-1980s, the shaft at Arizona 1 was sunk approximately 1,200 feet below surface before activity at the mine was shut down due to depressed uranium prices. The original target depth was 1,600 feet in order to reach the bottom of the ore body. The Company has decided to ramp down from the bottom of the existing shaft rather than deepen the shaft to access the lower parts of the ore body.

Work began on the rehabilitation of the shaft in mid-2007. The rehabilitation of the shaft, underground development, sinking of an internal raise, which will be used as an ore pass, and the sinking of a ventilation shaft was completed in September 2008. Due to ongoing delays in receipt of an air quality permit, Redpath was demobilized from the site, and the site remains on care and maintenance until the air quality permit is received. Once the permit is received it will take approximately six months of underground development before ore production can begin.

The Pinenut and Canyon mine sites have been cleaned up and the buildings re-opened. Both of these sites also remain on care and maintenance.

#### *Permitting*

The Arizona 1 mine has all but one of the permits necessary for mining. An air quality permit, which is required under new State requirements, is currently being applied for from the State of Arizona, Department of Environmental Quality (“**ADEQ**”) and Department of Air Quality (“**DAQ**”). DAQ has expanded the scope of the permit to include evaluation of the impact of ore haulage trucks traveling from the mine along the county and BLM roads. Modelling data has been submitted to DAQ and it is anticipated that the permit will be issued for public comment before mid-2009. All other permits are in place for the Arizona 1 mine.

In 1992, the State of Arizona updated its laws relating to groundwater issues, requiring that an Aquifer Protection Permit be obtained. The Company prepared documents applying for groundwater general permits for the on-site ponds, ore storage and development waste storage pads and stormwater collection for the Pinenut and Canyon mines. The initial applications for each of the mine sites were denied. The Company is revising the permit applications and will be submitting them for review in 2009. Air quality permits will also be required for each of the operations.

#### **Ore Purchase**

In July 2007, the Company initiated an ore purchase program to provide additional mill feed for the White Mesa mill. A schedule listing the price to be paid per ton is posted on the Company’s website at [www.denisonmines.com](http://www.denisonmines.com) from time to time. The Company adjusts the buying schedule from time to time in response to changing factors such as uranium and vanadium prices, milling cost and uranium and vanadium recoveries.

The mill did not receive any ore under the program in 2007 and received 2,423 tons in 2008 at an average grade of 0.19% U<sub>3</sub>O<sub>8</sub> and 1.0% V<sub>2</sub>O<sub>5</sub>.

In April 2008, the Company entered into an ore purchase and toll milling agreement with Blue Rock Resources Ltd. (“**Blue Rock**”). The term of the agreement was for three years and Blue Rock was

required to deliver 25,000 tons of ore under the Company's ore purchase program. Any additional ore would be milled under the terms of the toll milling agreement. In 2008, Blue Rock delivered only 661 tons at an average grade of 0.11% U<sub>3</sub>O<sub>8</sub> and 0.58% V<sub>2</sub>O<sub>5</sub>.

In March 2009, Denison agreed to terminate the ore purchase and toll milling agreement with Blue Rock and to relieve Blue Rock of its obligations in exchange for the issuance of common shares in the capital of Blue Rock equal to 19.75% of Blue Rock's then outstanding capital, at a deemed price of Cdn\$0.015 per share. As of the date hereof, the settlement is subject to approval of the TSX Venture Exchange.

### ***Mineral Properties***

William C. Kerr, the Company's Vice President, Exploration who is a "Qualified Person" in accordance with the requirements of NI 43-101, is responsible for the Mineral Reserves and Mineral Resources estimates for the Company's properties and is responsible for the information of a scientific or technical nature concerning Mineral Properties and Mineral Exploration in the following sections.

### **Summary of Reserves and Resources**

The following tables show the Company's estimate of mineral reserves and mineral resources as of December 31, 2008. NI 43-101 requires mining companies to disclose reserves and resources using the subcategories of proven reserves, probable reserves, measured resources, indicated resources and inferred resources. Denison reports reserves and resources separately. Several of the tables below identify "historic resource estimates," prepared prior to the implementation of NI 43-101. See "Mineral Properties – Gurvan Saihan Joint Venture" and "Mineral Properties – Elliot Lake" for the Company's disclosure regarding these estimates, including a discussion as to their relevance and reliability.

#### **Mineral Reserve Estimates**

Deposit	Tonnes (,000)	100% Basis		Company Share
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
McClellan – Ore Stockpile	375.6	0.79	6,505	1,464

#### **Measured Mineral Resource Estimates<sup>(1) (2)</sup>**

Deposit	Tonnes (,000)	100% Basis		Company Share
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
Mutanga – Mutanga	1,880.0	0.048	1,992	1,992

### Indicated Mineral Resource Estimates<sup>(1)(2)</sup>

Deposit	Tonnes (,000)	100% Basis		Company Share
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
McClellan – Caribou	39.5	3.13	2,724	613
McClellan—Sue D	122.8	1.05	2,840	639
McClellan North	186.1	2.80	11,480	2,583
Midwest <sup>(5)</sup>	354.0	5.50	42,900	10,800
Midwest A	464.0	0.57	5,800	1,460
Henry Mountains - Bullfrog	651.7	0.33	4,674	4,674
Henry Mountains-Tony M	1,527.8	0.24	8,140	8,140
Mongolia -Hairhan	4,726.0	0.08	7,891	5,524
Mutanga - Mutanga	8,400.0	0.03	5,817	5,817
Total Indicated Resources				40,250

### Inferred Mineral Resource Estimates<sup>(1)(3)</sup>

Deposit	Tonnes (,000)	100% Basis		Company Share
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
McClellan – Sue E <sup>(4)</sup>	483.4	0.63	7,300	1,643
McClellan –Sue D	24.2	0.39	209	47
McClellan North	3.2	0.74	50	11
Midwest	25.0	0.80	400	101
Midwest A	9.2	21.23	4,300	1,082
Henry Mountains - Bullfrog	685.2	0.35	5,332	5,332
Henry Mountains -Tony M	779.9	0.16	2,750	2,750
Arizona Strip	217.7	0.70	3,352	3,352
Mongolia - Hairhan	1,848.0	0.09	3,484	2,439
Mutanga - Mutanga	7,230.0	0.02	3,287	3,287
Mutanga - Dibwe	17,040.0	0.02	8,967	8,967
Mutanga - Mutanga Ext	500.0	0.03	400	400
Mutanga - Mutanga East	200.0	0.03	100	100
Mutanga - Mutanga West	500.0	0.03	400	400
Total Inferred Resources				29,911

**Notes:**

- (1) Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- (2) The measured and indicated resources were estimated at various block cut-off grades and 0.10% U<sub>3</sub>O<sub>8</sub> was selected as most reasonable for the McClellan deposits, 0.35% U<sub>3</sub>O<sub>8</sub> for the Caribou deposit, 0.30% U<sub>3</sub>O<sub>8</sub> for Midwest, 0.05% eU (0.059% eU<sub>3</sub>O<sub>8</sub>) for Midwest A, 0.20% eU<sub>3</sub>O<sub>8</sub> with a minimum thickness of 4 feet for Henry Mountains - Bullfrog, a 0.10% eU<sub>3</sub>O<sub>8</sub> with a minimum thickness of 2 feet for Henry Mountains Tony M, a 0.02% U (0.024% U<sub>3</sub>O<sub>8</sub>) with a minimum thickness of 1.0 metre for Mongolia, and a 100 ppm cutoff for Mutanga.
- (3) The inferred resources were estimated at various block cut-off grades and 0.10% U<sub>3</sub>O<sub>8</sub> was selected as most reasonable for the McClellan deposits, 0.05% eU (0.059% eU<sub>3</sub>O<sub>8</sub>) for Midwest A, 0.20% eU<sub>3</sub>O<sub>8</sub> with a minimum thickness of 4 feet for Henry Mountains – Bullfrog, 0.10% eU<sub>3</sub>O<sub>8</sub> with a minimum thickness of 2 feet for Henry Mountains – Tony M, 0.20% eU<sub>3</sub>O<sub>8</sub> for the Arizona Strip, 0.02% U (0.024% U<sub>3</sub>O<sub>8</sub>) with a minimum thickness of 1.0 metre for Mongolia, 100 ppm for Mutanga and Dibwe, and 200 ppm for Mutanga Ext, Mutanga East and Mutanga West.
- (4) The operator conducted confirmatory drilling on a portion of these resources outside the designed pit and late in 2006 submitted a preliminary analysis detailing an inferred resource of 2 million pounds on a 100% basis in this area, as compared to the 7 million pounds that Scott Wilson RPA has estimated. As at December 31, 2008, Scott Wilson RPA has not re-estimated the resource using the new drill information.
- (5) The Company's share of the indicated resources at Midwest also contains 4.35% Nickel (8.55 million pounds) and 0.34% Cobalt (0.68 million pounds).

Except as stated below, the reserve and resource information shown above is as reported in the various technical reports prepared in accordance with NI 43-101 (the “**Reports**”) by Scott Wilson RPA, Geostat and CSA Global. See “Mineral Properties – McClellan Lake,” “Mineral Properties – Midwest,” “Mineral

Properties – Henry Mountains Complex,” “Mineral Properties – Arizona Strip”, “Mineral Properties – Gurvan Saihan Joint Venture”, and “Mineral Properties – Mutanga.” Information on the Ore Stockpile was prepared from the year-end stockpile survey, mill feed and mine production data reported by ARC, the operator of the McClean Lake joint venture. Reserve and Resource information in the Reports has been adjusted to reflect ore mined into Ore Stockpile. The Midwest Probable Reserves have been reclassified, by the Company, to Indicated Mineral Resources as a result of the decision not to proceed with the project at this time.

The reconciliations shown below detail the changes from the Mineral Reserves and Mineral Resources reported as of December 31, 2007. The 2008 additions and deletions result from ore mined to stockpile, additional information provided by mining and milling results, new or updated technical reports and reclassification of reserves and resources.

**Reconciliation of Denison’s Share of Uranium Reserves  
(in thousands of pounds U<sub>3</sub>O<sub>8</sub>)**

Reserves	December 31, 2007	2008 Throughput <sup>(1)</sup>	2008 Additions (Deletions) <sup>(2)</sup>	December 31, 2008
McClean – Ore Stockpile	472	(762)	1,754	1,464
McClean –Sue E	1,600	0	(1,600)	0
Midwest	10,487	0	(10,487)	0
Total Reserves	12,559	(762)	(10,333)	1,464

**Notes:**

- (1) Corresponds to mill feed. The difference between the 2008 mill feed and Denison’s share of pounds of U<sub>3</sub>O<sub>8</sub> produced is due to mill recovery and changes of in-process circuit inventory.
- (2) Additions or deletions of reserves include ore mined to stockpile, reassessment of geological data, results of information provided from mining and milling and reclassification of reserves or resources.

**Reconciliation of Denison's Share of Uranium Resources  
(in thousands of pounds U<sub>3</sub>O<sub>8</sub>)**

Resources		December 31, 2007	2008 Throughput	2008 Additions (Deletions) <sup>(1)</sup>	December 31, 2008
<i>McClellan – Sue B</i>					
	indicated	264	0	(264)	0
	inferred	57	0	(57)	0
<i>McClellan - Caribou</i>					
	indicated	613	0	0	613
	inferred	0	0	0	0
<i>McClellan – Sue E</i>					
	indicated	0	0	0	0
	inferred	2,651	0	(1,008)	1,643
<i>McClellan - Sue D</i>					
	indicated	639	0	0	639
	inferred	47	0	0	47
<i>McClellan North</i>					
	indicated	2,583	0	0	2,583
	inferred	11	0	0	11
<i>Midwest</i>					
	indicated	0	0	10,800	10,800
	inferred	0	0	101	101
<i>Midwest A</i>					
	indicated	1,460	0	0	1,460
	inferred	1,082	0	0	1,082
<i>Henry Mountains - Bullfrog</i>					
	indicated	6,866	0	(2,192) <sup>(2) (3)</sup>	4,674
	inferred	6,046	0	(714) <sup>(2) (3)</sup>	5,332
<i>Henry Mountains - Tony M</i>					
	indicated	0	0	8,140 <sup>(2) (3)</sup>	8,140
	inferred	0	0	2,750 <sup>(2) (3)</sup>	2,750
<i>Arizona Strip</i>					
	indicated	0	0	0	0
	inferred	3,352	0	0	3,352
<i>Mongolia - Hairhan</i>					
	indicated	5,524	0	0	5,524
	inferred	2,439	0	0	2,439
<i>Mutanga</i>					
	measured	0	0	1,992	1,992
	indicated	0	0	5,817	5,817
	inferred	0	0	13,154	13,154

**Notes:**

- (1) Additions or deletions of resources include ore mined to stockpile and reassessment of geological data and reclassification of reserves or resources.
- (2) Henry Mountains – Bullfrog includes the Indian Bench and Copper Bench deposits. The Henry Mountains – Tony M includes the Southwest and Tony M deposits. See “Mineral Properties – Henry Mountains Complex.”
- (3) The Southwest deposit, which was included in the Bullfrog resources in the Henry Mountains Technical Report, was re-estimated as part of the Tony M report and these resources were moved from Henry Mountains – Bullfrog to Henry Mountains – Tony M. See “Mineral Properties – Henry Mountains Complex.”

**Historical Resources**

On several of Denison's mineral properties, where there are no current estimates of mineral resources or mineral reserves, as such terms are defined under NI 43-101, historical estimates exist. Several of these historical estimates have been reviewed and are considered reasonable and reliable.

On the Haraat deposit in Mongolia, Geologorazvedka prepared an estimate of mineral resources in 1998. These estimates are considered historical mineral resources under Section 2.4 of NI 43-101. The methodology for the Haraat resource estimate is considered reliable to the level of classification specified. Scott Wilson RPA considers that the mineral resources, as shown in the following table, in the Haraat

area are equivalent to inferred and, because they are potentially economic, they are relevant. See “Mineral Properties – Gurvan Saihan Joint Venture.”

### Haraat Historical Mineral Resources

Category	100% Basis			Company Share
	Tonnes (,000)	Grade (% U)	Pounds eU <sub>3</sub> O <sub>8</sub> (,000)	Pounds eU <sub>3</sub> O <sub>8</sub> (,000)
Inferred Resources	10,600	0.023	6,398	4,479

**Notes:**

- (1) The mineral resource estimate does not comply with the requirements of NI 43-101. In the opinion of Scott Wilson RPA, the classification complies with CIM definition standards.
- (2) The cut-off grade is 0.01% eU (0.012%U<sub>3</sub>O<sub>8</sub>).
- (3) The historic resource estimates cannot be verified and the estimates are not necessarily indicative of the mineralization on the property.

In June 2007, the Company received a technical report entitled “Technical Report on the Elliot Lake Property, Elliot Lake District, Ontario” from Scott Wilson RPA (the “**Elliot Lake Report**”), a copy of which is available on Denison’s profile on the SEDAR website at [www.sedar.com](http://www.sedar.com). Scott Wilson RPA compiled the historic mineral resources for the Elliot Lake deposits and reported in accordance with the requirements of NI 43-101. The resource estimate is based on historical mine records at the time of the shutdown of the mines in 1992. No subsequent work has been carried out since that time.

### Elliot Lake Historical Mineral Resources

Category	100% Basis and Company Share		
	Tons (,000)	Grade (pounds/ton)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
Developed	89,200	1.29	115,000
Undeveloped	80,500	1.13	90,000
			205,000

**Notes:**

- (1) The mineral resource estimate does not comply with the requirements of NI 43-101. CIM definitions are not used.
- (2) The cut-off grade is 0.8 lb/ton U<sub>3</sub>O<sub>8</sub>.
- (3) A minimum mining width of 6 feet was used and no mining recovery factors were applied.
- (4) The historic resource estimates cannot be verified and the estimates are not necessarily indicative of the mineralization on the property.

In the opinion of Scott Wilson RPA, although the historical estimate cannot be verified, the estimate is considered to be reasonable based on the estimation methods at the time. The current historical resource, without access to the drilling information, cannot be classified directly under the CIM classification standards incorporated under NI 43-101. The mineral resource estimates were originally classified for the purposes of the Elliot Lake Report as Developed and Undeveloped. Developed resources are those resources that have been developed for mining and represent total mineralization remaining after partial extraction during the previous mining operations. Undeveloped resources are located in blocks beyond existing development workings where no mining has taken place.

Denison is investigating the possibility of extracting uranium from the water that has seeped into the old mine over the past 15 years.

## **McClellan Lake**

### Property Description and Location

McClellan Lake is owned by Denison (22.5%) and its joint venture partners, ARC (70.0%) and OURD (7.5%). ARC is the operator/manager of the facility. Denison, ARC and OURD also jointly own the nearby Midwest project. It is planned that the Midwest ore will be milled at McClellan Lake.

The McClellan Lake facility is located approximately 26 kilometres west of the Rabbit Lake mine and approximately 750 kilometres north of Saskatoon.

The mineral property consists of four mineral leases covering an area of 1,147 hectares and 13 mineral claims covering an area of 3,111 hectares. The right to mine the McClellan Lake deposits was acquired under these mineral leases, as renewed from time to time. Mineral leases are for terms of 10 years with the right to renew for successive 10-year periods provided that the leaseholders are not in default pursuant to the terms of the lease. The terms of the four mineral leases must be renewed between November 2015 and August 2016. A mineral claim grants the holder the right to explore for minerals within the claim lands and the right to apply for a mineral lease. Title to the mineral claims is secure until at least 2023. It is expected that the leases will be renewed in the normal course, as required, to enable all the McClellan Lake deposits to be fully exploited.

For additional information on mineral leases, mineral claims and surface leases, see “Government Regulation – Land Tenure.”

The uranium produced from the McClellan Lake deposit is subject to Saskatchewan uranium royalties under the terms of Part III of the Crown Mineral Royalty Schedule, 1986 (Saskatchewan), as amended, see “Government Regulation – Canadian Royalties.” In addition, a royalty of 2% of the spot market price on all U<sub>3</sub>O<sub>8</sub> produced from the Sue E deposit is payable to the previous owner of a portion of the deposit.

### Accessibility, Climate, Infrastructure and Physiography

Access to the McClellan Lake site is by both road and air. Goods are transported to the site by truck over an all-weather road connecting with the provincial highway system. Air transportation is provided through the Points North airstrip about 25 kilometres from the project site.

The nearest permanent community is Wollaston Post, about 50 kilometres from the property. Workers commute to and from the site by aircraft landing at Points North then by bus to the site. While at the site, workers reside in permanent camp facilities. Personnel are recruited from the northern communities and major population centres, such as Saskatoon, and normally work one week on and one week off.

Site activities are carried out all year, despite the cold weather during the winter months. Mean daily temperatures range from -25°C in January to +15°C in July. The average length of the frost-free period is about 90 days.

Water for industrial activities is obtained from one of the many lakes and ponds that surround the area. Electric power is obtained from the provincial grid with stand-by power available as required.

All tailings from the McClellan Lake processing facility are deposited in the TMF in the mined out JEB pit. In addition, the TMF has been designed to receive tailings from the processing of the high-grade Midwest and Cigar Lake ores.

The terrain at McClellan Lake is typical of the Athabasca basin area with glacial drift features following northeast-southwest trends to produce sand and gravel ridges. These ridges are surrounded by low-lying ground which is often water logged and dominated by muskeg. Small ponds and lakes cover over 25% of

the area. Jack pine and spruce, rarely more than 10 metres high, are the predominant trees. Surface elevations range from 400 to 500 metres above sea level.

### History

Canadian Occidental Petroleum Limited ("**CanadianOxy**") began exploring for uranium in northern Saskatchewan in 1974 in the area between the Rabbit Lake deposit and the Midwest Lake area where uraniferous boulder trains had been found previously. In April 1977, CanadianOxy entered into a joint venture agreement with Inco Limited ("**Inco**"). During a diamond drilling program in 1977, one of the 47 drilled holes encountered encouraging uranium mineralization. During the next two years, extensive exploration work, including airborne geophysics, electromagnetic surveys and diamond drilling was carried out.

Mineralization was discovered at McClean Lake (the McClean North deposit) in January 1979 and follow up drilling later that year confirmed the existence of significant unconformity type uranium mineralization. Subsequent exploration resulted in the discovery in 1980 of the McClean South zone and the JEB deposit in 1982. The Sue trend deposits were discovered between 1988 and 1991, and the Caribou deposit in 2002.

In 1993, the owners of the Midwest and McClean Lake projects agreed to combine the two projects and develop them as a complementary development. Ownership interests in the respective joint ventures were interchanged, with a predecessor in title to the Company, which owned an interest in the Midwest project, resulting in the Company acquiring a 22.5% interest in McClean Lake.

### Geological Setting

The McClean Lake uranium deposits lie near the eastern margin of the Athabasca basin in the Churchill Structural Province of the Canadian Shield. The bedrock geology of the area consists of Precambrian gneisses unconformably overlain by flat lying, unmetamorphosed sandstones and conglomerates of the Athabasca Group. The Precambrian basement complex is composed of an overlying Aphebian aged supracrustal metasedimentary unit infolded into the older Archean gneisses. The younger Helikian aged, Athabasca sandstone was deposited onto this basement complex. The basement surface is marked by a paleoweathered zone with lateritic characteristics referred to as regolith.

### Mineralization

Excluding the JEB deposit, which was mined out several years ago and which is now used as the TMF, the McClean Lake reserves and resources are located along two "trends" of mineralization, the Sue trend and the McClean trend. The Caribou pod is a singular deposit at this time.

The mineralized zones in the McClean trend occur as sausage-shaped pods straddling the unconformity between the Athabasca sandstones and the crystalline basement. The high grade part of the mineralized pods undulates from 13 metres above to 13 metres below the unconformity contact which is, on average, 160 metres below the surface in this area. The host rocks for the mineralization are altered sandstones and Aphebian basement rocks usually altered to clay-rich rocks. A zone of illite alteration forms a mushroom-shaped envelope tilted to the north in the McClean North zone. There are 11 discrete pods, arranged along two separate but parallel trends (termed the North and South zones) separated by approximately 500 metres. Generally, mineralization in the basement is at the eastern extremity of the combined zone. Uranium mineralization is hosted in hematitically altered clay-rich zones in which illite forms massive layers. Uranium occurs as fine-grained coffinite, as veinlets and nodules of pitchblende and as massive masses of pitchblende/uraninite. Highly variable but generally small amounts of nickel arsenides are associated with the uranium.

The deposits of the Sue trend are along a linear trend on the western flank of the Collins Bay dome. These deposits trend north-south along or near a steeply east-dipping unit of graphitic gneiss within a 4.2 kilometre long basement conductor. Mining has been completed at Sue A, Sue B, Sue C and Sue E. The Sue D deposit lies north of Sue E and south of the Sue C pit along the Sue trend. Uranium mineralization is hosted by faulted/fractured brecciated and altered graphitic paragneiss.

Caribou is an unconformity and sandstone-hosted egress-type deposit similar to such deposits as Cigar Lake, McArthur, Collins Bay and Midwest. The Caribou mineralization consists primarily of uranium oxides (uraninite and pitchblende) with a suite of nickel-cobalt arsenides in a clay-altered matrix within the sandstones and fault breccias in the basement. The mineralization is concentrated along the Athabasca sandstone basement unconformity.

### Drilling

As of April 30, 1990, when the diamond drilling of the McClean trend ceased, 416 diamond drill holes totalling 81,800 metres had been drilled into the McClean North and McClean South zones. A total of 81 diamond drill holes totalling 8,006 metres have been drilled in the Sue A deposit. A total of 71 holes totalling 7,094 metres have been drilled into the Sue B deposit.

The JEB deposit was discovered by CanadianOxy and Inco in 1982. A total of 92 diamond drill holes totalling 11,779 metres were drilled on this deposit by the time of the feasibility study in 1990.

A total of 128 diamond drill holes were drilled into the Sue C deposit prior to the development decision, totalling 21,749 metres of core.

Sue D was explored by diamond drilling from surface from 1989 to 2001 with 70 holes totalling 13,395 metres drilled.

At Sue E, a total of 135 diamond drill holes have been cored for a total of 23,757 metres. Drill spacing was at 10 metre centres on 12.5 metre lines on all of the above properties.

The Caribou deposit was explored in 2002 with the drilling of 44 diamond drill holes with 7,022 metres. Holes were drilled on 12.5-metre sections at a spacing of 5 metres.

### Sampling and Analysis

The following description applies to all exploration on the McClean Lake property.

Following the completion of a drill hole, the hole was radiometrically logged using a downhole slim-line gamma probe. The gamma-log results provide an immediate equivalent uranium value ( $eU_3O_8\%$ ) for the hole, which, except in high grade zones, is reasonably accurate. The gamma-log results, however, have not been used for the purposes of estimating reserves.

Sample intervals are generally 500 millimetres long, except where higher or lower grade mineralization boundaries fall within the interval. In that case, two 250 millimetre samples are collected. Flank samples of 1.0 metre are always collected where mineralization is located. A background geochemistry sample is collected every 10 metres down the hole.

All sampled core is split in half, one half retained and the other sent to an independent laboratory. Lost core is not an issue at the McClean project as core recovery has been good. Control samples were routinely assayed with each batch of core samples analyzed.

The mineralization in the various McClean deposits is highly variable in both mineralogy and uranium content. The principal minerals identified in the deposits are pitchblende, uraninite and niccolite. As a result of the highly variable uranium content, a variable density formula was developed for the McClean deposits. This formula was modified over the years to account for the fact that it originally tended to underestimate  $U_3O_8$  content where the  $U_3O_8$  values were associated with high values of nickel and arsenic.

#### Security of Samples

No opinion can be given regarding security of samples in the mid to late 1970s and the late 1980s other than to indicate that subsequent geological work and all metallurgical and geotechnical work have confirmed the results. All procedures reviewed follow generally accepted industry practice. A good demonstration of the reliability is that both the JEB and Sue C deposits have been mined out and more uranium has been recovered into stockpiles than had been estimated from surface drilling.

#### Mineral Reserve and Mineral Resource Estimates

Mineral reserve estimation procedures have evolved over the years. At the time of the feasibility study in 1990, polygonal methods were used for the JEB, the Sue A, the Sue B, the Sue C deposits and for the McClean zones. Prior to the start of mining at the JEB deposit, the reserves were re-evaluated using computerized methods whereby block models were constructed and geostatistical methods were implemented. Much more recently, these figures have been further fine tuned using Whittle pit optimization software. Throughout all this, the reserve numbers have not changed materially. Appropriate tests and audits of the databases on all the McClean deposits have been carried out by qualified Denison personnel. In the case of JEB, Sue C and Sue B, the amount of  $U_3O_8$  recovered into stockpiles was 12%, 24% and 13% respectively higher than that estimated from surface drilling.

The Company received a technical report from Scott Wilson RPA dated November 21, 2005, as revised February 16, 2006, on its mineral reserves and mineral resources at certain of the deposits at McClean Lake in which it has an interest entitled “Technical Report on the Denison Mines Inc. Uranium Properties, Saskatchewan, Canada” (the “**McClean Technical Report**”), a copy of which is available on the Company’s profile on the SEDAR website at [www.sedar.com](http://www.sedar.com). The mineral resource estimates, as reported in the McClean Technical Report, for Caribou and McClean North are as shown in “Mineral Properties – Summaries of Reserves and Resources.”

In preparing the McClean Technical Report, Scott Wilson RPA reviewed previous estimates of mineral reserves and mineral resources at the applicable properties, and examined and analyzed data supporting the previous estimates, as well as other available data regarding the properties, including extensive information from ARC. The analysis for the McClean North deposit in this Report was based on the blind shaft boring mining method.

For the Sue B deposit, Scott Wilson RPA evaluated the previously developed 2003 resource model which was based on a total of 71 drill holes. Scott Wilson RPA accepted and reclassified the previously developed resource model and estimate. At the date of the McClean Technical Report, Sue B was not planned to be developed, so Scott Wilson RPA did not evaluate the economic potential of the deposit and did not estimate reserves. Sue B was mined in 2008 and recovered 13% more uranium than had been estimated.

For the Sue E deposit, Scott Wilson RPA constructed a block model using indicator kriging to both map out and geologically constrain mineralized areas. A block that had at least one nearby composite within 10 metres of its centre, and that had composites from at least two different drill holes in its search neighbourhood was classified as part of the indicated resource. The indicated resource was evaluated by Scott Wilson RPA using Whittle economic evaluation software showing that the Sue E pit economics

were robust and mineral reserves were estimated. Mining was completed at the Sue E pit during 2008 recovering about 91% of the probable reserves estimated by Scott Wilson RPA. Scott Wilson RPA classified approximately 7.3 million of the pounds outside the current pit as inferred. Confirmatory drilling in 2006 by the operator has indicated that this may be reduced to 2.0 million pounds. Scott Wilson RPA has not re-estimated the resources based on this drilling.

Scott Wilson RPA's estimation of the McClean North deposit was carried out by 2-D block modeling with inverse distance cubed ( $ID^3$ ) interpolation of drill hole composites spanning the vertical thickness of the pod, and 3 x 3 block model cells were developed. Potentially economic uranium mineralization, using the blind-shaft boring method, was correlated on longitudinal and cross sections and in plan to define the plan boundaries of the pods, effectively providing a contour of mineralization grading 0.1%  $U_3O_8$  over three metres vertically. Resources were estimated based on a grade thickness ("GT") cut-off of 24%  $U_3O_8$  x metres.

The Company received a technical report from Scott Wilson RPA dated March 31, 2006 on its mineral resources at the Sue D deposit entitled "Technical Report on the Sue D Uranium Deposit Mineral Resource Estimate, Saskatchewan, Canada" (the "**Sue D Report**"), a copy of which is available on the Company's profile on the SEDAR website at [www.sedar.com](http://www.sedar.com). Scott Wilson RPA carried out an independent resource estimate for Sue D by conventional 3-D computer block modeling. A minimum vertical mining width of two metres was employed with a 0.1%  $U_3O_8$  cut-off.

The resource estimate for the Caribou deposit is based on a block model for which grade was interpolated using ordinary kriging. Since there were no plans for the mining of this deposit at the date of the McClean Technical Report, the economic potential was not evaluated and reserves were not estimated.

Due to the significant increase in the price of uranium, Denison requested Scott Wilson RPA to re-evaluate the uranium resources in the McClean North trend that are amenable to other methods of mining. The original McClean Technical Report had only evaluated Mineral Resources and Mineral Reserves of the high grade portions under the assumption of the blind shaft mining method. The Company received a technical report from Scott Wilson RPA dated January 31, 2007, on its mineral reserves and resources at the McClean North uranium project entitled "Technical Report on the McClean North Uranium Deposit Mineral Resource Estimate, Saskatchewan, Canada" (the "**McClean North Technical Report**"), a copy of which is available on the Company's profile on the SEDAR website at [www.sedar.com](http://www.sedar.com).

The re-evaluation of McClean North was carried out by conventional 3-D computer block modeling. Wire frames were constructed for each of pods 1, 2 and 5. The estimate included internal dilution, but not external dilution, and was carried out at a 0.1%  $U_3O_8$  cut-off. This resource estimate is based entirely on diamond drill information. Block cell dimensions were selected at eight metre model grid east west x 5 metre model grid north south and a 2 metre bench height or approximately 180 tonnes/block. Scott Wilson RPA constructed a resource wireframe based on kriging, and constructed a special waste wireframe, that generally surrounds the resource wireframe, using similar kriging parameters but with larger search distances.

## **Midwest**

### Property Description and Location

The Midwest and Midwest A uranium deposits at the Midwest project are two of several high-grade deposits at or near the contact between the basement complex and the sandstone in the Athabasca Basin in northern Saskatchewan. Midwest is owned by Denison (25.17%) and its joint venture partners, ARC (69.16%) and OURD (5.67%). ARC is the operator/manager. Denison, ARC and OURD are also the joint venture partners in the McClean Lake joint venture and the owners of the McClean Lake mill where the Midwest ore is planned to be milled.

The Midwest project is located near South McMahon Lake approximately 15 kilometres from the McClean Lake mill, which began operating in 1999. The site is approximately 750 kilometres north of Saskatoon.

Since the completion of the test mine at the Midwest deposit in 1988 and 1989, the site has been under an environmental monitoring and site security surveillance program. At present, there is an inactive water treatment plant, two water storage ponds and a core storage area on the site and a dam in the Mink Arm of South McMahon Lake. All of the facilities used in the test mine program and all of the existing surface facilities are located on lands owned by the Province of Saskatchewan. The right to use and occupy the lands was granted in a surface lease agreement with the Province of Saskatchewan. The original surface lease agreement of 1988 was replaced by a new agreement in 2002. This new surface lease is valid for a period of 33 years. Obligations under the surface lease agreement primarily relate to annual reporting regarding the status of the environment, the land development and progress made on northern employment and business development. The Midwest surface lease covers an area of approximately 646 hectares.

The mineral property consists of three contiguous mineral leases covering an area of 1,426 hectares. The right to mine the Midwest deposit was acquired under these mineral leases, as renewed from time to time. The mineral leases are for terms of 10 years with the right to renew for successive subsequent 10 year periods, provided that the leaseholders are not in default pursuant to the terms of the lease. The term of one of the mineral leases expires in December 2013 and the other two expire in December 2018. The Company expects that the leases will be renewed in the normal course, as required, to enable the Midwest deposit to be fully exploited.

For additional information on mineral leases and surface leases, see “Government Regulation – Land Tenure.”

The uranium produced from the two Midwest deposits will be subject to Saskatchewan uranium royalties under the terms of Part III of the Crown Mineral Royalty Schedule, 1986 (Saskatchewan), as amended, see “Government Regulation – Canadian Royalties.” In addition, a portion of Denison's interest in the Midwest project (i.e. 5.5% of the project reducing to 3.44% after payout) is subject to a sliding-scale, gross overriding royalty ranging from 2% to 4% payable to two previous owners of a portion of the Midwest project.

#### Accessibility, Climate, Infrastructure and Physiography

Access to the Midwest project is by both road and air. Goods are transported to the site by truck over an all-weather road connecting with the provincial highway system. Air transportation is provided through the Points North airstrip approximately 4 kilometres from the project site.

The nearest permanent community is Wollaston Post, about 70 kilometres from the property on the other side of Wollaston Lake.

Site activities are carried out all year despite the cold weather during the winter months. Mean daily temperatures range from -25°C in January to +15°C in July. The average length of the frost-free period is about 90 days.

Water for industrial activities is obtained from one of the many lakes and ponds that surround the area. Electric power can be accessed from the provincial grid through nearby Points North.

No tailings storage areas are expected to be required at Midwest since it is planned that all Midwest ore will be transported to the McClean Lake mill for processing, with all resulting tailings being disposed of in McClean Lake's licensed TMF.

Surface facilities and infrastructure at the Midwest project will consist of a water treatment plant and those necessary to support the mining operation and the ore shipment activities. Ample area for these facilities is available on the existing surface lease.

The terrain at Midwest is typical of the Athabasca Basin area with glacial drift features following northeast-southwest trends to produce sand and gravel ridges. These ridges are surrounded by low lying ground which is often water logged and dominated by muskeg. Over 25% of the area is covered by small ponds and lakes. Jack pine and spruce, rarely more than 10 metres high, are the predominant trees. Surface elevations range from 400 to 500 metres above sea level.

### History

Initial exploration work in the vicinity of the two Midwest deposits began in 1966. Canada Wide Mines Ltd, a subsidiary of Esso Resources Canada Ltd. was operator of the project from 1968 to 1982. From 1968 to 1975, exploration was carried out on an exploration permit which included the area covered by the current mineral leases. Most of the work was concentrated on the area near South McMahan Lake where uranium mineralized boulders were found. In 1974, the exploration permit was changed to mineral leases.

During the winter season of 1977, one of the holes drilled through the unconformity encountered radioactive mineralization. In January 1978, the Midwest deposit was intersected by the first drill holes. During 1978 through 1980, a further 439 holes were drilled (for a total of about 650) to delineate the deposit and to explore the surrounding area of the mineral leases.

In 1987, Denison acquired a 45% interest in the Midwest project and became the operator. An underground test mine program was completed in 1989 which confirmed the results of the surface drilling program and identified a high-grade mineral reserve containing 35.7 million pounds of  $U_3O_8$  at an average diluted grade of 99 pounds per tonne, mineable by underground methods.

In 1993, the respective owners of McClean Lake and Midwest combined their interests to make one complementary project with one mill at McClean Lake. In order to accomplish this, a portion of Denison's interest in Midwest was exchanged for an interest in McClean Lake. This transaction, together with several related ownership changes, resulted in Denison's ownership interest in Midwest being reduced to 19.5% and Minatco, ARC's predecessor in title, becoming the operator.

In 1999, Denison increased its interest in Midwest by 5.50% through the exercise of first refusal rights. With the increase in uranium reserves recovered into stockpiles at McClean Lake, the uncertainty of the timing and costs of the Midwest development and the desire to eliminate the obligation to pay advance and future royalties on production from Midwest, Denison decreased its interest in Midwest from 25% to 19.96% effective March 31, 2001. ARC, the operator/manager of Midwest, also reduced its interest from 70.5% to 54.84% for the same reason.

At the end of 2004, in order to take advantage of uranium prices rapidly increasing and the supply demand balance becoming tighter, Denison again increased its interest at Midwest, along with its joint venture partners, by buying the 20.70% interest in Midwest then held by Redstone Resources Inc. This purchase permitted Denison to acquire a further 5.21% interest in Midwest, bringing its interest to 25.17% and adding 1.7 million pounds to the Company's uranium resource base. ARC's interest increased to 69.16% and OURD's interest increased to 5.67%.

Exploration activities resumed in 2004 some three kilometres to the northeast of the Midwest deposit to test ground around a historic hole MW338 that had returned an isolated intercept of 3.8 metres at 6.9%

U<sub>3</sub>O<sub>8</sub>. Continuing exploration identified the Midwest A deposit and several other mineralized areas, including the Josie Zone, lying between the Midwest and the Midwest A deposits.

### Geological Setting

The Midwest uranium deposits lie near the eastern margin of the Athabasca Basin in the Churchill Structural Province of the Canadian Shield. The bedrock geology of the area consists of Precambrian gneisses unconformably overlain by flat lying, unmetamorphosed sandstones and conglomerates of the Athabasca Group. The Precambrian basement rocks are Archean-aged, are termed the Wollaston Group, and are essentially graphitic pelitic metasediments. These pelitic metasediments form a steeply dipping syncline which trends northeast. The basement surface is marked by a paleoweathered zone with lateritic characteristics referred to as regolith.

### Exploration

Initial work on the property was a regional airborne geophysical survey, which located conductors below the sandstone cover. Ground prospecting identified a radioactive boulder field and subsequent drill testing of the conductors located the mineralization in 1978.

After Denison acquired a 45% interest in the project and became the operator in 1987, an underground exploration test mine program was initiated at the Midwest deposit. From the fall of 1988 through April 1989, a 3.7 metre diameter shaft was sunk to a depth of 185 metres on the west shore of the Mink Arm of South McMahon Lake. From a depth of 170 metres, a crosscut was driven a total of 180 metres east. At the end of the crosscut, a blind-hole boring rig was installed to test the unconformity and related mineralization. Blind-hole boring of two 1.2 metre diameter holes through the mineralization was then carried out.

All three known uranium occurrences in the area (Midwest deposit, Josie Zone and Midwest A deposit) lie along a long resistivity low corresponding to a conductor associated to the graphite-bearing gneissic units of the basement. The other exploration tool of choice is rock geochemistry and clay mineralogy in drill hole core samples, mostly to define alteration haloes in the overlying Athabasca sandstone.

### Mineralization

The Midwest deposit is lens to cigar-shaped, 215 metres long with two main pods of high-grade mineralization separated by a 50 metre long section of low grade disseminated mineralization. The average width is 80 metres with a maximum of 128 metres. Thickness of the zone averages 10 metres with a maximum of 30 metres. Overall, the deposit is high grade at 5.47% U<sub>3</sub>O<sub>8</sub>. Nickel and arsenic average grades are high, at 3.2% and 5.3% respectively.

The Midwest deposit is representative of a typical unconformity type zone, whereby 99.5% of the resources are located at the basement sandstone contact either in the basal conglomerate or in the upper basement unit.

Locally, mineralized lenses occur along steep faults above and below the main unconformity mineralization. These are termed "perched" and "deep basement mineralization" respectively.

The Midwest A deposit is located at a depth of between 175 and 210 metres below the surface. It consists of several sub-parallel high-grade mineralized zones. These structures are surrounded by low-grade remobilized and clay-rich mineralization that has formed in the typical 'pancake' morphology. This occurs on several layers, with the most pronounced being located in the sandstone just under the contact with the chlorite zone, immediately under a conglomerate marker horizon located at approximately 175 metres below surface. This conglomerate layer has been somewhat disturbed and locally destroyed by the quartz dissolution associated with the mineralization. Another layer, more poorly defined, occurs just

above the unconformity. The mineralized structures also exhibit structurally controlled roots that go well down into the basement (as far as 70 metres beneath the unconformity).

### Drilling

Over 650 drill holes had tested the Midwest property prior to 2004, of which 100 surface (and wedged extensions) and three underground holes have been used for resource estimations for the Midwest deposit. Eighty of these are NQ diamond drill holes from the surface, 20 are PQ holes drilled for metallurgical test work, and three are confirmation holes drilled from the underground crosscut. All of the surface holes were geologically and geotechnically logged and sampled by previous owners of Midwest, while the underground holes were logged and sampled by Denison.

Of the 103 holes used for estimation of the Midwest resources, 22 did not have downhole survey information and therefore were assumed to be vertical. A statistical analysis carried out in 1982 indicated that at the 285 metre level, these supposedly vertical holes could have deviated by as much as 12 metres with an average of roughly five metres. Sensitivity studies have been carried out and indicate that, if the block boundaries remain fixed, the uncertainty in hole location for these 22 holes causes a fluctuation of 8% in tonnes, 5% in metal content and 3% on grade.

The resource estimate for Midwest A is based on 85 new core holes drilled between 2005 and 2007, as well as 29 old vertical core holes drilled in 1979 and 1980, and in 1989. Additional drilling has been carried out since the date of the resource estimate.

### Sampling and Analysis

Due to the nature of the mineralization, lost core is a significant issue. Lost core ranges between 0% and 50% with an average core loss of 33% for the drill holes included in the resource estimation for the Midwest deposit. The original owners initiated a convention which is conservative and has withstood many audit procedures over the years. The value assigned to lost core is the lowest assay of recovered material from one of three samples. These samples are: (1) the sample within which the lost core occurs; (2) the sample immediately above the one containing the lost core; and (3) the sample immediately below the one containing the lost core.

Core recovery from the 2005 to 2007 Midwest A drilling was substantially improved in relation to earlier drilling, with 86% overall core recovery. The sections of poor core recovery occur with more frequency in the sandstone just above the unconformity.

Geochemical rock samples from the 2005 to 2007 drilling were shipped to and analysed by Saskatchewan Research Council Geoanalytical Laboratories (“SRC”) in Saskatoon. Quality control procedures in place at SRC include a systemic insertion of blanks, duplicates and standards. Radiometric data are converted into % eU in a standard manner.

### Security of Samples

No opinion can be given regarding security of samples by the previous owners in the mid to late 1970s, other than to indicate that subsequent geological work, and all metallurgical and geotechnical work, including the sinking of a shaft and a test mining program in the late 1980s, have given no cause to doubt the veracity of the samples from which the resource estimations are based. The best confirmation that proper security of samples was maintained is the previously mentioned report on the assay data, where the assay data base was checked at two external labs and found to contain an average variation of only 4% for values greater than 0.5% U<sub>3</sub>O<sub>8</sub>.

No special security measures were enforced for the core samples from drilling since 2005. They are transported to the core shack and logging facility in sealed, standard, wooden core boxes, where they are

photographed, logged, radiometrically scanned and, in some cases, split or chipped. Bagged samples are shipped to SRC in plastic pails or metallic containers.

#### Mineral Reserve and Mineral Resource Estimates

From June of 1978 up to and including October of 1980, there were a total of 13 discrete "reserve estimation" reports published on the Midwest deposit by the previous owners.

The Company retained Scott Wilson RPA to independently review and audit its previously reported mineral reserves and resources in accordance with the requirements of NI 43-101. The Company received a technical report from Scott Wilson RPA dated June 1, 2005, revised on February 14, 2006, on its mineral reserves and resources at the Midwest uranium project entitled "Technical Report on the Midwest Uranium Deposit Mineral Resource and Mineral Reserve Estimates, Saskatchewan, Canada" (the "**Midwest Technical Report**"), a copy of which is available on the Company's profile on the SEDAR website at [www.sedar.com](http://www.sedar.com).

In preparing the Midwest Technical Report, Scott Wilson RPA reviewed previous estimates of mineral reserves and mineral resources, and examined and analyzed data supporting the previous estimates, as well as other available data regarding the properties, including extensive information from ARC. For the purpose of the economic analysis for determining reserves for the open pitable deposit, Scott Wilson RPA used a 0.3% U<sub>3</sub>O<sub>8</sub> mining cut-off, mining costs based on previous actual operating experience at Sue C, historical milling costs at the JEB mill and a uranium price of \$23.20 per pound of U<sub>3</sub>O<sub>8</sub>. Scott Wilson RPA constructed a block model based on a total of 265 surface drill holes. Scott Wilson RPA adopted the ARC unconformity and sandstone mineralization interpretation with some minor modifications. The total reserve in the Scott Wilson RPA estimate is approximately 24% greater than the previously reported estimates due to the addition of the South Extension Zone and increased U<sub>3</sub>O<sub>8</sub> grade estimates due to the application of a density weighted methodology. This block model was then used as the basis for evaluation of open pit economics using industry standard Whittle software analysis program. As a result, of increased costs and other economic factors, the Midwest reserves were reclassified to resources in 2008 pending a decision to proceed with the development of the Midwest deposit.

#### **Midwest Mineral Resources** <sup>(1) (2) (3)</sup>

Category	Tonnes (000's)	100% Basis		Company Share
		Grade (% U <sub>3</sub> O <sub>8</sub> )	Pounds of U <sub>3</sub> O <sub>8</sub> (000's)	Pounds of U <sub>3</sub> O <sub>8</sub> (000's)
Indicated	354.0	5.50	42,900	10,800
Inferred	25.0	0.80	400	101

**Notes:**

- (1) The Midwest Technical Report estimated Probable Reserves but they have been reclassified, by the Company, to indicated mineral resources in 2008 as a result of the decision not to proceed with the development of the project at this time.
- (2) The cut-off grade for the Midwest indicated resources is 0.30% U<sub>3</sub>O<sub>8</sub>.
- (3) The indicated resources also contain 4.35% nickel (Company share of 8.5 million pounds) and 0.34% cobalt (Company share of 0.68 million pounds).

Geostat was retained to complete an independent technical review of the Midwest A uranium deposit. Geostat's review was carried out and a report was prepared in compliance with the standards of NI 43-101. The Company received Geostat's report on the mineral resources of the Midwest A deposit, dated January 31, 2008, entitled "Technical Report on the Midwest A Uranium Deposit of Saskatchewan, Canada" (the "**Midwest A Technical Report**"), a copy of which is available on the Company's profile on the SEDAR website at [www.sedar.com](http://www.sedar.com).

In preparing the Midwest A Technical Report, Geostat delineated mineralized envelopes on drill section planes at 25 metre intervals, mostly based on equivalent uranium grades and a cut-off of 0.05% eU. As a general rule, the mineralized shapes look simple on both extremities of the zone while they seem to have a more complex geometry in the centre part of the zone. In that centre part, a small high-grade pod is defined within the outline of the mineralized zone itself around a few intercepts of significant length and consistently showing high grades, generally above 10%e U.

Once mineralized solids and the location and cut grades of composites within those solids were defined, the next step was to fill the solids with small blocks on a regular grid and interpolate the grade of each block from the grades of composites close to the blocks. Blocks of the current resource model are 10 x 10 x 3 metres and they are oriented along the strike of the deposit. The procedure used calculates the proportion of each mineralized solid in each resource block on the regular grid. All together, 1,461 resource blocks have some mineralized material with proportions ranging from 0.6% to 100%, and an average of 47.6%.

Volumes of mineralized material of each solid, obtained by adding block fractions, are reasonably close to the mineralized solid volumes. For the low-grade solids, the interpolation of the uranium grade of the block fraction in a given solid is done with ordinary kriging following search conditions as defined by variography routines. With the above conditions, the grade of all low-grade fractions in the 1,461 blocks can be interpolated. For the high-grade solid (only 73 blocks with some fraction of that material from 0.2% to 49.2%), no local block grade interpolation was attempted. An 18% U fixed value (reasonably close to the average composite grade of 18.6% U) has been assigned to all block fractions. This approach corresponds to kriging with a pure nugget effect variogram.

The resource block model leads to resource estimates provided that volumes are converted into tonnages. Since at this time, there are no density measurements from Midwest A core samples, densities used are based on the density model defined for the nearby Midwest deposit. In this model, fixed densities (from 2.24 to 2.34 tonnes per cubic metre) are assigned to material in given uranium grade categories (from 0 to 6% U), and a fixed density of 2.8 tonnes per cubic metre is used for the high-grade material.

Geostat classified the Midwest A resources as follows:

#### **Midwest A Mineral Resources<sup>(1) (2)</sup>**

Category	100% Basis			Company Share
	Tonnes (000's)	Grade (% U <sub>3</sub> O <sub>8</sub> )	Pounds of U <sub>3</sub> O <sub>8</sub> (000's)	Pounds of U <sub>3</sub> O <sub>8</sub> (000's)
Indicated	464.0	0.57	5,800	1,460
Inferred	9.2	21.23	4,300	1,082

**Notes:**

- (1) The mineral resource estimates comply with the requirements of NI 43-101 and the classifications comply with CIM definition standards.
- (2) The cut-off grade is 0.05% eU.

#### Other Midwest Information

For taxes and royalties, see “Government Regulation – Canadian Royalties” and “Government Regulation – Canadian Income and Other Taxes.”

#### **Henry Mountains Complex**

The Henry Mountains Complex is 100% owned by Denison, and is comprised of the Bullfrog property, hosting the Indian Bench and the Copper Bench deposits, and the Tony M property, hosting the Southwest deposit and the Tony M deposit and mine.

On October 17, 2006, Denison filed on the SEDAR website at [www.sedar.com](http://www.sedar.com) an independent technical report entitled “Technical Report on the Henry Mountains Complex Uranium Project, Utah, U.S.A.” prepared by Scott Wilson RPA in accordance with the requirements of NI 43-101 with respect to its Henry Mountains Complex (“**Henry Mountains Technical Report**”). This report provided current estimates for the Indian Bench, Copper Bench and the Southwest deposits and a historical resource estimate for Tony M.

On March 26, 2009, Denison announced that it had received an independent review of the resource estimates for the Tony M and Southwest deposits on the Henry Mountains Complex prepared by Scott Wilson RPA in accordance with NI 43-101 (“**Henry Mountains Tony M – Southwest Technical Report**”).

#### Property Description and Location

The Henry Mountains Complex is one contiguous property located in eastern Garfield County, Utah, 15 miles to 20 miles north of Bullfrog Basin Marina on Lake Powell and approximately 40 air miles south of the town of Hanksville, Utah. It is situated three miles west of Utah State Highway 276. The Henry Mountains Complex includes the Bullfrog property located to the north and the Tony M property located to the south.

The Henry Mountains Complex is comprised of 202 unpatented BLM mining claims totalling approximately 3,665 acres and one 640 acre Utah State Mineral Lease. The surface rights are owned by the federal government and administered by the BLM, with the exception of the Utah State Mineral Lease which has associated state surface rights. Seventeen of the claims, comprising a portion of the Tony M property, are subject to an escalating annual advance minimum royalty based on the uranium spot price, and a 4% yellowcake royalty, less taxes and certain other deductions. There is also a vanadium production royalty which is a 2% gross royalty less certain deductions. The Utah State Mineral Lease has an annual rental of \$640 and is subject to royalties set by the State of Utah including: an escalating annual advance minimum royalty based on the uranium spot price; a uranium royalty of 8% of gross value less certain deductions; and a vanadium royalty of 4% of gross value less certain deductions.

#### Accessibility, Climate, Local Resources, Infrastructure and Physiography

Road access to the Henry Mountains Complex is by paved Highway 276, running between Hanksville and Bullfrog Basin Marina, Utah. A gravel road, maintained by Garfield County and extending west from Highway 276, provides access to the northern end of the property. An unimproved county road passes by the portal of the Tony M mine and extends northerly across the property. A network of unimproved, dirt exploration roads provide access over the property except for areas of rugged terrain. The Bullfrog Basin Marina airstrip is located approximately 15 miles south of the Henry Mountains Complex. The Henry Mountains Complex is located in a relatively remote area of Utah, and the infrastructure is limited. The distance to Denison’s White Mesa mill is 117 miles.

The climate is distinctly arid, with average annual precipitation of approximately 8 inches, including about 12 inches of snow. Local records indicate the temperature ranges from a minimum of -10°F to a maximum of 110°F. The vegetation consists primarily of small plants including some of the major varieties of blackbrush, sagebrush, and rabbit brush. A few small junipers are also present.

Relief over the combined Bullfrog and Tony M properties is about 2,250 feet. The elevation ranges from 4,550 feet above sea level at the portal of the Tony M mine, near the southern end of the property, to 6,800 feet above sea level over the northern end of the properties. The terrain is typical canyon lands topography, with some areas deeply dissected by gullies and headwalls of canyons and the rest consisting of gently sloping gravel benches covering the northern half of the properties.

## History

The Bullfrog property was initially explored by Exxon Minerals Company (“**Exxon**”), while the Tony M property was explored and developed by Plateau Resources Inc. (“**Plateau**”), at that time a subsidiary of Consumers Power Company of Michigan.

Denison acquired the Bullfrog property when it purchased substantially all of the uranium producing assets of EFN in 1997. In February 2005, Denison acquired the Tony M property, thus bringing it under common ownership with the Bullfrog property.

Prior to 2005, all exploration, mine development, and related activities for the two properties were conducted independently. The Bullfrog and Tony M properties are therefore discussed separately, except where correlations and comparisons are made.

### *Bullfrog Property*

Exxon conducted reconnaissance in the area in 1974 and 1975, and then staked its first Bullfrog claims in 1975 and 1976. A first phase drilling program conducted in 1977 resulted in the discovery of what became the “Southwest” uranium deposit. Additional claims were subsequently staked and drilling was continued by Exxon. Several uranium and vanadium zones were discovered in the Southwest and Copper Bench and Indian Bench areas. With the declining uranium markets of the early 1980s, Exxon prepared a prefeasibility report and then discontinued development of the property.

From July 1982 to July 1983, 112 drill holes were completed by Atlas Corp., under a purchase option with Exxon, delineating the Southwest and Copper Bench deposits on approximately 100 foot centres. From July 1983 to March 1984, a core drilling program was completed throughout the Bullfrog Property with 133 rotary drill holes to delineate the Indian Bench deposit on approximately 200 foot centres.

In late 1992, EFN purchased the Bullfrog property from Exxon and conducted a geologic review and internal economic analysis of the property. In 1997, Denison became the owner of the Bullfrog property.

### *Tony M Property*

Exploration drilling in the Shootaring Canyon area was initiated by Plateau during 1976 in the vicinity of outcropping uranium mineralization. In February 1977, drilling commenced in what was to become the Tony M mine. More than 2,000 rotary drill holes totaling about one million feet were drilled.

Development of the Tony M mine started in September, 1977. By mid-1984, nearly 17 miles of underground workings had been developed in the Tony M mine. During development of the Tony M entryways and crosscuts, a total of 237,441 tons of muck with an average grade of 0.121% U<sub>3</sub>O<sub>8</sub> was extracted and stockpiled.

In 1989, 30 to 40 rotary holes were drilled to delineate zones of high grade uranium mineralization.

## Geological Setting

The Henry Mountains Complex uranium deposits occur within the Salt Wash Member of the Morrison Formation, located within the Colorado Plateau. The Morrison Formation is a complex fluvial deposit of Late Jurassic age that occupies an area of approximately 600,000 square miles, including parts of 13 western states and small portions of three Canadian provinces, far to the north and east of the boundary of the Colorado Plateau.

The Bullfrog and Tony M deposits consist of two extensive elongate, tabular zones containing a large concentration of mineralization. Together the Southwest deposit of the Bullfrog property and the Tony M deposit extend for a distance of about three miles along a north-south trend and have a maximum width of

about one-half mile. The larger Indian Bench and Copper Bench deposits within the Bullfrog property extend about 3.5 miles along a northwesterly trend.

Mineralization in the Bullfrog property deposits occurs over three stratigraphic zones of the Salt Wash Member of the Morrison Formation, while mineralization at the Tony M property occurs over four zones. The Southwest deposit (like most of the adjacent Tony M property) occurs in the lowermost 35 feet to 40 feet of the Salt Wash Member sandstone. Mineralization forming the Copper Bench and Indian Bench deposits occurs between about 60 feet and 100 feet above the base of the Salt Wash Member.

The depth below the surface to the base of the three deposits ranges from about 475 feet (Southwest deposit) to nearly 1,100 feet in both the Copper Bench and Indian Bench deposits.

### Exploration

Surface drilling using rotary tricone technology, together with radiometric gamma logging, was the primary exploration method used to discover and delineate uranium on the Bullfrog and Tony M properties.

During development of the Tony M mine, Plateau also conducted an intensive mine geology program to collect detailed information on the occurrence of uranium, including its thickness, grade, and lateral extent. This was done through geological mapping, together with face and rib scanning, as well as gamma probing of short up and down holes extending to about eight feet. Probing was also done using long-hole drilling to test target zones up to about 150 feet from mine openings. The results of this program are recorded on a systematic set of cross sections through the Tony M mine developed at a scale of 10 feet to the inch. Scott Wilson RPA did not have access to the detailed information collected underground in the Tony M mine.

Denison carried out no work on the Bullfrog and Tony M properties, with the exception of a review of available data and critical evaluation, until the end of 2005 when certain activities including underground reconnaissance and permitting were initiated. See “Operations – Henry Mountains Complex.”

### Mineralization

The uranium/vanadium mineralization in the Henry Mountains Complex is similar to ores observed elsewhere in the Colorado Plateau. It occurs as intragranular disseminations within the fluvial sand facies of the Salt Wash Member. It also forms coatings on sand grains and organic associated masses. Coffinite is the dominant primary uranium mineral in the mineralized horizons, with uraninite occurring in only trace amounts.

Vanadium occurs as montroseite (hydrous vanadium oxide) and vanadium chlorite in primary mineralized zones located below the water table, (i.e., the northern portion of the Tony M Property). Above the water table to the south, vanadium chlorite is absent, while montroseite and a suite of secondary uranium/vanadium minerals are present.

### Drilling

#### *Bullfrog Property*

Most of the drilling done on the Southwest, Copper Bench, and Indian Bench deposits on the Bullfrog property was conducted by rotary drilling using a tricone bit. Additional drilling was done to collect core samples.

The Indian Bench deposit is delineated by drilling on approximately 200 foot centres, while the Southwest and Copper Bench deposits were drilled on 100 foot centres. In some areas, the rugged terrain

made access difficult, resulting in an irregular drill pattern. A total of 2,232 drill holes were completed on the Bullfrog property.

The mineralization is approximately horizontal on the Bullfrog property, so vertical holes provide a reliable estimate of the thickness of the deposits.

#### *Tony M Property*

In February 1977, drilling commenced in what was to become the Tony M deposit. Plateau Resources Inc. drilled more than 2,000 rotary drill holes totalling about 1.0 million feet. The holes were drilled using rotary tricone technology. The rugged terrain over much of the Tony M property made drilling access difficult, resulting in an irregular drill pattern. The drilling includes 24 core holes. The core holes provided samples of the mineralized zone for chemical and amenability testing and to determine geologic and engineering properties of the mineralized zone.

### Sampling and Analysis

#### *Bullfrog Property*

Downhole gamma logging of surface holes was done on the Bullfrog property. Standard logging suites included radiometric gamma, resistivity and self potential measurements, supplemented by neutron-neutron surveys for dry holes. Deviation surveys were conducted for most of the holes.

Assays of samples from core drilling were collected by company geologists and submitted to various commercial labs for analysis. Results of these analyses were compared to  $eU_3O_8$  values from gamma logs to evaluate radiometric equilibrium, logging tool performance, and validity of gamma logging.

Metallurgical testing included leach amenability studies, settling, and filtration tests.

Resource estimates for the Bullfrog property are based on the  $eU_3O_8$  gamma log conversion values used to identify the mineralized zone, its thickness and calculate an average grade. The procedures implemented to identify the minimum grade and cut-off GT product for resource estimation are described below under the heading "Cut-Off Grade and Mining Considerations."

#### *Tony M Property*

The same suite of logging surveys and procedures as employed at the Bullfrog property were conducted for Tony M. Assays of samples from core drilling were collected and submitted for analysis. Confirmation assays of chemical  $U_3O_8$  were completed on drill core samples for comparison and calibration with  $eU_3O_8$  values from gamma logging.

### Status of Chemical Equilibrium of Uranium

#### *Bullfrog Property*

Exxon conducted analyses of samples from core drilling in the Southwest and Copper Bench deposits and found that the radioactive disequilibrium of potentially economic grade intercepts in cores, measured as the ratio of chemical  $U_3O_8$  to log radiometric equivalent ( $eU_3O_8$ ), varied from 0.80 to 1.35 and averaged 1.06, close to the equilibrium value of 1.0. Other investigations had identified no significant disequilibrium problem.

#### *Tony M Property*

Plateau conducted an extensive investigation of the state of chemical disequilibrium of uranium in the Tony M deposit. In 1989, NAC reported that an analysis of results from 1,763 samples, including 1,137 composite samples collected from buggies coming from the Tony M mine, was completed in 1983. Based

on that analysis, it was concluded: (i) the state of disequilibrium varies from location to location within the deposit; (ii) with the exception of one small area in the southern part of the deposit, the equilibrium factor is positive; (iii) low grade material with less than 0.06%  $U_3O_8$  is depleted in uranium; and (iv) higher grade material containing more than 0.06%  $U_3O_8$  is enriched in uranium.

Scott Wilson RPA is of the opinion that based on the information available, the original gamma log data and subsequent conversion to e $U_3O_8$ % values are reliable but slightly conservative estimates of the uranium  $U_3O_8$ % grade. Furthermore, there is no evidence that radiometric disequilibrium would be expected to negatively affect the uranium resource estimates of the Henry Mountains Complex.

#### Data Verification

Based on its review of the grade and thickness of uranium mineralization determined in the original gamma logs and a comparison with the computer generated GT composites, Scott Wilson RPA is of the opinion that the original gamma log data and subsequent conversion to e $U_3O_8$  values are reliable. Furthermore, Scott Wilson RPA reviewed the chemical analyses of core from diamond drill holes from the Bullfrog property and is of the opinion that the gamma logging results for the Bullfrog property provide a reliable, but conservative, estimate of the uranium content. The review suggests that the resource estimate may underestimate the uranium content of the Bullfrog property by up to about 5%.

#### Security of Samples

Procedures followed during exploration were well documented and at the time followed best practices and standards of companies participating in uranium exploration and development. Onsite collection of the downhole gamma data and onsite data conversion limit the possibility of sample contamination or tampering.

#### Mineral Resource Estimation

In the Henry Mountains Technical Report, Scott Wilson RPA audited the 1993 EFN mineral resource estimate of the Copper Bench and Indian Bench deposits on the Bullfrog property and the Southwest deposit on the Tony M property, accepted them as a current resource estimate and classified them as indicated and inferred mineral resources in accordance with CIM definitions.

The basis for this resource estimation is the gamma logs from 1,801 rotary drill holes located on the Southwest, Copper Bench and Indian Bench deposits. This represents about 80% of the 2,232 total holes drilled on these deposits. A total of 81 core holes were drilled to recover samples for chemical and geologic analysis and to establish stratigraphic relationships. All of the drilling and analyses were conducted by past owners (i.e., prior to Denison's tenure). See "Drilling" above for further detail.

The grades of the mineralized zones were calculated on a polygonal block-by-block basis. The pounds of e $U_3O_8$  for each polygon were then tabulated along with the area and calculated volume for each block. The total number of tons and pounds of e $U_3O_8$  contained in the blocks were summed to provide a total inventory for each of the three deposits. Average grades for each deposit were estimated from the grades of the drill hole intersections used in the resource estimate weighted by tonnage.

In the preparation of the Henry Mountains Tony M - Southwest Technical Report, Scott Wilson RPA audited the mineral resource estimates of the Tony M and Southwest deposits prepared by Denison using the contour method in 2008 and accepted them as a current resource estimate, and has classified them as indicated and inferred mineral resources in accordance with CIM definitions. This new estimate provides an update of the Southwest deposit which was previously included in the Henry Mountains Technical Report.

The results of 1,671 drill holes were used to prepare the resource estimates for the Tony M and the Southwest deposits. A total of 32 core holes were drilled to recover samples for chemical and geologic analysis and to establish stratigraphic relationship.

The following table lists the mineral resources by deposit for the entire Henry Mountains Complex:

**Henry Mountains Complex Mineral Resource Estimate<sup>(1) (2) (3)</sup>**  
**100% Basis and Company Share**

Deposit	Category	Million Tons	Grade eU <sub>3</sub> O <sub>8</sub> (%)	Contained eU <sub>3</sub> O <sub>8</sub> (million pounds)
Tony M	Indicated Resource	1.03	0.24	4.83
Tony M	Inferred Resource	0.65	0.17	2.17
Southwest	Indicated Resource	0.66	0.25	3.30
Southwest	Inferred Resource	0.21	0.14	0.68
Indian Bench	Indicated Resource	0.22	0.40	1.74
Indian Bench	Inferred Resource	0.25	0.42	2.09
Copper Bench	Indicated Resource	0.50	0.29	2.93
Copper Bench	Inferred Resource	0.50	0.32	3.24

**Notes:**

- (1) The mineral resource estimates comply with the requirements of NI 43-101 and the classifications comply with CIM definition standards.
- (2) The Tony M and Southwest mineral resources were estimated at a cut-off grade of 0.10% eU<sub>3</sub>O<sub>8</sub> over a minimum thickness of 2 feet and a minimum GT of 0.2 feet-%.
- (3) The Indian Bench and Copper Bench mineral resources were estimated at a cut-off grade of 0.20% eU<sub>3</sub>O<sub>8</sub>, a minimum thickness of 4 feet and a minimum GT of 0.8 feet-% that does not include any intervals with less than a 0.5 foot intercept of 0.08% U<sub>3</sub>O<sub>8</sub>.

**Cut-Off Grade and Mining Considerations**

The selection of a 0.20% eU<sub>3</sub>O<sub>8</sub> cut-off for the Copper Bench and Indian Bench was made by Scott Wilson RPA based on evaluations of current mining and processing costs made by both Denison and other operators in the region. Preliminary estimates for mining and processing costs are in the order of \$150/ton.

The 0.20% eU<sub>3</sub>O<sub>8</sub> cut-off maximizes the tonnage of higher grade mineralization while maintaining strong positive value. Based on the extensive review of the drilling, Scott Wilson RPA notes that lowering the cut-off criteria will increase total tonnage by increasing the number of drill hole intercepts meeting the cut-off, while also increasing the apparent continuity of mineralization between adjacent drill holes.

For the Tony M and Southwest deposits, Denison established minimum grade, thickness and GT parameters based on conventional Colorado Plateau mining practices and recent operating costs at the Tony M Mine.

As an initial step for compositing of the drill hole assays, minimum grades of 0.10%, 0.08%, 0.05% and 0.03% eU<sub>3</sub>O<sub>8</sub> were used over a minimum thickness of two feet, with a two foot minimum for exclusion of waste intervals. This resulted in minimum GT values of 0.20 feet-%, 0.16 feet-%, 0.10 feet-% and 0.06 feet-%, respectively. The two-foot thicknesses are based on the mining technique of split shooting, which is commonly used in the Uravan district. For inclusion of blocks in the mineral resource estimate, Denison used a cut-off grade of 0.10% eU<sub>3</sub>O<sub>8</sub>.

## **Arizona Strip**

Denison has a 100% interest in four significant breccia pipe uranium deposits in the Arizona Strip district of northern Arizona, being: Arizona 1, Canyon, Pinenut, and Kanab North.

On March 26, 2007, Denison filed, on the SEDAR website at [www.sedar.com](http://www.sedar.com), an independent technical report entitled "Technical Report on the Arizona Strip Uranium Project" prepared by Scott Wilson RPA in accordance with the requirements of NI 43-101 with respect to the Company's Arizona Strip properties (the "Arizona Strip Report").

Arizona 1 has been substantially developed for underground mining; all surface facilities for shaft sinking are in place at Canyon, and Pinenut is a fully developed underground mine currently on standby. Kanab North, mined previously, is reported to have only minor quantities of mineralized material remaining in place and is not included in the Scott Wilson RPA mineral resource estimate.

### Property Description and Location

Prior to its bankruptcy in 1995, EFN located and developed to various stages, numerous uranium mineralized breccia pipe structures in north western Arizona, between Utah and the Grand Canyon, an area termed the "Arizona Strip." Most of Denison's breccia pipes are between the town of Fredonia, on the Arizona Utah state line, and Grand Canyon National Park. These include the Pinenut, and Arizona 1 pipes. One deposit, Canyon, is located south of the park. The properties are approximately 320 miles from the White Mesa mill.

Arizona 1 is located in Mojave County, Arizona, about 45 miles south west from Fredonia, Arizona by unsurfaced road. Denison's property position consists of 10 unpatented mining claims covering approximately 207 acres.

Pinenut consists of 10 unpatented mining claims encompassing 207 acres. It is located 45 miles south of Fredonia in Mojave County, Arizona and is accessible via an unsurfaced road.

The Canyon project is in north central Arizona, 153 miles north of Phoenix and 10 miles south of Grand Canyon Village in the Kaibab National Forest, Coconino County. The Canyon site consists of nine unpatented mining claims encompassing approximately 186 acres. There is a 3.5% yellowcake royalty on the Canyon property.

### Accessibility, Local Resources, Physiography and Infrastructure

Climate in northern Arizona is semi-arid, with cold winters and hot summers. January temperatures range from about 7° F to 57° F and July temperatures range from 52° F to 97° F. Annual precipitation, mostly in the form of rain but some snow, is about 12 inches. Vegetation on the plateaus is primarily open pinon juniper woodland and shrubs.

The region north of the Grand Canyon is very sparsely populated. Due to the inaccessibility and low population, infrastructure is not well developed. The nearest commercial centres to the Fredonia area are the towns of St. George and Cedar City, Utah, both approximately 88 miles to the northwest by road. The White Mesa mill is approximately 275 miles by road from Fredonia and about 325 miles by road from the Canyon site.

Arizona 1 is a substantially developed mine with the production shaft completed for 1,250 feet of the proposed final 1,650 feet depth. Drill stations were cut near the current shaft bottom and some 40,000 feet of drilling were completed from those stations. A headframe, hoist and compressor are in place.

Pinenut is a fully developed underground mine that produced about 0.5 million pounds  $U_3O_8$  in 1989 and is now on standby. A hoist, headframe and compressor are in place.

Only surface development has been completed at the Canyon site with a headframe, hoist and compressor in place. The shaft has been collared to a depth of 50 feet.

### History

Uranium exploration and mining of breccia pipe uranium deposits started in 1951 when a geologist employed by the U.S. Geological Survey noted uranium ore on the dump of an old copper prospect on the South Rim of the Grand Canyon of Northern Arizona. The prospect was inside the Grand Canyon National Park, but on fee land that predates the park. A mining firm acquired the prospect and then mined a significant high grade uranium deposit, the Orphan Mine. By the time mining ended in the early 1960s, 4.26 million pounds of  $U_3O_8$  and some minor amounts of copper and silver had been produced.

After the discovery of the first deposit in the 1950s, an extensive search for other deposits was made by the government and industry, but only a few low grade prospects were found. Exploration started again in the early 1970s. In the mid 1970s, Western Nuclear acquired the Hack Canyon prospect located about 25 miles north of the Grand Canyon and found high grade uranium mineralization offsetting an old shallow copper/uranium site. In the next few years, a second deposit was found a mile away along a fault.

EFN leased the Hack Canyon property from Western Nuclear in December 1980 as a likely low cost source of  $U_3O_8$ . Development started promptly, and the deposits were in production by the end of 1981.

The Kanab North deposit was discovered in 1981, but development did not begin until late 1984. Kanab North was fully developed in 1988 and operated until December 1990 when it was placed on standby. Production totalled about 2.8 million pounds  $U_3O_8$  at an average grade of just over 0.50%  $U_3O_8$ . Some minor quantity of mineralized material remains.

EFN explored the Arizona 1 pipe with a total of 253 drill holes, including: 18 core holes from underground drill stations with a total footage of 6,122 feet; 17 rotary holes from surface with a total footage of 25,289 feet, and 218 long holes from underground drill stations with a total footage of 36,189 feet. Mine development of the Arizona 1 ore body began in 1990 but was suspended in 1992, with the shaft at a depth of 1,254 feet.

The Canyon deposit is located on mining claims that EFN acquired in 1982. Drilling completed by EFN in 1983 identified a major deposit. EFN drilled a further 36 holes from May 1983 through April 1985 to delineate the uranium mineralization and to determine placement of the mine shaft and water supply well. Additional drilling of six holes was completed in 1994. Development of the site was discontinued as a result of low uranium prices.

The Pinenut mine was developed in 1989, but saw only minor production, approximately 0.5 million pounds  $U_3O_8$  at an average grade of 1.02%  $U_3O_8$ , and was then placed on standby.

EFN identified and investigated more than 4,000 circular features in northern Arizona. Some 110 of the most prospective features were explored by deep drilling, and approximately 50% of those drilled were shown to contain uranium mineralization. Ultimately, nine pipes were deemed worthy of development. Total mine production from the EFN breccia pipes from 1980 through 1991 was approximately 19.1 million pounds  $U_3O_8$  at an average grade of just over 0.60%  $U_3O_8$ .

Most of the EFN assets were acquired by the Company in 1997. Since that time, Denison has maintained its ownership of the Kanab North, Pinenut, Arizona 1, and Canyon pipes. All other EFN breccia pipe

prospects have been dropped, although Denison recently acquired four additional breccia pipe deposits and one sandstone type deposit from Pathfinder. See “Arizona Strip – Acquisition” below.

### Geological Setting

Parts of two distinct physiographic provinces are found within Arizona: the Basin and Range province in the southern and western edge of the state, and the Colorado Plateau province in most of northern and central Arizona. The Arizona Strip lies within the Colorado Plateau province.

Surface exposures within the Arizona Strip reveal sedimentary and volcanic rocks ranging in age from upper Paleozoic to Quaternary; the area is largely underlain by Mississippian through Triassic sedimentary rocks. However, exposed within the Grand Canyon are older rocks reaching Precambrian in age.

Arizona 1, in common with all other breccia pipes within the Arizona Strip, was believed by EFN to have had its origin as a solution collapse of the Redwall Limestone. This collapse worked its way upward through the overlying formations to the surface where the throat diameter is on the order of 200 feet to 300 feet. Vertical displacement in the throat averages some 175 feet. Uranium mineralization is distributed irregularly over a depth interval of approximately 650 feet mainly at the level of the Hermit Shale formation to a maximum depth of some 1,400 feet from surface.

At Canyon, the surface expression of the pipe is a broad shallow depression in the Permian Kaibab Formation. The pipe is essentially vertical with an average diameter of less than 200 feet, but it is considerably narrower through the Coconino and Hermit horizons (80 feet). The cross sectional area is probably between 20,000 square feet and 25,000 square feet. The pipe extends for at least 2,300 feet from the Toroweap limestone to the upper Redwall horizons. The ultimate depth of the pipe is unknown.

Mineralization extends vertically both inside and outside the Canyon pipe over some 1,700 vertical feet, but ore grade mineralization has been found mainly in the Coconino, Hermit, and Esplanade horizons and at the margins of the pipe in fracture zones. Sulphide zones are found scattered throughout the pipe but are especially concentrated (sulphide cap) near the Toroweap Coconino contact, where the cap averages 20 feet thick and consists of pyrite and bravoite, an iron-nickel sulphide. The ore assemblage consists of uranium-pyrite-hematite with massive copper sulphide mineralization common in and near the ore zone. The strongest mineralization appears to occur in the lower Hermit-upper Esplanade horizons in an annular fracture zone.

### Deposit Types

Paleozoic sedimentary rocks of northern Arizona are host to thousands of breccia pipes. The pipes are known to extend from the Mississippian Redwall Limestone to the Triassic Chinle Formation, which makes some 4,000 feet of section. However, because of erosion and other factors, no single pipe has been observed cutting through the entire section. No pipe is known to occur above the Chinle Formation or below the Redwall Limestone.

Breccia pipes within the Arizona Strip are vertical or near vertical, circular to elliptical bodies of broken rock. Broken rock is comprised of slabs and rotated angular blocks and fragments of surrounding and stratigraphically higher formations. Hence, many geologists consider the pipes to have been formed by solution collapse of underlying calcareous rocks, such as the Redwall Limestone. Surrounding the blocks and slabs making up the breccia is a matrix of fine material comprised of surrounding and overlying rock from various formations. The matrix has been cemented by silicification and calcification for the most part.

Breccia pipes are comprised of three interrelated features: a basinal or structurally shallow depression at surface (designated by some as a collapse cone); a breccia pipe which underlies the structural depression; and annular fracture rings which occur outside of, but at the margin of the pipes. Annular fracture rings are commonly, but not always, mineralized. The structural depression may range in diameter up to 0.5 miles or more, whereas breccia pipe diameters range up to about 600 feet; the normal range is 200 feet to 300 feet.

Mineralized breccia pipes found to date appear to occur in clusters or trends. Spacing between pipes ranges from some hundreds of feet within a cluster to several miles within a trend. Pipe location may have been controlled by deep seated faults, but karstification of the Redwall Limestone in Mississippian and Permian times is considered to have initiated formation of the numerous and widespread pipes in the region.

### Exploration

Denison has not carried out any exploration on the properties since the acquisition in 1997.

### Mineralization

In the breccia pipe deposits, uranium occurs largely as blebs, streaks, small veins, and fine disseminations of uraninite/pitchblende ( $UO_2$ ). Mineralization is mainly confined to matrix material, but may extend into clasts and larger breccia fragments, particularly where these fragments are of Coconino sandstone. In addition to uranium, an extensive suite of elements is reported to be anomalously concentrated in mineralized rock within breccia pipes throughout northern Arizona. Within many pipes, there is a definite mineralogical zoning in and around the uranium ore body.

Pipes are surrounded by bleached zones, particularly notable in the Hermit Formation where unaltered red sediments contrast sharply with grey-green bleached material. Both age dating and disequilibrium determinations indicate that remobilization of uranium has occurred. Uranium concentrations in the upper levels of a pipe tend to be in equilibrium, but with depth disequilibrium in the ore bodies increases in favour of the chemical assays.

Uranium mineralization within Arizona 1 extends significantly in the vertical dimension. Continuous drill hole intersections of several tens of feet with grades exceeding 1.00%  $U_3O_8$  or more are not uncommon. The maximum continuous surface drill hole intersection was 92.5 feet at an average grade of 1.55%  $U_3O_8$ . On average, the 12 drill holes from surface which had intersected uranium mineralization recorded 75 feet of 0.62%  $U_3O_8$ .

Uranium mineralization at Canyon is concentrated in three stratigraphic levels: Coconino, Hermit/Esplanade, and a lower zone. Mineralization extends vertically from a depth of 600 feet to over 2,100 feet. Intercepts range widely up to several tens of feet with grades in excess of 1.00%  $U_3O_8$ . Twenty-two drill holes from surface encountered uranium mineralization averaging 100 feet of 0.45%  $U_3O_8$ .

### Drilling

Shallow drilling was often conducted to locate the centre of the collapse feature as a guide to the throat of the underlying breccia pipe. The basic tool for exploring breccia pipes in northern Arizona is deep rotary drilling supplemented by core drilling, to a depth of 2,000 feet or more from surface. Prospective pipes were usually first tested with three drill holes. If no showing of mineralization was present, the effort was abandoned.

Exploration drilling of breccia pipes is a difficult process. Substantial depths, approximately 2,000 feet, small targets, approximately 200 feet in diameter, and non-homogeneous rock formations combine to

limit the accuracy of the drilling process. The presence of cavernous and brecciated sediments near the present land surface can result in loss of circulation of drilling fluid; as a result, much drilling is conducted “blind.” Periodic “spot cores” are taken to determine whether or not holes are within the target structure or have drifted away from the pipe. Indeed, most pipes cannot be completely drilled out from the surface due to deviation from desired targets. All drill holes are surveyed for deviation and logged with gamma logging equipment.

If surface drilling provides sufficient encouragement that a mine can be developed, on that basis a vertical shaft is sunk or drilled to its ultimate depth and underground drill stations are established at various levels to provide platforms for further exploration and delineation drilling. Drilling from underground stations typically utilized large bore percussion drills. The resulting drill holes, out to as much as approximately 200 feet or so, were then gamma logged and surveyed as a supplement to surface drilling.

#### Sampling Method and Approach

All the historical drill holes on Denison’s Arizona Strip breccia pipe properties were gamma logged and surveyed for deviation. These data provide the basic building blocks from which quantities of mineralized material are estimated. Core holes were drilled to supplement this data, to provide information for determination of disequilibrium, and to accommodate material for metallurgical testing. This process was consistent with industry standards at the time and the work carried out by EFN is judged by Scott Wilson RPA to have been of superior quality.

All of the basic data for calculation of quantities and grades of mineralized material for the Arizona 1, Pinenut, and Canyon deposits was derived directly by gamma log interpretation. Numerous checks were completed on this data by means of chemical assays, closed-can assays, and various beta gamma analyses.

#### Sample Preparation, Analyses and Protocols

Industry standards for uranium exploration in the western United States are based almost completely on the gamma logging process with a number of checks, including: (i) frequent calibration of logging tools, (ii) core drilling and chemical analysis of core as a check on gamma log values and the potential for disequilibrium; (iii) possible closed-can analysis as an adjunct to chemical assays; and (iv) possible gamma logging by different tools and/or companies.

EFN used the GAMLOG computer program to interpret gamma-ray logs. The GAMLOG program was developed by the U.S. Atomic Energy Commission. The essence of the method is a trial and error iterative process by which  $U_3O_8$  grades are determined for a series of 1/2-foot or 1-foot layers which can be considered to comprise the zone under analysis. The objective of the iterative process is to find a grade for each separate layer such that an imaginary set of separate gamma-ray anomalies (one from each separate layer) could be composited to form an over all anomaly which would closely match the real anomaly under analysis.

#### Security of Samples

There are no specific provisions for security of data or samples other than those employed for confidentiality. The previous property owner, EFN, is deemed to have met or exceeded industry standards for the exploration process.

#### Data Verification

Data verification in uranium exploration in the western United States takes the form of a combination of logging tool calibration, chemical assays on core, and various checks by other logging units and outside laboratories. Most of this verification process is internal and company specific. Independent verification has not been part of the industry standard process. EFN operations in the Arizona Strip are judged by Scott Wilson RPA to have met or exceeded industry standards.

### Mineral Resource and Mineral Reserve Estimates

Mineral resource estimates were prepared for the Arizona 1, Canyon, and Pinenut deposits using historical drill hole data provided by Denison. Scott Wilson RPA interpreted a set of cross sections and plan views to construct 3-D grade-shell wireframe models at 0.2% eU<sub>3</sub>O<sub>8</sub>. Variogram parameters were interpreted and eU<sub>3</sub>O<sub>8</sub> grades were estimated in the block model using kriging. The grade-shell wireframes were used to constrain the grade interpolation. All blocks within the 0.2% eU<sub>3</sub>O<sub>8</sub> grade-shell wireframes, regardless of grade, were included in the mineral resource estimate. There are no mineral reserves estimated at any of the three deposits at this time. Scott Wilson RPA estimates the inferred mineral resources as shown below:

#### **Arizona Strip Inferred Mineral Resource Estimates <sup>(1)</sup> 100% Basis and Company Share**

	<b>Tons</b>	<b>Grade eU<sub>3</sub>O<sub>8</sub> <sup>(2)</sup> (%)</b>	<b>Contained eU<sub>3</sub>O<sub>8</sub> (pounds)</b>
Arizona 1	70,300	0.68	956,000
Canyon	70,500	1.08	1,523,000
Pinenut	99,200	0.44	873,000

#### **Notes:**

- (1) The mineral resource estimates comply with the requirements of NI 43-101 and the classifications comply with CIM definition standards.
- (2) Interval grades were converted from the gamma log data and are therefore equivalent U<sub>3</sub>O<sub>8</sub> (eU<sub>3</sub>O<sub>8</sub>).
- (3) High eU<sub>3</sub>O<sub>8</sub> grades were cut to 6% at Arizona 1, 10% at Canyon, and 8% at Pinenut.

### Cut-off Grade

In its feasibility studies of the various Arizona Strip breccia pipes compiled during the 1980s and 1990s, EFN typically used a cut-off grade of 0.15% U<sub>3</sub>O<sub>8</sub>. A reasonable cut-off grade for long term sustainable market conditions would be approximately 0.20% U<sub>3</sub>O<sub>8</sub>. This cut-off grade was applied by Scott Wilson RPA to all the breccia pipe deposits.

### Acquisition

In 2007, Denison acquired five uranium deposits located in the Arizona Strip district in north eastern Arizona from Pathfinder. In aggregate, the historical resource estimates at these deposits are 1.3 million tons at an average grade of 0.28% U<sub>3</sub>O<sub>8</sub>, containing an estimated 7.1 million pounds of U<sub>3</sub>O<sub>8</sub>.

Four of the mineral deposits (EZ 1, EZ 2, WHAT and DB 1) are breccia pipe type deposits. The fifth deposit, Moonshine Springs, is sandstone hosted with uranium mineralization in reduced zones along oxidation-reduction fronts occurring at surface and gradually becoming deeper towards the north.

Historical resource estimates of the deposits, as presented by Pathfinder to Denison and estimated in 1996, are shown below. No cut-off grades have been reported for the breccia pipe deposits, while a 0.05% U<sub>3</sub>O<sub>8</sub> cut-off has been used for Moonshine Springs.

The uranium produced from these deposits is subject to royalties that aggregate less than 2%.

The Company has initiated the permitting to develop the EZ1 and EZ2 deposits.

### Pathfinder Historical Resource Estimates<sup>(1)</sup>

Deposit	Tons	% U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (millions)
EZ1	106,250	0.66%	1.4
EZ2	216,480	0.44%	1.9
DB1	103,550	0.44%	0.9
WHAT	89,800	0.25%	0.4
Moonshine Springs	775,000	0.16%	2.5

**Notes:**

- (1) The mineral resource estimate does not comply with the requirements of NI 43-101. CIM definitions are not used.
- (2) The historic resource estimates cannot be verified and the estimates are not necessarily indicative of the mineralization on the property.

The Pathfinder resource estimates are based on data, reports and documentation obtained from and prepared by previous operators, including AREVA. Denison is not treating the historical mineral resource estimate as NI 43-101 defined resources verified by a qualified person. The properties will require considerable further evaluation which Denison’s management and consultants intend to carry out in due course.

#### Colorado Plateau

The Company mined uranium and vanadium bearing ore from its Sunday and Rim mines in the Colorado Plateau District from November 1997 to mid-1999 and since 2007 mined the Topaz, Pandora, Sunday/St. Jude and West Sunday mines. To date, the Company has not completed the necessary studies to classify the existing mineralized material as reserves or resources in accordance with NI 43-101; hence, these properties should be classified as “mineral deposits.” The quantity and grade must be treated as conceptual in nature as the quantity of work has been insufficient to define a mineral resource, and it is uncertain if further exploration work will result in conversion of these estimates to a mineral resource. The current estimate of the deposit’s tons and grade are shown in the following table. The estimates are based on historical estimates prepared by EFN.

#### Colorado Plateau Mineral Deposit Estimates 100% Basis and Company Share

	Mineral Tons (millions)	% U <sub>3</sub> O <sub>8</sub>	Pounds U <sub>3</sub> O <sub>8</sub> (millions)	% V <sub>2</sub> O <sub>5</sub>	Pounds of V <sub>2</sub> O <sub>5</sub> (millions)
Colorado Plateau	1.335	0.21	5.6	1.23	32.9

The most recent estimation of resources was conducted in November 1996. Several estimation methods, including the long-established “uravan” method of estimation, were compared. This particular method applies a reduction factor of 0.6 to the tonnage to account for the highly erratic nature of the mineralization in the Uravan belt.

As part of this estimation process, the resources were re-estimated at part of the West Sunday complex (West Sunday, Le May, and Leonard-Clark) as a comparison with the EFN uravan estimates. A total of 275 drill holes from original data sources were input into the BORSURV program for estimating resources using polygonal, triangular, and inverse distance squared methods. It was found that the polygonal estimation method was the most robust. A 0.5 foot dilution factor above and below the mineralized horizon was applied. The EFN estimate of 262,000 tons of material at a grade of 0.24% U<sub>3</sub>O<sub>8</sub> for a total of 1.261 million pounds U<sub>3</sub>O<sub>8</sub> compared favourably with the polygonal estimation of 268,140 tons of material grading 0.25% U<sub>3</sub>O<sub>8</sub> and totalling 1.354 million pounds U<sub>3</sub>O<sub>8</sub>. Cut-off grades used were 0.10% U<sub>3</sub>O<sub>8</sub> for Le May and West Sunday, and 0.14% U<sub>3</sub>O<sub>8</sub> for Leonard-Clark.

Although the resources at the Topaz deposit was not estimated, it was concluded that the estimates by EFN are slightly conservative but are realistic numbers for any possible future mining operations. Note that the deposits evaluated in 1996 contain 24% of the estimated contained pounds in the table above as the work was primarily driven by verification of estimation methods and was not done on all deposits.

The above work represents Denison's most recent resource estimation at the Colorado Plateau operations. Therefore, the estimates described herein are classified as historical resources under NI 43-101.

### **Gurvan Saihan Joint Venture**

On March 13, 2007, Denison filed on the SEDAR website at [www.sedar.com](http://www.sedar.com) an independent technical report entitled "Technical Report on the Uranium Exploration Properties in Mongolia" prepared by Scott Wilson RPA in accordance with the requirements of NI 43-101 with respect to its uranium properties in Mongolia (the "**Mongolia Technical Report**").

#### Property Description and Location

Denison has a significant mineral land position in Mongolia. Denison has been active in Mongolia for more than 15 years, and initial exploration commenced prior to the promulgation of the law on mineral resources in Mongolia in 1997 ("**Mineral Law of Mongolia**"). Denison's property holdings are divided into three groups: (i) properties obtained prior to the Mineral Law of Mongolia and held within the Gurvan Saihan Joint Venture (or "**GSJV**") with the Government of Mongolia (through the Ministry of Minerals and Energy Resources) and Geologorazvedka, (ii) exploration licences acquired by the GSJV since 1997 that are subject to the Mineral Law of Mongolia, and (iii) certain wholly-owned properties of Denison that are also subject to the Mineral Law of Mongolia. The following details the resources estimated in the Mongolia Technical Report. The other properties which Denison holds are covered in further detail in the section "Mineral Exploration – Mongolia."

The GSJV holds four exploration licences that were obtained under an agreement with the Government of Mongolia (the "**Mineral Agreement**") prior to the introduction of the Mineral Law of Mongolia. The GSJV licences have an area of 685,632 hectares and are located in the South Gobi region of Mongolia. This area is termed desert steppe and supports nomadic herdsmen.

#### Properties Obtained Prior to 1997

The GSJV was formed in 1994 by EFN, the Government of Mongolia (currently represented by the Ministry of Minerals and Energy Resources), and Geologorazvedka. 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 GSJV Founding Agreement:

- The Government of Mongolia entered into the Mineral Agreement, granting the GSJV 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.

- Denison was obligated to provide 100% of venture funding until the predetermined total had been reached (initially it was \$4 million that then changed to \$5.1 million).

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 a period of 15 years, commencing in 1994, and for so long thereafter as the GSJV is conducting exploration, development or production activities on a specific property. Properties on which the GSJV is conducting exploration activities after 15 years must be put into development for the purposes of production within two years after cessation of exploration activities. The agreement will continue in effect after 15 years as to any property in development or production so long as such activities continue.
- 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 GSJV 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.
- The initial funding obligation by Denison was to be fulfilled within four years in accordance with a schedule in the Mineral Agreement. This commitment was met in 1997.
- After the initial funding of the first \$4 million (subsequently changed to \$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, however, the Company has been funding 100% of all expenditures of the GSJV after the initial funding obligation.
- If a participant fails to fund its share of expenditures, such participant will be suspended from participating in the business and management of the GSJV, 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 GSJV an amount equal to 150% of contributions made on behalf of the non-funding participant.
- Specific tax provisions for the GSJV are defined.
- In addition to its 15% equity interest in the GSJV, the Government of Mongolia is entitled to a 4% production royalty.
- Participants cannot assign their interest to another party without the written consent of the other participants.
- The Government of Mongolia acknowledges that its 15% equity interest in the GSJV and its production royalty of 4% are its entire interest and waives any rights it may have had at the time

the Mineral Agreement was entered into or under future law to 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.

The GSJV and the Ministry of Minerals and Energy are currently in the process of extending the terms of the GSJV’s licences in accordance with the Mineral Law of Mongolia and the terms of the Mineral Agreement.

#### Accessibility, Climate, Local Resources, Infrastructure and Physiography

Mongolia is a large, landlocked country with an area of about 1,566,000 square kilometres. 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. Much of the country is open and 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.

In the areas where Denison is working, there is essentially no infrastructure currently available to support mine development.

#### History

During 1988 and 1989, regional scale exploration drilling was commenced by Geologorazvedka in the Choir Depression. 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. The early exploration clearly established the favourability of the sedimentary basins of the Gobi region as hosts for uranium deposits.

Following approval of the formation of the GSJV in January 1994, work began immediately on a field program in the summer of 1994. The focus of the GSJV exploration was for deposits amenable to in-situ recovery (“**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. A small ISR field test was run in 1994 to determine the ISR favourability of the Haraat type mineralization.

In 1996, the GSJV began a major escalation of exploration work. A total of 30,210 metres were drilled, and 6,000 kilometres of gamma spectrometric surveys were run. This drilling resulted in the 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. Uranium mineralization was encountered in all of the profiles, and in several instances ore grade mineralization was discovered.

Initial reconnaissance drilling in the Hairhan Depression totalled slightly over 1,000 metres in 22 holes, and was conducted near the end of the 1996 field season. The largest ore discovery encountered by the GSJV to that point in time was made at Hairhan. The discovery hole intersected a 14-metre thick ore zone grading 0.144% U.

In May 1997, the Company acquired the assets of EFN including its interest in the GSJV.

No estimates were completed at Haraat for the widespread mineralization that occurs above the natural water table. Historical mineral resource estimates for the mineralization at Haraat that is below the water table were prepared by Geologorazvedka, as General Contractor, in 1997 and 1998. The results of the estimates are set out below:

#### **Haraat Historical Resource Mineral Estimate<sup>(1)</sup>**

Category	100% Basis				Company Share
	Million Tonnes	Grade %U <sup>(2)</sup>	Tonnes U	Pounds of U <sub>3</sub> O <sub>8</sub> (millions)	Pounds U <sub>3</sub> O <sub>8</sub> (millions)
Inferred Resource	10.60	0.023	2,461	6.4	4.5

**Notes:**

- (1) The mineral resource estimate does not comply with the requirements of NI 43-101. In the opinion of Scott Wilson RPA, the classification complies with CIM definition standards.
- (2) The cut-off grade is 0.01% U.
- (3) The historic resource estimates cannot be verified and the estimates are not necessarily indicative of the mineralization on the property.

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 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 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. These tests confirmed that hydraulic control can be maintained and that uranium solubilization and mobilization can be controlled.

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 1997 drilling effort was redirected to focus on Hairhan with the goal to delineate and confirm resources by the end of the 1997 season. In only five months, over 32,000 metres were drilled, resulting in delineation of a significant uranium deposit. At Hairhan, the natural water table is near the surface, so all the mineralization of possible commercial interest is below the water table.

Work in 1998 was once again directed toward the objectives of exploration reconnaissance, resource delineation, and ISR testing, with over 50,000 metres of drilling, and the first stage ISR testing at the Hairhan deposit. The Hairhan Depression received the bulk of the exploration drilling effort in 1998. The mineralization depth ranges from 10 metres to 200 metres, with the average depth in the 60-metre to 80-metre range. The Hairhan 1998 test confirmed the leachability of the mineralization at Hairhan.

With the decline of the uranium price, no drilling was conducted during 1999; however, an extensive regional geologic reconnaissance program was conducted. In 2000, the GSJV Managing Director placed the GSJV program on “standby” status.

During 2004 and 2005, the GSJV resumed work and applied for additional Exploration Licences in six areas. In the Gurvan Saihan depression, previously identified uranium occurrences, as well as additional target areas within the depression, were tested with 159 holes totalling 12,562 meters. Results indicated that uranium mineralization was encountered in a variety of settings, which indicated that additional exploration drilling was warranted.

During 2006, the Company completed over 76,000 metres of drilling on the GSJV properties and 11,600 metres on its 100% owned properties. Based on this drilling, Denison reduced its property position to focus on its higher priority targets. For a description of the 2007 and 2008 programs, see “Mineral Exploration – Mongolia”.

### Geological Setting

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 mélange 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.

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.

### Property Geology

The GSJV licences cover a number of the internal basins, or depressions, located in central Mongolia. All of these depressions appear to have similar geological features. The depression that has received most testing to date is the Choir Depression.

The Choir Depression is a linear depression about 150 kilometres long and from 10 kilometres to 20 kilometres wide. The elevation of the depression varies from about 1,100 metres to 1,140 metres above sea level, while the surrounding upland is from 300 metres to 500 metres 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 metres. 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 metres to 40 metres thick. It is typically composed of variegated sand and gravel with limonite-goethite cementation.

### Drilling

A significant amount of drilling has been completed on the GSJV. The aggregate lengths of the historical drilling and type of drilling completed in the period 1994-1998 are set out below.

#### **Drilling by Property and Year Exploration Drilling (metres)**

<b>Depression/Licence</b>	<b>1994</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>Totals</b>
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>

**Drilling by Location and Type  
Exploration Drilling (metres)**

Depression/Licence	Rotary Non-Core	Rotary Core	Hydrology	ISR Test Wells	Water Wells	Total
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 <sup>(1)</sup>	1,650	710				2,360
Exploration Areas (Ulziit)	497	175				672
Totals	128,356	12,808	3,046	2,141	707	147,058

**Notes:**

(1) The Undurshil project was returned to the Government in 2001 and the Company retains no interest in this area.

Drilling was carried out by Geologorazvedka working as a drilling contractor to the GSJV in the period from 1994 to 1998. In the period from 1994 to 1996, down 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.

A significant amount of drilling has been carried out by Denison during the period from 2005 to 2008. See “Mineral Exploration – Mongolia.”

Sampling Method and Approach

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 metres to 0.9 metres, but the bulk of the samples were either 0.2 metres or 0.3 metres. Samples were transported to the camp near Haraat for sample preparation.

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. Reports translated from Russian indicate that the laboratory maintained internal quality control programs.

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.

Other data verification exercises completed by Scott Wilson RPA included: (i) location of drill hole collars in the field; and (ii) manual checking of the algorithm for converting down hole gamma readings to uranium grades.

### Mineral Resource Estimates

For the mineral resource estimate, Scott Wilson RPA accepted and used the drill hole database compiled by Denison for its 1999 historical estimate. 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.

The raw borehole natural gamma data (counts per second or 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®. For each mineralized zone and for each drill hole, thickness (“TH”) and GT were calculated using the following parameters:

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

The values for the density and disequilibrium factor are based on calculations completed by Geologorazvedka. Density is 1.65 tonnes per cubic metre and the disequilibrium factor is 1.0.

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 plans for each mineralized zone showing the GT and TH values for each drill hole that penetrated the zone, with a minimum GT value of 0.05 metre %. The GT value and the TH values were contoured by hand on separate plans and the contours were digitized into AutoCAD.

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 metres. 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-metres apart. In general, the indicated 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 metres apart.

In 2007, Scott Wilson RPA estimated mineral resources for the Hairhan property as summarized in the table below based on exploration drilling conducted up to 1999. The cut-off is 0.1 metre GT over a minimum of one metre. The average thickness of the indicated resources is 5.2 metres and of the inferred resources is 5.7 metres.

## Hairhan Mineral Resource Estimates

Category	100% Basis				Company Share
	Tonnes (,000)	Grade % U	Tonnes U	Pounds U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
Indicated	4,726	0.064	3,036	7,891	5,524
Inferred	1,848	0.073	1,341	3,484	2,439

**Notes:**

- (1) The mineral resource estimates comply with the requirements of NI 43-101 and the classifications comply with CIM definition standards.
- (2) The cut-off grade is 0.02% U.
- (3) Minimum thickness of 1 metre.
- (4) Density is 1.65 tonnes per cubic metre.

There are no mineral reserves estimated for any of the Denison Mongolia properties at this time. See “Mineral Exploration – Mongolia” for a discussion of recent exploration activities.

### **Mutanga Project**

Denison acquired the Mutanga Project (“**Mutanga**”) in 2007 through the acquisition of OmegaCorp. Mutanga is comprised of the Mutanga and Dibwe deposits plus a number of exploration areas.

#### Property Description and Location

Mutanga is located in a sparsely populated region in southern Zambia, in the Siavonga District of the Southern Province, approximately 200 kilometres south of the nation’s capital, Lusaka.

Mutanga is comprised of a prospecting licence (PL LS 237) encompassing 946.3 square kilometres, which is held by OmegaCorp Minerals Limited, a wholly-owned subsidiary of Denison. The licence authorises the Company to carry out prospecting activities for industrial metals, base metals, precious metals, fuel metals and uranium. The licence was initially granted to Okurusu Florspar (Pty) Limited on October 21, 2004 and formally transferred to OmegaCorp on December 20, 2005. The licence was renewed on October 20, 2006 for two years and then again on October 20, 2008 for an additional two years.

#### Accessibility, Climate, Local Resources, Infrastructure and Physiography

Mutanga is located approximately 200 kilometres south of Lusaka. The main road from Lusaka to Siavonga (the nearest town to the project site) is in fairly good condition. The mine site itself is located east of the main road and is accessed via 39 kilometres of poorly maintained gravel road, for which a four-wheel drive vehicle is required. This road will be upgraded for the project.

The Mutanga site lies to the south of the Zambezi escarpment and is situated in the Zambezi valley at an altitude of 600 metres above sea level. The climate is warm to hot with dry warm winters and hot summers during which the seasonal rainfall occurs. The average annual rainfall is approximately 720 mm and occurs from November to March.

The population is very sparse and limited to small family settlements. No service facilities or accommodation are available in the area.

#### History

Uranium was first identified in the area in 1957 after a ground survey located five anomalous areas in the vicinity of Bungua Hill, west of Siavonga. Further exploration in 1958 and 1959 then found low-grade uranium mineralization that could be followed for over 800 metres of strike extent. Confirmation of this uranium mineralization was further defined in two campaigns after regional airborne magnetic and

radiometric surveys had been flown over the area in 1974. The Geological Survey of Zambia (“GSZ”) conducted a ground investigation (1973 to 1977) and a second campaign was conducted by the Italian oil company AGIP S.p.A. (“AGIP”) between 1974 and 1984.

GSZ and AGIP completed fairly extensive field programs on several areas within the licence. Both GSZ and AGIP carried out ‘resource’ estimations on prospects within the current licence area. The Mutanga and Dibwe deposits were investigated by AGIP during the late 1970s and early 1980s. Considerable exploration was undertaken by AGIP including extensive resource drilling at both Dibwe and Mutanga. AGIP estimated a combined resource for Mutanga and Dibwe containing more than 20 million pounds of U<sub>3</sub>O<sub>8</sub>.

### Geological Setting

The Mutanga uranium deposits are located within the Zambezi Rift Valley which is hilly with large fault-bounded valleys filled with Permian, Triassic and possibly Cretaceous sediments of the Karoo Supergroup. Rocks of the Karoo Supergroup (late carboniferous to Jurassic) occupy the rift trough of the Zambezi Valley. The Lower Karoo Group comprises a basal conglomerate, tillite and sandstone overlain unconformably by conglomerate, coal, sandstone and carbonaceous siltstones and mudstones (the Gwembe Formation), and fine-grained lacustrine sediments of the Madumabasia Formation. The Upper Karoo sediments unconformably overlay the Lower Karoo and comprise a series of arenaceous continental sediments overlain by mudstones capped by basalt.

### Mineralization

The uranium mineralization identified to date appears to be restricted to the Escarpment Grit Formation of the Karoo Supergroup. Within the tenement area, the Karoo sediments are in a northeast trending rift valley. They have a shallow dip and are displaced by a series of normal faults, which, in general, trend parallel to the axis of the valley. The Madumabisa Mudstones form an impermeable unit and are thought to have prevented uranium mineralization from moving further down through stratigraphy.

Mineralization is associated with iron-rich areas (goethite) as well as secondary uranium being distributed within mud flakes and mud balls as well in pore spaces, joints, and other fractures.

It is probable that the uranium was eroded from the surrounding gneissic and plutonic basement rocks during weathering and deposition of the immature grits and sandstones. The uranium was transported together with this material in a presumably arid environment. Uranium was precipitated during reducing conditions in certain favourable units. Later fluctuations in the groundwater table caused remobilization of this material; uranium was again dissolved and then re-deposited in reducing often clay-rich areas with a certain degree of enrichment.

### Drilling

The first drilling of the Mutanga Project subsequent to Denison’s acquisition of OmegaCorp commenced on October 17, 2007 at the Dibwe deposit. The initial focus of the drilling campaign was to collect bulk sample material from the Dibwe prospect for metallurgical testing. This program continued until the onset of the rainy season in the first week of December 2007.

All rigs were relocated to the Mutanga Prospect for the 2007/08 rainy season. The objective of the program was infill drilling to support an NI 43-101 estimate. Drill hole spacing was 50 x 50 metres. After the end of the rainy season in April 2008, the rigs returned to Dibwe (Central) for a 50 x 100 metres infill program. Development drilling was completed July 17, 2008, and the rig fleet transferred to exploration drilling.

<b>Development Drilling Statistics</b>	
Development Drilling (October 17, 2007– December 31, 2007)	<b>4,232m</b>
Development Drilling (January 1, 2008 – July 17, 2008)	<b>41,366m</b>
<b>Total Denison Development Drilling to end of 2008</b>	<b>45,598m</b>

### Sampling and Analysis

Sampling of the drill-holes for U<sub>3</sub>O<sub>8</sub> content has been by the following methods: (i) down-hole radiometric logging; (ii) riffle splitting of reverse circulation (“**RC**”) chips; and (iii) half diamond drill core.

**Diamond Core Sampling:** On the basis of geological logging and scintillometer readings, mineralized intercepts from selected holes were cut with a dry diamond blade to minimize core destruction and loss of uranium mineralization by flushing with water. Half core was sent to Genalysis Analytical Laboratories (“**Genalysis**”) in Johannesburg, Republic of South Africa, for sample preparation. Pulps were sent to Perth, Australia for analysis at Genalysis by pressed powder XRF methods

**RC Drill Hole Sampling:** All percussion chips were collected via a cyclone and split on site at the time of drilling. The cuttings for each metre are put through a riffle splitter to give a notional 1.5kg primary sample; a notional 1.5kg field duplicate and, depending on the hammer size, a residual bulk sample of approximately 15 to 20kg. Approximately 10% of anomalous intercepts (more than twice background level of counts per second (“**cps**”) as determined by a hand held scintillometer) in RC holes were selected for assay. Samples of mass approximately 1.5 kg were sent to Genalysis in Johannesburg for sample preparation. Pulps were sent to Perth, Australia for analysis at Genalysis by pressed powder XRF methods.

Approximately 1.5 kg primary samples representing anomalous intervals of RC holes that collapsed before they could be probed were also sent for pressed powder XRF analysis.

### Security of Samples

RC and diamond drilling campaigns sample were shipped to Genalysis in Johannesburg for preparation. Once prepared, the assay pulps were forwarded by Genalysis to its Perth assay laboratory where the samples were held in secure, quarantined storage.

### Data Verification: Processes for Determining Uranium Content by Gamma Logging

Exploration for uranium deposits in Zambia typically involves identification and testing of sandstones within reduced sedimentary sequences. The primary method of collecting information is through extensive drilling (both RC and diamond drill coring) and the use of down hole geophysical probes. The down hole geophysical probes measure natural gamma radiation, from which an indirect estimate of uranium content can be made.

The radiometric (gamma) probe measures gamma radiation which is emitted during the natural radioactive decay of uranium. The gamma radiation is detected by a sodium iodide crystal, which when struck by a gamma ray emits a pulse of light. This pulse of light is amplified by a photomultiplier tube, which outputs a current pulse. The gamma probe is lowered to the bottom of a drill hole and data is recorded as the tool is withdrawn up the hole. The current pulse is carried up a conductive cable and processed by a logging system computer which stores the raw gamma cps data.

If the gamma radiation emitted by the daughter products of uranium is in balance with the actual uranium content of the measured interval, then uranium grade can be calculated solely from the gamma intensity measurement. Down hole cps data is subjected to a complex set of mathematical equations, taking into

account the specific parameters of the probe used, speed of logging, size of bore hole, drilling fluids and presence or absence of and type of drill hole casing. The result is an indirect measurement of uranium content within the sphere of measurement of the gamma detector.

The basis of the indirect uranium grade calculation (referred to as "eU<sub>3</sub>O<sub>8</sub>" for "equivalent U<sub>3</sub>O<sub>8</sub>") is the sensitivity of the sodium iodide crystal used in each individual probe. Each probe's sensitivity is measured against a known set of standard "test pits," with various known grades of uranium mineralization, located at the DOE's Grand Junction, Colorado office. The ratio of cps to known uranium grade is referred to as the probe "K-Factor," and this value is determined for every gamma probe when it is first manufactured and is also periodically checked throughout the operating life of each probe. In addition, certain boreholes at the Mutanga property are cased and the probes are periodically checked for any instrument drift. Application of the K-Factor, along with other probe correction factors, allows for immediate grade estimation in the field as each drill hole is logged.

#### Core Sampling, Processing and Assaying

Core and RC chip samples are collected for a number of purposes in addition to purely geological reasons: verification of lithology as determined from geophysical logging and examination of drill cuttings if RC; determination of uranium content as a general check of gamma probing to determine if gamma measurement and chemical uranium content are close to balance (this is referred to as "radiometric disequilibrium"); whole rock analysis; and specific geochemistry for uranium species and other minerals of interest. Core diameter is typically 76mm. For zones selected for laboratory analyses, one half of the core will normally be used and the other half retained. The minimum length of core submitted is usually 0.2 metres and the maximum length per sample is 0.4 metres. Sample intervals are selected by geologists in the field based on lithology, oxidation/reduction and uranium grade (from gamma logging and from hand-held gamma counters).

Samples are analyzed at the Genalysis in Perth. Samples are transported in a dedicated truck from Zambia to Johannesburg, where Genalysis operates a dedicated sample preparation facility. The sample is crushed, pulped and homogenized and a sample pulp is air freighted to the lab in Perth, Australia.

This laboratory has been in operation since 1975 and now processes over 1,000,000 samples per year. It is fully certified and accredited by Australian standards. Genalysis is an accredited NATA (National Association of Testing Authorities, Australia) laboratory (Number 3244). Genalysis has been approved by AQIS (Australian Quarantine and Inspection Service) for the receipt and treatment of samples from interstate and overseas. Genalysis is an Associate Member of the Association of Mining and Exploration Companies Inc. and a Member of the Standards Association of Australia.

#### Quality Assurance and Quality Control Measures

Drill hole logging is conducted by trained and dedicated personnel devoted solely to this task. The tools and a complete set of spares, were manufactured by Mount Sopris Instrument Company in Golden, Colorado and were shipped to Zambia in 2007, ahead of the drilling season. Denison has retained the services of a senior geophysical consultant, an expert in down hole geophysical probing for uranium, to oversee training, implementation and quality control protocols with the Zambian logging personnel. All tools were checked and calibrated before being shipped to Zambia and a variety of system checks and standards have also been established for routine checking and calibration of tools. In addition, Denison cased a mineralized hole at one of its centrally located development areas and this cased hole was logged periodically to ensure exact repeatability of the gamma probes.

Drill hole logging data is stored on digital media in the logging truck at the exploration sites. The digital data are periodically brought in from the field locations to the Lusaka office. The raw and converted

logging data are copied and then sent via e-mail to Denison's Saskatoon office, where all data is checked and reviewed.

Samples of drill core are chosen on the basis of radiometric data collected during core logging. This radiometric data is obtained by using a hand-held scintillometer and on the basis of subsequent down hole probing. The general concept behind the scintillometer is similar to the gamma probe except the radiometric pulses are displayed on a scale and the respective count rates are recorded manually by the geologist logging the core. The hand-held scintillometer provides quantitative data only and cannot be used to calculate uranium grades; however, it does allow the geologist to identify uranium mineralization in the core and select intervals for geochemical sampling.

Additional samples are collected above and below the horizons of interest in order to "close-off" sample intervals. Sample widths are selected according to radiometric values and lithologic breaks or changes. All reasonable efforts are made to ensure that splitting of the core is representative and that no significant sampling biases occur. Once the sample intervals are identified, an exclusive sample number is assigned each interval and recorded by the on-site geologist.

After the geological logging of the core and sample selection, all of the selected sample intervals of drill core are split longitudinally at the drill site. One half of the core is placed in a new sample bag along with a sample tag corresponding to the sample number. The other half of the core is re-assembled in the core box and stored for future reference. Samples are transported by dedicated truck transport and delivered to Genalysis for preparation. As standard procedure, field duplicates are included in assay suites sent to the laboratory and reference samples are used to verify laboratory controls and analytical repeatability

#### Mineral Resources Estimates

On March 20, 2009, the Company filed on SEDAR, available at [www.sedar.com](http://www.sedar.com), an independent technical report entitled "NI 43-101 Technical Report Mutanga Uranium Project, Zambia" (the "**Mutanga Report**") prepared by CSA Global in accordance with the requirements of NI 43-101 with respect to the Company's deposits in Mutanga.

In preparing the Mutanga Report, CSA Global carried out the following procedures.  $U_3O_8$  grades were estimated into a block model for each deposit, constructed to honour the interpreted mineralized zones and the surface topography. Blocks within each model were coded by the relevant domains using the domain wireframes and then constrained to the surface topography. Blocks situated above the topographic surface were deleted. Adequate waste was built into the block models to ensure that they were suitable for open pit optimisation and mine planning. To speed up processing time, waste blocks were filtered out of each block model prior to grade interpolation and then re-merged into the block file after grades were assigned to each model.

Ordinary kriging was used to estimate  $U_3O_8$  based on the modelled variogram parameters. Inverse distance squared estimation was completed as a comparison with the kriged estimate.

The grade interpolation strategy for both deposits involved setting up search parameters in a search ellipse for each domain, which was then aligned to the geometry of each domain. A series of grade interpolation "runs" were then completed, at progressively larger search distances until all blocks received an interpolated grade. Constraints were applied to the number of grade values and holes used in the interpolations in order to improve the reliability of the estimates.

Upon completion of grade estimation for both deposits, a series of block model validations were completed to test the robustness of each estimate.

**Mutanga Resource Estimates  
100% Basis and Company Share**

Deposit	U <sub>3</sub> O <sub>8</sub> Lower Cut-off ppm	Measured		
		tonnes (,000)	U <sub>3</sub> O <sub>8</sub> ppm	Pounds U <sub>3</sub> O <sub>8</sub> (,000)
Mutanga	100	1,880	481	1,992

Deposit	U <sub>3</sub> O <sub>8</sub> Lower Cut-off ppm	Indicated			Inferred		
		tonnes (,000)	U <sub>3</sub> O <sub>8</sub> ppm	Pounds U <sub>3</sub> O <sub>8</sub>	tonnes (,000)	U <sub>3</sub> O <sub>8</sub> ppm	Pounds U <sub>3</sub> O <sub>8</sub> (,000)
Mutanga	100	8,400	314	5,817	7,230	206	3,287
Mutanga Ext	200	-	-	-	500	340	400
Mutanga East	200	-	-	-	200	320	100
Mutanga West	200	-	-	-	500	340	400
Dibwe	100	-	-	-	17,040	234	8,967
<b>Total</b>		<b>8,400</b>	<b>314</b>	<b>5,817</b>	<b>25,470</b>	<b>235</b>	<b>13,154</b>

**Notes:**

- (1) The Mutanga mineral resource estimates comply with the requirements of NI 43-101 and the classifications comply with CIM definition standards.

Based on the results of recent mining and processing studies, the updated resource estimates for Mutanga and Dibwe are reported at a 100 ppm U<sub>3</sub>O<sub>8</sub> cut-off. Recent drilling at Mutanga has validated the previous historical drilling data and provided increased confidence in the U<sub>3</sub>O<sub>8</sub> grade, geological interpretation and tonnage factors resulting in a significant portion of Mutanga being classified as Indicated. The remainder of the Mineral Resource has been assigned to the Inferred category, due to the limited understanding of geological continuity, low drilling density and the uncertainty surrounding the historical data.

***Mineral Exploration***

**General**

In the Athabasca Basin, Denison is participating in 33 exploration projects, primarily located in the southeast part of the basin and within trucking distance of the operating mills. During 2008, over 10,000 metres were drilled on Denison-operated projects, and a further 18,498 metres were performed by ARC on properties in the McClean mill area.

Denison is participating in five drill programs in the basin during the 2008-2009 winter season. Only one drill program is operated by Denison, on the Wheeler project, where a significant discovery has been made. ARC will undertake winter drill programs at the Midwest, McClean and Wolly projects and, for the first time in several years, the Waterfound property will be drill tested with 5 holes planned. A major focus of ARC's work will be to look for mineralized strike extensions from a number of deposits along the Midwest trend.

On Denison's operated and non-operated projects, a total of 29,025 metres of drilling is planned for 2009. In addition to these major drill campaigns, Denison is carrying out a number of different geophysical surveys to identify targets for future drill programs. Approximately 1,500 line kilometres of airborne geophysical surveys are being flown over two properties as an initial screening tool. Denison is also

carrying out a large number of ground geophysical surveys on seven properties, where over 250 line kilometres of Fixed Loop or Moving Loop Time Domain EM surveys, 125 line kilometres of Horizontal Loop Electromagnetics and over 100 line kilometres of DC Resistivity surveys are planned for the 2009 season. Over 300 line kilometres of ground magnetic surveys will also be carried out in conjunction with the above.

In Mongolia, the Company was successful two years ago in making a significant discovery on the Hairhan deposit where a deeper zone of relatively thick and permeable sands was discovered underlying the north half of the deposit. In 2008, over 25,000 metres of drilling, part of an overall 72,723 metre program, was completed at Hairhan, and work is currently underway to estimate resources. Drill testing was carried out on five other projects, including the Choir depression's Haraat deposit where various studies are underway to determine the most optimum mining and processing method.

At Mutanga in Zambia, the Company continued a major drilling program, which had been initiated in late 2007 and, during 2008, completed 41,366 metres of both reverse circulation and diamond drilling directed towards development drilling, and 27,341 metres directed towards exploration drilling. Three new areas of significant mineralization were discovered within kilometres of the proposed pit developments. These discoveries will be the target of future development drill programs as the Company works towards further resource estimation.

### **McClellan Lake**

The McClellan project includes the deposits of the Sue Trend, and the JEB, Caribou and McClellan Lake sandstone hosted deposits. The "Sue Trend" represents an arcuate graphitic gneiss which flanks various granitic domes, and one of these domes is associated with virtually all of the mineralization at the property. Depths to basement are relatively shallow, rarely exceeding 175 metres, which is well within the range of open pit mining methods. The Sue Trend is host to five deposits, including Sue A, Sue C, Sue E and Sue B which have been mined. The Sue E deposit is geologically similar to the Sue C deposit, in that it is basement hosted and contains an order of magnitude more pounds than the nearby unconformity hosted deposits (Sue A, B and D).

Work in 2008 tested the Tent-Seal trend, where basement mineralization was discovered during three previous drill campaigns. The Tent-Seal is a relatively long conductor which has not been thoroughly drill tested and exhibits good alteration. While no economic intersections were made this year, the continuity of this mineralization was confirmed, and infill drilling is proposed. Several drill holes will also test untested areas proximal to the McClellan North and South deposits. The corridor between the Caribou and McClellan North/South deposits is also untested and is still presently targeted for drilling.

### **Midwest**

For 2009, drilling will focus on targets within the highly-altered 3 kilometre corridor between the Midwest and Midwest A deposit. In 2008, the Company prepared mineral resource estimates at Midwest A. See "Mineral Properties – Midwest". In addition, there are a number of high potential alteration zones which remain untested at development drilling spacing. A major 9,400 metre drill program is slated for winter 2008/2009.

### **Moore Lake**

The Moore Lake property, owned 75% by Denison and 25% by JNR Resources Inc. ("JNR"), comprises 11 contiguous claims totalling approximately 36,000 hectares. The property is located in the south-eastern portion of the Athabasca Basin in the La Ronge Mining District of Saskatchewan. The Moore Lake property is subject to a 2.5% net smelter return royalty. The target on the Moore Lake property is an Athabasca unconformity type deposit.

The most encouraging discovery to date on the Moore Lake project has been the Maverick zone. While mineralized intercepts have been recovered along nearly 800 metres of strike, and the mineralized system has been traced by wide-spaced drilling for over three kilometres, the controls, distribution and concentration mechanism of the uranium mineralization are not understood. The 2008 program attempted to determine the controls of the Maverick mineralization. A program of 13 holes was drilled in 2008. Twelve of these holes were drilled on the Maverick Zone with the following purposes: (i) to test the deposit for any extensions of the unconformity mineralization into the basement rocks; (ii) to closely define the western edge of the known unconformity mineralized pod; and (iii) to test a perched mineralization target in the upper part of the overlying Athabasca sandstone. The eighth hole was drilled on a structural and weak resistivity target at the north eastern end of the Maverick Mineralized Trend. This was unsuccessful in expanding the Maverick deposit. Future work will focus on identifying repetitions elsewhere on the Moore Lake property. This work will consist of a focused relogging program and drilling. A significant program of resistivity surveying will also attempt to create targets by responding to any sandstone alteration chimneys.

### **Wheeler River**

Denison has earned a 60% interest in the Wheeler River joint venture and is operator. The Wheeler project is favourably located along strike from the McArthur River deposit and is underlain by many of the same geological features as are present on that producing property. A prime target during the past three years of Denison-operated work has been the quartzite ridge, where significant but uneconomic mineralization has been intercepted at a depth of 300 metres on two separate locations along this ridge separated by 600 metres.

2007 was an important year at Wheeler as it both concluded a three-year earn-in, where Denison earned an additional 20% interest to hold a 60% interest in the project, and established the exploration program where Denison will now operate under a five-year plan. A number of areas on the property have not been tested for years, and the proposed drilling, over five years, represents a systematic approach to the testing of these high potential targets.

A 7,000 metre drill program was carried out in 2007 on three areas, with the winter program commencing with a drill test of the M Zone, an unconformity hosted target at a 400 metre depth. Two years ago, a zone of mineralization was intersected 50 metres above the unconformity, and this target, in an area of known unconformity related mineralization, remains a priority target. Further work is also planned in the area of mineralization discovered in the last hole of 2007, on the west side of the quartzite ridge.

Work during 2008 was successful in discovering a new zone of unconformity hosted mineralization associated with the hanging wall of the quartzite ridge. This zone was a direct result of testing DC Resistivity anomalies for sandstone “breaches”, postulated to represent alteration plumes emanating from mineralization at the unconformity. More significantly, the new mineralized zone returned the highest grades so far intersected in more than 40 years of continuous exploration at Wheeler. The zone was tested on two sections, 600 metres apart, and remains open along strike. All drill holes during the summer of 2008 either intersected mineralization, or very strong alteration close to mineralization.

During the winter of 2008/2009, this zone was tested and significant mineralization was discovered in several holes. On February 17 and March 18, 2009, Denison announced the results of the program to date. The following table outlines the assay results from two of the high-grade intercepts.:

Drill Hole	From (m)	Probe Interval (m)	e% U <sub>3</sub> O <sub>8</sub> (at 1% cut- off)	From (m)	Assay Interval (m)	% U <sub>3</sub> O <sub>8</sub>
WR-258	396.0	2.3	18.7	397.5	2.5	24.6%
WR-259	395.6	4.6	12.8	397.0	4.0	19.7%

In addition to the above drill holes, drill hole WR-261 intersected 1.6 metres of 5.6% eU<sub>3</sub>O<sub>8</sub> at 406.4 metres at a 1% eU<sub>3</sub>O<sub>8</sub> cut-off. Drill holes WR-262 through 265 intercepted significant alteration but no mineralization. Drill hole WR-266 intercepted minor mineralization of 2.61% eU<sub>3</sub>O<sub>8</sub> over 0.6 metres from 415.1 metres in the basement rocks. Three more holes will be drilled to complete the winter program.

The mineralization is monomineralic, unconformity and basement hosted, and bears striking similarities to McArthur River style mineralization. The McArthur River model is the target of choice at Wheeler River. Current plans are to test this structure at 50 metre spacings, and then to test all sections by fence drilling.

### **Wolly**

The Wolly uranium exploration project is a large and well located property that essentially surrounds the McClean project and comprises 23,799 hectares (approximately double the size of Wheeler). In October 2004, Denison entered into an agreement to earn up to a 22.5% interest in this project by spending up to Cdn\$5 million over a six-year period. To date, Denison has earned an initial 13% interest, and anticipates earning the remaining 9.5 % interest under the option during 2009.

The property was first explored in the mid 1970s, due to its proximity to the Rabbit Lake discoveries. Because of the relatively shallow depths to unconformity, which do not exceed 200 metres, drill testing is inexpensive, and deposits are well within the realm of open pit extraction methods. Wolly originally included the McClean area until the decision was made to place McClean into production, at which time McClean was separated out. ARC is the operator of the Wolly project. Denison believes that the Wolly property, despite containing a total of over 800 drill holes, is arguably the most geologically prospective in the Athabasca Basin, on the basis of favourable geology, lack of basement exploration, and shallowness of cover.

In 2007, work consisted of a variety of ground geophysical surveying of a number of strongly anomalous conductors and drill testing of targets relatively proximal to the JEB mill. In 2008, drill testing was carried out on a number of high quality geophysical targets, proximal to areas of previous mineralized intersections. Work is expected to continue in 2009 on geophysical preparation and drilling on previously prepared grids. The Wolly project hosts the geological strike extension of the JEB deposit. As a general rule, all Athabasca uranium deposits are podiform, and the JEB is strongly anomalous in its singularity. Denison's management feels that further drill testing is warranted.

### **Park Creek**

Denison signed a letter of intent with Cameco in March 2006 for an option to earn an aggregate 75% interest in Cameco's Park Creek uranium exploration project in two stages by incurring Cdn\$2.8 million in exploration expenditures over a period of three years to earn a 49% interest, with a second option to earn an additional 26% interest by incurring expenditures of Cdn\$3.0 million over two years. Denison is the operator during the earn-in period and has earned the initial 49% interest.

The work completed on Park Creek in 2007 included an AeroTEM survey and a winter and summer drill program for a total of six holes. Four holes were drilled on the Park Creek Property during the winter

drill program which lasted from February 1 to April 1, 2007. The main area of drilling was located on the Esker grid where previous drill programs had outlined an area of anomalous geochemistry associated with an apparent intersection of the northeast-southwest trending Bird Lake Fault with north-south trending Tabernor faults. The most favourable hole was drilled on the Hook grid which targeted a conductor and coincident major fault zone, identified during 2006 drilling and which had low but anomalous radioactivity in a wedge of basal conglomerate below the unconformity.

As part of the ongoing exploration on the Park Creek claims, a winter drill program was completed on the Esker 1995 and 1998 grids from February to April, 2008. Four drill holes on the Esker 1995 grid, PK-75, PK-77, 78 and 79, followed up structural targets and anomalous U concentrations identified in previous exploration programs. A fifth drill hole on the Esker 1998 grid, PK-76, followed up faulting, anomalous U concentrations and illite alteration observed in historic holes in the area. The highest levels of radioactivity intersected were within pegmatite and granitic intervals associated with significant structural disruptions within the hanging wall in most of the holes drilled during the winter 2008 season. The maximum value encountered was 2600 CPS, recorded with a handheld scintillometer at a drill depth of 164 m in PK-75.

### **Bell Lake Joint Venture**

The Bell Lake project is a joint venture with JNR and is located in the Athabasca Basin some 50 to 75 kilometres northwest of the Rabbit Lake mine. Denison holds a 60% interest and is the operator of the prospect. The project consists of nine claims totalling 26,550 hectares and includes all of Denison's Ward Creek claims and JNR's Bell Lake and La Rocque Lake claims. The latter two were under option to Denison. Five diamond drill holes totalling 2,050 meters were completed during the winter of 2008 with no significant results. Four holes were targeted on the east-west trending conductor outlined by Time Domain Electro-Magnetic ("TEM") surveys on the Bell Lake North Grid and one hole on the east-west trending conductor in the Bell Lake South grid. Historic drill holes on the property indicate that the conductive horizons may be attributed to graphite and sulphides in the basement lithologies.

Additional line cutting and ground geophysics are recommended on two of the claims with follow-up drilling to test any targets that may result.

### **Huard-Kirsch**

No exploration activities were conducted on this property in 2008.

### **Murphy Lake Project**

During the summer of 2008, two drill holes were completed on the Murphy Lake property a total of 600.5 metres. Both targeted a TDEM anomaly, outlined by ground geophysics completed during 2008 on the Murphy Lake Grid.

One drill hole was cut by a reverse fault and had 40 cm of basement rock thrust into the basal sandstone. This was accompanied by alteration and anomalous radioactivity. The highest radioactivity (1,900 cps) was in clay-altered, bleached basement rock just below the reverse fault. Two 20 cm assays through this zone returned 537 ppm U and 742 ppm U.

### **Hatchet Lake Project**

During the summer 2008 drill program, three drill holes were drilled on Hatchet Lake for a total of 558.6 metres. All targeted HLEM anomalies, outlined by ground geophysics completed during winter 2008 on the Hatchet South and Richardson Lake Grids. All three holes intersected moderate to strong sulphides and weak graphite throughout the basement. Weak alteration and a few notable structures were intersected.

### **Bachman Lake Project**

As a follow up to the 2005 MegaTEM survey, two ground geophysical field programs were carried out during the winter of 2007 and the winter of 2008.

During the summer of 2008 one diamond drill hole was completed on the Bachman Lake property. The hole intersected moderately foliated granitic gneiss in the basement, but no anomalous radioactivity was noted. This conductor remains unexplained. The hole drilled on the CR-2 grid, intersected weakly-graphitic pelite in the basement. The extent of the large alteration zone seen in core needs to be confirmed, as does any possible controlling structures.

### **Crawford Lake Project**

As a follow-up to the 2005 MegaTEM survey, the Company conducted a ground geophysical field program during the winter of 2008. The interpretation of the electromagnetic survey data better defined the ground positioning and orientation of the conductive trends interpreted from the aforementioned airborne survey. All conductors are interpreted as basement features.

During the summer of 2008 four diamond drill holes were attempted on the Crawford Lake property. The two holes attempted on the CR4-08 grid failed to reach basement. Drilling on the CR1- 2007 grid was restarted after the first attempt was lost in overburden. Drilling on the CR1-2007 grid was targeting graphitic metasediments, weakly foliated granitic gneiss was encountered. No anomalous radioactivity was recorded. These conductors remain unexplained. The extent of the large alteration zone seen in core needs to be confirmed, as well as any controlling structures.

### **Brown Lake Project**

No exploration activities were conducted on this property in 2008.

### **Ford Lake Project**

No exploration activities were conducted on this property in 2008.

### **Jasper Lake Project**

The Jasper Lake property is wholly-owned and operated by Denison. The target on the property is an unconformity-type uranium deposit at or near the contact between the Athabasca sandstones and underlying basement rocks.

During the winter 2008/2009 program, one drill hole, targeting an HLEM anomaly outlined by ground geophysics, was completed to a drill depth of 413 metres and encountered the unconformity at 258.8 metres. The HLEM target was explained by a package of graphitic metasediments encountered at 369.5 metres to 413 metres with friability and alteration increasing towards the end of the hole.

Future drilling is recommended to target the unconformity surface where the graphic metasediments are suspected to subcrop.

### **Stevenson River Project**

The Stevenson River property is wholly-owned and operated by Denison. The Company completed a two-hole helicopter supported drill program during the summer of 2008. No mineralization or significant radiometric peaks were encountered.

### **Ahenakew Lake Project**

The Ahenakew Lake property is wholly-owned and operated by Denison. Four diamond drill holes totalling 804 metres were completed during the winter of 2008/2009. None of the drill holes had Athabasca Group sandstone overlying basement rocks. Although all holes encountered varying amounts

of strongly graphitic pelite with locally massive graphite none intersected any significant gamma anomalies.

### **North Wedge Project**

The North Wedge Project is 51% owned by Denison, with JNR holding the balance. Denison is the operator of this project. The winter 2008/2009 exploration program on the North Wedge claim consisted of approximately 300 meters of diamond drilling over two holes. The drilling targeted a weak geophysical anomaly as well as Tabbernor faulting.

### **JNR Operated Projects**

On JNR operated projects Dufferin, Kelic Lake, Lazy Edwards and Pendleton, ground geophysical surveys were carried out on a variety of locations.

### **Gold Properties**

Denison also holds a 100% interest in a gold prospect at Talbot Lake in Ontario and also maintains a 37.115% interest in the 630 hectare Sulphide Lake gold prospect in Saskatchewan. There was no activity on these properties in 2008 and none is planned for 2009.

### **U.S. Properties**

The uranium mineralization found in the Colorado Plateau was deposited in alluvial fans by braided streams. The shape and size of the mineralized lenses are extremely variable. As a result, exploration and mining have historically involved conducting exploration to find the lens and then following its erratic path, with little additional surface exploration drilling other than development drilling in the course of following the lens. This is unlike other types of mining where mineralization is almost completely delineated by surface drilling prior to mining.

The unusual nature of these deposits has traditionally resulted in a limited amount of resources being dedicated to delineate reserves prior to mining. Traditionally, there will be some reserves that have been delineated at the beginning of each year, uranium will be mined during the year and approximately the same amount of reserves will remain delineated at the end of the year. This pattern has persisted since the 1940s.

Following an extensive review, it was determined that an exploration drilling program was warranted to better direct the mining activities and to locate similar deposits with potential for development. A 90,000 feet (28,000 metres) drill program was planned for 2007. Unfortunately, unforeseen delays with permitting effectively cancelled the work in 2007.

Denison conducted drilling at three sites in 2008. Two of these sites are proximal to existing, active Denison mines, and the third site, Monogram Mesa, is a block of claims in an area of extensive historical production by past operators. Total drilling was 11,830 metres in 63 holes.

Near the Pandora Mine in the La Sal trend in Utah, 30 holes were completed totalling 4,675 metres. This drilling targeted two areas of limited past drilling within 60 to 325 metres of currently active mine workings. Based on preliminary probing of the drill holes, minable grade mineralization was encountered in both target areas at the same levels as the current mine workings. These intersections potentially expand the resources available for near term mining at the Pandora mine. Further drilling is planned to test extensions of both trends, as mineralization remains open in both areas.

Twelve exploration holes, totalling 2,680 metres were drilled near the Rim Mine in 2008. The Rim drilling tested a projected extension branching off the main mineralized channel system. Drill results

were negative. Further drilling is planned to move back to the main mineralized channel and extend known, open-ended mineralized zones.

Initial exploration drilling was conducted in 2008 on the Monogram Mesa claims in Colorado, which is near Denison's Van 4 mine. Monogram Mesa is one of the more prolific historical production areas in this region, and widespread past drilling has indicated additional mineralized trends that have not been adequately tested. Drilling on the claims totalled 4,470 metres in 21 holes. A number of weakly mineralized zones were encountered. Based on the initial drilling results, follow up drilling is planned.

### **Mongolia**

In addition to the four GSJV depressions discussed in the section "Mineral Properties – Gurvan Saihan Joint Venture," Denison also holds other exploration properties, in the GSJV and through a wholly-owned subsidiary, Denison Mines Mongolia, XXX.

In 2008, a total of 72,356 metres of drilling was carried out on the Hairhan depression, the Choir depression and other exploration targets. At Hairhan, over 25,000 metres, using seven rigs, was dedicated to infill drilling and the establishment of hydrogeological wells for baseline groundwater and monitoring wells.

At the Choir depression, only a limited amount of drilling was carried out, but it was successful in discovering several small isolated mineralized zones which will be future targets. The Haraat deposit in the Choir depression contain a very large amount of near surface uranium, which is above the water table, and is not amenable to conventional ISR operations, so a variety of mining and recovery procedures are being evaluated. Several drill holes were cored to obtain metallurgical samples. The preliminary metallurgical test work indicated that recoveries of approximately 90% could be achieved using either acid or carbonate leach.

At the Ulziit depression, a 25,000 metre program was completed and a new discovery of moderate mineralization in permeable sands was made. Further evaluation of this new discovery will be the focus of further infill drilling in 2009.

Late in 2008, the Company submitted to the Mineral Resources Committee of Mongolia a reserve estimate prepared in accordance with Russian procedures.

In 2009, the program in Mongolia will be significantly reduced and will entail a combination of exploration drilling and continuation of environmental baseline data collection and permitting activities.

### **Mutanga**

Work commenced on the Mutanga project late in 2007, and the project was the focus of a major development drilling effort until mid-2008 when the rigs were turned to exploration.

As a result of this development work, the Company retained CSA Global and mineral resources at this project were re-estimated, with both the indicated and inferred being substantially increased. See "Mineral Properties – Mutanga Project – Mineral Resource Estimate".

Following the completion of the development work, the drills concentrated on testing areas discovered as a result of an airborne radiometric survey over the prospective parts of the project not covered by a previous survey. This work was successful in discovering three new areas of mineralization of moderate to strong mineralization which will each require a major infill and development drill program.

## **Quality Assurance and Quality Control Procedures and Protocols**

### Athabasca Basin

Denison has developed Quality Assurance and Quality Control (“QA/QC”) procedures and protocols for all exploration projects operated by Denison.

The following details the protocols used by all Denison staff and consultants. The use of very large historic databases, and ongoing compilation and evaluation, allows Denison to target both reconnaissance and detail follow up targets on many of its projects. Selected control points on historic and newly cut grids are located by differential Global Positional System (“GPS”). Diamond drill holes are initially located with respect to local grid coordinates, and are located post-drilling by differential GPS. This GPS allows definition of the surface elevation control, which is critical in location of any unconformity offsets. Denison also collects down hole spatial data which allows determination of the true position of the drill hole, as the azimuth and dip down the hole often varies from that at the collar of the hole.

Denison collects several types of down hole geochemical data during drilling operations, as follows:

- Regular geochemical samples of two types are collected at specific intervals down the hole, generally at predetermined intervals in the 5.0 metre range:
- Regular samples are taken for clay analysis by (PIMA) spectrometer. The speciation of clays determined by this method helps to characterize proximity to mineralized alteration zones at the unconformity. Less than 10 centimetres of sample is collected for this work.
- Regular samples of core are taken for multi-element geochemical analysis to determine background levels of 53 elements; elevated concentrations of certain elements can then aid in economic evaluation of the hole. Three selected samples of less than 10 centimetres are composited to make up this sample.
- Selected samples of drill core are sampled on the basis of radiometric data collected during core logging, and on the local geology in the hole. This radiometric data is obtained by using a hand held scintillometer. The scintillometer does not allow quantification of grades, but it does help to identify mineralization and therefore select samples for further geochemical analysis and assay. These special samples are selected for geochemical analysis and are generally less than 10 cm.
- Following completion of drilling, the hole is flushed with water for an hour to remove any material from the bottom of the hole, and then a radiometric probe is lowered through the rods to within 10 metres of the bottom. Readings are taken both on the way down and on the way up. Probe results are presented as “grade equivalent”  $eU_3O_8$ . The correlation of  $eU_3O_8$  versus the true grade, as determined by assay on split core, is generally assumed to be within 10%. The downhole probes are calibrated originally by the manufacturer at test pits with known mineralization in the United States. These probes are also regularly tested in the test pits at a government-owned facility in Saskatoon.
- Assay data is collected where the geologist suspects, on the basis of alteration, geology, scintillometer and probe results, that the grade of a sample could be greater than 0.01%  $U_3O_8$ . The start and end points of the sample are marked; Denison strives to keep a constant 0.5 metre sample interval. Flank samples are taken above and below the suspected mineralized interval to geochemically constrain this mineralization. These samples are split longitudinally with a mechanical splitter, and half of the core is archived. The sample is placed in individual plastic bags, a sample tag is placed in the bag and sealed and a corresponding tag is stapled to the core

box where the core was removed, and the samples are collected in five gallon pails for shipment to the analytical lab.

Once the diamond drill core is geologically logged but before sampling, the core is photographed, labelled with aluminium tags, and all core is stored in specially constructed core racks out of doors in the event the core needs to be re-logged or re-sampled in the future.

The geochemical lab routinely inserts and tests known standards inserted with batches of the Company's samples as an internal check on their analytical precision. The Company regularly submits a variety of duplicate samples in the sample stream as a check on the accuracy of the analytical lab. On Denison operated projects where the Company anticipates definition drilling of potentially economic mineral deposits, Denison will insert known samples containing known standards into the sample stream. Following receipt of the analytical results, the Company uses specialized statistical software to monitor the expected results of the control samples against the actual results.

Sample pails containing material for clay analysis (PIMA) are transported to Saskatoon to a contractor who specializes in determination of clay altered sandstones. Sample pails for geochemical analysis and assay type samples are transported to the analytical laboratories of SRC in Saskatoon, Saskatchewan by representatives of a licensed and bonded transport company regulated to transport this type of material.

All analyses are conducted by SRC, a Standards Council of Canada (CCRMP) certified analytical laboratory. SRC has specialized in the field of uranium research and analysis for over 30 years and is a CNSC licensed laboratory for the analysis of uranium samples.

The following outlines SRC's sample processing and analytical procedures:

All data for  $U_3O_8$  assaying is obtained under a QA/QC program that involves sample processing and analysis as follows:

- Drill cores are received by the analytical laboratory from Denison in sealed five-gallon plastic pails. Each core sample is contained in a sealed plastic bag with a sample tag. A packing slip is enclosed that contains instructions and a sample number list. Samples are verified against the packing slip. Any extra samples or missing samples are noted and Denison is informed.
- Samples are sorted by the analytical laboratory according to location (sandstone or basement origin) radioactivity, and are dried and processed as follows:
  - Samples are processed from lowest to highest radioactivity.
  - Crushed to 60% -2 millimetres. Approximately 200 grams of crush is riffled out then ground in a chrome steel grinding mill to 90% -106 microns.
  - Replicates are chosen at random and another 200 grams of crush is riffled and ground.
- The pulp is digested in aqua regia leach and diluted. The solutions are then analyzed by ICP for %  $U_3O_8$ .
- Certified  $U_3O_8$  standards are analyzed with samples with corresponding radioactivities. The detection limit is 0.002 wt%  $U_3O_8$ . Accuracy at various concentrations of  $U_3O_8$  are listed below:

Sample #	%U <sub>3</sub> O <sub>8</sub>	Typical Accuracy
BL-1	0.026	±0.004
BL-4a	0.147	±0.004
BL-2a	0.502	±0.008
BL-3	1.21	±0.02
BL-5	8.36	±0.10
RS2-11	48.0	±0.7

Check assays are done on selected pulps by DNC (Delayed Neutron Counting) at SRC. All radioactive samples are monitored and recorded as per CNSC licence 01784-1-09.0.

### Mongolia

All uranium exploration technical information is obtained, verified and compiled under a formal quality assurance and quality control program in Mongolia. The following details the protocols used by all Denison staff and consultants.

#### *Processes for Determining Uranium Content by Gamma Logging*

Exploration for uranium deposits in Mongolia typically involves identification and testing of permeable sandstones within reduced sedimentary sequences. The primary method of collecting formation is through extensive drilling and the use of down hole geophysical probes. The down hole geophysical probes measure natural gamma radiation, from which an indirect estimate of uranium content can be made.

The radiometric (gamma) probe measures gamma radiation which is emitted during the natural radioactive decay of uranium. The gamma radiation is detected by a sodium iodide crystal, which when struck by a gamma ray emits a pulse of light. This pulse of light is amplified by a photomultiplier tube, which outputs a current pulse. The gamma probe is lowered to the bottom of a drill hole and data is recorded as the tool is withdrawn up the hole. The current pulse is carried up a conductive cable and processed by a logging system computer which stores the raw gamma cps data.

If the gamma radiation emitted by the daughter products of uranium is in balance with the actual uranium content of the measured interval, then uranium grade can be calculated solely from the gamma intensity measurement. Down hole cps data is subjected to a complex set of mathematical equations, taking into account the specific parameters of the probe used, speed of logging, size of bore hole, drilling fluids and presence or absence of and type of drill hole casing. The result is an indirect measurement of uranium content within the sphere of measurement of the gamma detector.

The basis of the indirect uranium grade calculation (referred to as "eU<sub>3</sub>O<sub>8</sub>" for "equivalent U<sub>3</sub>O<sub>8</sub>") is the sensitivity of the sodium iodide crystal used in each individual probe. Each probe's sensitivity is measured against a known set of standard "test pits," with various known grades of uranium mineralization, located at the U.S. DOE's Grand Junction, Colorado office. The ratio of cps to known uranium grade is referred to as the probe "K-Factor," and this value is determined for every gamma probe when it is first manufactured and is also periodically checked throughout the operating life of each probe. Application of the K-Factor, along with other probe correction factors, allows for immediate grade estimation in the field as each drill hole is logged.

#### *Core Sampling, Processing, and Assaying*

Core samples are collected for a number of purposes: verification of lithology as determined from geophysical logging and examination of drill cuttings, determination of uranium content as a general check of gamma probing to determine if gamma measurement and chemical uranium content are close to

balance (this is referred to as "radiometric disequilibrium"), whole rock analysis, and specific geochemistry for uranium species and other minerals of interest. Typically core is only taken over select intervals of interest as identified from logging of drill holes. This reduces the amount of core through barren zones or horizons of no interest and greatly reduces overall exploration costs.

Core diameter is typically 76 millimetres. For zones selected for laboratory analyses, one half of the core will normally be used. The minimum length of core submitted is usually 0.2 metres and the maximum length per sample is 0.4 metres. Sample intervals are selected by geologists in the field based on lithology, oxidation/reduction, and uranium grade (from gamma logging and from hand-held gamma counters).

Core samples are prepared at either the Central Analytical Laboratory or Activation Laboratories Ltd.'s facilities in Ulaanbaatar, Mongolia. Samples are crushed and then ground to -200 mesh. The sample pulps are split to 250 to 300 grams for laboratory work.

#### *Quality Assurance and Quality Control Measures*

Drill hole logging is conducted by an independent Mongolian contractor. The contractor developed its logging capabilities specifically to meet Denison's logging requirements in Mongolia. The tools, and a complete set of spares, were manufactured by Mount Sopris Instrument Company in Golden, Colorado and were shipped to Mongolia in 2005 ahead of the drilling season. Denison has retained the services of a senior geophysical consultant to oversee training, implementation, and quality control protocols with the Mongolian logging contractor. All tools were checked and calibrated before being shipped to Mongolia, and a variety of system checks and standards are also established for routine checking and calibration of tools. In addition, Denison cased a mineralized hole at one of its centrally located exploration areas, and this cased hole can be logged periodically to ensure exact repeatability of the gamma probes.

Drill hole logging data is stored on digital media in the logging truck at the exploration sites. The digital data are periodically brought in from the field locations to the Ulaanbaatar office. The raw and converted logging data are copied and then sent via e-mail to Denison's Denver office, where all data is checked and reviewed.

Samples of drill core are chosen on the basis of radiometric data collected during core logging. This radiometric data is obtained by using a hand held scintillometer. The general concept behind the scintillometer is similar to the gamma probe except the radiometric pulses are displayed on a scale and the respective count rates are recorded manually by the geologist logging the core. The hand-held scintillometer provides quantitative data only and can not be used to calculate uranium grades. However, it does allow the geologist to identify uranium mineralization in the core and select intervals for geochemical sampling.

Additional samples are collected above and below the horizons of interest in order to "close-off" sample intervals. Sample widths are selected according to radiometric values and lithologic breaks or changes. All reasonable efforts are made to ensure that splitting of the core is representative and that no significant sampling biases occur. Once the sample intervals are identified, an exclusive sample number is assigned each interval and recorded by the on-site geologist.

After the geological logging of the core and sample selection, all of the selected sample intervals of drill core are split longitudinally at the drill site. One half of the core is placed in a new sample bag along with a sample tag corresponding to the sample number. The other half of the core is re-assembled in the core box and stored for future reference. Samples are transported to Ulaanbaatar under the supervision of the project geologists and delivered to either the Central Analytical Laboratory or Activation Laboratories

Ltd. for preparation. As standard procedure, field duplicates are included in assay suites sent to the laboratories and reference samples are used to verify laboratory controls and analytical repeatability.

### Zambia

All uranium exploration technical information is obtained, verified and compiled under a formal quality assurance and quality control program in Zambia. The following details the protocols used by all Denison staff and consultants.

#### *Processes for Determining Uranium Content by Gamma Logging*

Exploration for uranium deposits in Zambia typically involves identification and testing of sandstones within reduced sedimentary sequences. The primary method of collecting information is through extensive drilling (both Reverse Circulation and Diamond Drill coring) and the use of down hole geophysical probes. The down hole geophysical probes measure natural gamma radiation, from which an indirect estimate of uranium content can be made.

The radiometric (gamma) probe measures gamma radiation which is emitted during the natural radioactive decay of uranium. The gamma radiation is detected by a sodium iodide crystal, which when struck by a gamma ray emits a pulse of light. This pulse of light is amplified by a photomultiplier tube, which outputs a current pulse. The gamma probe is lowered to the bottom of a drill hole and data is recorded as the tool is withdrawn up the hole. The current pulse is carried up a conductive cable and processed by a logging system computer which stores the raw gamma cps data.

If the gamma radiation emitted by the daughter products of uranium is in balance with the actual uranium content of the measured interval, then uranium grade can be calculated solely from the gamma intensity measurement. Down hole cps data is subjected to a complex set of mathematical equations, taking into account the specific parameters of the probe used, speed of logging, size of bore hole, drilling fluids and presence or absence of and type of drill hole casing. The result is an indirect measurement of uranium content within the sphere of measurement of the gamma detector.

The basis of the indirect uranium grade calculation (referred to as "eU<sub>3</sub>O<sub>8</sub>" for "equivalent U<sub>3</sub>O<sub>8</sub>") is the sensitivity of the sodium iodide crystal used in each individual probe. Each probe's sensitivity is measured against a known set of standard "test pits," with various known grades of uranium mineralization, located at the U.S. DOE's Grand Junction, Colorado office. The ratio of cps to known uranium grade is referred to as the probe "K-Factor," and this value is determined for every gamma probe when it is first manufactured and is also periodically checked throughout the operating life of each probe. In addition, certain boreholes at the Mutanga property are cased and the probes are periodically checked for any instrument drift. Application of the K-Factor, along with other probe correction factors, allows for immediate grade estimation in the field as each drill hole is logged.

#### *Core Sampling, Processing, and Assaying*

Core and reverse circulation chip samples are collected for a number of purposes in addition to purely geological reasons: verification of lithology as determined from geophysical logging and examination of drill cuttings if RC; determination of uranium content as a general check of gamma probing to determine if gamma measurement and chemical uranium content are close to balance (this is referred to as "radiometric disequilibrium"); whole rock analysis; and specific geochemistry for uranium species and other minerals of interest. Core diameter is typically 76 millimetres. For zones selected for laboratory analyses, one half of the core will normally be used and the other half retained. The minimum length of core submitted is usually 0.2 metres and the maximum length per sample is 0.4 metres. Sample intervals are selected by geologists in the field based on lithology, oxidation/reduction, and uranium grade (from gamma logging and from hand-held gamma counters).

Samples are analyzed at the Genalysis in Perth, Australia. Samples are transported in a dedicated truck from Zambia to Johannesburg, where Genalysis operates a dedicated sample preparation facility. The sample is crushed, pulped and homogenized and a sample pulp is air freighted to the lab in Perth, Australia.

This laboratory has been in operation since 1975 and now processes over 1,000,000 samples per year. It is fully certified and accredited by Australian standards. Genalysis is an accredited NATA (National Association of Testing Authorities, Australia) laboratory (Number 3244). Genalysis has been approved by AQIS (Australian Quarantine and Inspection Service) for the receipt and treatment of samples from interstate and overseas. Genalysis is an Associate Member of the Association of Mining and Exploration Companies Inc., and a Member of the Standards Association of Australia.

#### *Quality Assurance and Quality Control Measures*

Drill hole logging is conducted by trained and dedicated personnel devoted solely to this task. The tools, and a complete set of spares, were manufactured by Mount Sopris Instrument Company in Golden, Colorado and were shipped to Zambia in 2007, ahead of the drilling season. Denison has retained the services of a senior geophysical consultant to oversee training, implementation, and quality control protocols with the Zambian logging personnel. All tools were checked and calibrated before being shipped to Zambia, and a variety of system checks and standards have also been established for routine checking and calibration of tools. In addition, Denison is planning on casing a mineralized hole at one of its centrally located exploration areas, and this cased hole will be logged periodically to ensure exact repeatability of the gamma probes.

Drill hole logging data is stored on digital media in the logging truck at the exploration sites. The digital data are periodically brought in from the field locations to the Lusaka office. The raw and converted logging data are copied and then sent via e-mail to Denison's Saskatoon office, where all data is checked and reviewed.

Samples of drill core are chosen on the basis of radiometric data collected during core logging. This radiometric data is obtained by using a hand-held scintillometer and on the basis of subsequent down hole probing. The general concept behind the scintillometer is similar to the gamma probe except the radiometric pulses are displayed on a scale and the respective count rates are recorded manually by the geologist logging the core. The hand-held scintillometer provides quantitative data only and cannot be used to calculate uranium grades; however, it does allow the geologist to identify uranium mineralization in the core and select intervals for geochemical sampling.

Additional samples are collected above and below the horizons of interest in order to "close-off" sample intervals. Sample widths are selected according to radiometric values and lithologic breaks or changes. All reasonable efforts are made to ensure that splitting of the core is representative and that no significant sampling biases occur. Once the sample intervals are identified, an exclusive sample number is assigned each interval and recorded by the on-site geologist.

After the geological logging of the core and sample selection, all of the selected sample intervals of drill core are split longitudinally at the drill site. One half of the core is placed in a new sample bag along with a sample tag corresponding to the sample number. The other half of the core is re-assembled in the core box and stored for future reference. Samples are transported by dedicated truck transport and delivered to Genalysis for preparation. As standard procedure, field duplicates are included in assay suites sent to the laboratory and reference samples are used to verify laboratory controls and analytical repeatability.

## U.S.

All uranium exploration technical information is obtained, verified and compiled under a formal quality assurance and quality control program in the Southwestern United States. The following details the protocols used by all Denison staff and consultants.

### *Processes for Determining Uranium Content by Gamma Logging*

Exploration for uranium deposits in the Southwest United States typically involves identification and testing of permeable sandstones within reduced sedimentary sequences. The primary method of collecting formation is through extensive drilling and the use of down hole geophysical probes. The down hole geophysical probes measure natural gamma radiation, from which an indirect estimate of uranium content can be made.

The radiometric (gamma) probe measures gamma radiation which is emitted during the natural radioactive decay of uranium. The gamma radiation is detected by a sodium iodide crystal, which when struck by a gamma ray emits a pulse of light. This pulse of light is amplified by a photomultiplier tube, which outputs a current pulse. The gamma probe is lowered to the bottom of a drill hole and data is recorded as the tool is withdrawn up the hole. The current pulse is carried up a conductive cable and processed by a logging system computer which stores the raw gamma cps data.

If the gamma radiation emitted by the daughter products of uranium is in balance with the actual uranium content of the measured interval, then uranium grade can be calculated solely from the gamma intensity measurement. Down hole cps data is subjected to a complex set of mathematical equations, taking into account the specific parameters of the probe used, speed of logging, size of bore hole, drilling fluids and presence or absence of and type of drill hole casing. The result is an indirect measurement of uranium content within the sphere of measurement of the gamma detector.

The basis of the indirect uranium grade calculation (referred to as "eU<sub>3</sub>O<sub>8</sub>" for "equivalent U<sub>3</sub>O<sub>8</sub>") is the sensitivity of the sodium iodide crystal used in each individual probe. Each probe's sensitivity is measured against a known set of standard "test pits," with various known grades of uranium mineralization, located at the U.S. DOE's Grand Junction, Colorado office. The ratio of cps to known uranium grade is referred to as the probe "K-Factor," and this value is determined for every gamma probe when it is first manufactured and is also periodically checked throughout the operating life of each probe. Application of the K-Factor, along with other probe correction factors, allows for immediate grade estimation in the field as each drill hole is logged.

### *Core Sampling, Processing, and Assaying*

Core samples are collected for a number of purposes: verification of lithology as determined from geophysical logging and examination of drill cuttings, determination of uranium content as a general check of gamma probing to determine if gamma measurement and chemical uranium content are close to balance (this is referred to as "radiometric disequilibrium"), whole rock analysis, and specific geochemistry for uranium species and other minerals of interest. Typically core is only taken over select intervals of interest as identified from logging of drill holes. This reduces the amount of core through barren zones or horizons of no interest and greatly reduces overall exploration costs.

Core diameter is typically 2 1/2 – 3 1/4 inches. For zones selected for laboratory analyses, one half of the core will normally be used. The minimum length of core submitted is usually one foot and the maximum length per sample is two feet. Sample intervals are selected by geologists in the field based on lithology, oxidation/reduction, and uranium grade (from gamma logging and from hand-held gamma counters).

Core samples are prepared at the White Mesa mill in Blanding, Utah. Samples are crushed and then ground to -200 mesh. The sample pulps are split to 250 to 300 grams for laboratory work.

### *Quality Assurance and Quality Control Measures*

Drill hole logging is conducted by Denison in-house personnel. The logging capabilities are designed specifically to meet Denison's logging requirements in the Southwest United States. The tools, and a complete set of spares, were manufactured by Mount Sopris Instrument Company in Golden, Colorado. Denison has retained the services of a senior geophysical consultant to oversee training, implementation, and quality control protocols for the southwest United States' operations. All tools are checked and calibrated before being used in the southwest United States, and a variety of system checks and standards are also established for routine checking and calibration of tools.

Drill hole logging data is stored on digital media in the logging truck at the exploration sites. The digital data are periodically brought in from the field locations to the Egnar, Colorado field office. The raw and converted logging data are copied and then sent via e-mail to Denison's Denver office, where all data is checked and reviewed.

Samples of drill core are chosen on the basis of radiometric data collected during core logging. This radiometric data is obtained by using a hand held scintillometer. The general concept behind the scintillometer is similar to the gamma probe except the radiometric pulses are displayed on a scale and the respective count rates are recorded manually by the geologist logging the core. The hand-held scintillometer provides quantitative data only and cannot be used to calculate uranium grades. However, it does allow the geologist to identify uranium mineralization in the core and select intervals for geochemical sampling.

Additional samples are collected above and below the horizons of interest in order to "close-off" sample intervals. Sample widths are selected according to radiometric values and lithologic breaks or changes. All reasonable efforts are made to ensure that splitting of the core is representative and that no significant sampling biases occur. Once the sample intervals are identified, an exclusive sample number is assigned each interval and recorded by the on-site geologist.

After the geological logging of the core and sample selection, all of the selected sample intervals of drill core are split longitudinally at the drill site. One half of the core is placed in a new sample bag along with a sample tag corresponding to the sample number. The other half of the core is re-assembled in the core box and stored for future reference. Samples are stored at the Egnar, Colorado office under the supervision of the project geologists and delivered to either the White Mesa mill or Activation Laboratories Ltd. for preparation. As standard procedure, field duplicates are included in assay suites sent to the laboratories and reference samples are used to verify laboratory controls and analytical repeatability.

### ***Manager of UPC***

In March 2005, DMI was appointed as the manager of UPC for an initial term of five years. UPC is a public company with the primary investment objective of achieving an appreciation in the value of its uranium holdings. The Company does not, directly or indirectly, have an ownership interest in UPC, and the two companies do not have any directors in common. As manager, DMI provides the corporation's officers and manages the activities of UPC including purchasing uranium for and on behalf of UPC, arranging for its storage at converters and attending to regulatory reporting for UPC.

For its management services, DMI will receive the following fees from UPC: a) a commission of 1.5% of the gross value of any purchases or sales of  $U_3O_8$  and  $UF_6$  completed at the request of the Board of Directors of UPC; b) a minimum annual management fee of Cdn\$400,000 (plus reasonable out-of-pocket expenses) plus an additional fee of 0.3% per annum based upon UPC's net asset value between Cdn\$100,000,000 and Cdn\$200,000,000 and 0.2% per annum based upon UPC's net asset value in excess

of Cdn\$200,000,000; c) a fee of Cdn\$200,000 upon the completion of each equity financing where proceeds to UPC exceed Cdn\$20,000,000; d) a fee of Cdn\$200,000 for each transaction or arrangement (other than the purchase or sale of  $U_3O_8$  and  $UF_6$ ) of business where the gross value of such transaction exceeds Cdn\$20,000,000 (“an initiative”); e) an annual fee up to a maximum of Cdn\$200,000, at the discretion of the Board of Directors of UPC, for on-going maintenance or work associated with an initiative; and f) a fee equal to 1.5% of the gross value of any uranium held by UPC prior to the completion of any acquisition of at least 90% of the common shares of UPC.

During 2008, DMI earned an aggregate of \$2.9 million in management fees and commissions as manager of UPC. In 2008, the Company also sold 50,000 pounds of  $U_3O_8$  to UPC at a price of \$64.50 per pound for total consideration of \$3,225,000.

### *Urizon Joint Venture*

In November, 2002 the Company formed a 50/50 joint venture company, Urizon Recovery Systems, LLC (“**Urizon**”), with Nuclear Fuel Services, Inc. (“**NFS**”) to pursue the development of a new, alternate feed program (the “**USM Ore Program**”) for the Company’s White Mesa mill.

NFS is a privately owned corporation with operations based in Erwin, Tennessee. Since 1957, NFS has been a leader in the process development and production of specialty nuclear fuels for commercial power, research reactors and naval reactors. NFS is the supplier of highly enriched uranium fuel materials for the U.S. Government. NFS has also developed and implemented the process for recycling highly enriched uranium material into lower commercial enrichments. This process supports the U.S. government’s program for downblending surplus material from the weapons program into fuel for nuclear power reactors. In addition, NFS is involved as a contractor at DOE facilities.

The USM Ore Program that Urizon is pursuing involves the development of a process and construction of a plant at NFS’s facility in Erwin, Tennessee, for the blending of contaminated low enriched uranium with depleted uranium to produce a natural uranium ore (“**USM Ore**”). The USM Ore will then be further processed at the Company’s White Mesa mill to produce conventional yellowcake.

The primary source of feed targeted by Urizon is contaminated materials within the DOE complex. Throughout the DOE complex, there are a number of streams of low enriched uranium that contain various contaminants. These surplus nuclear materials often require additional processing in order to meet commercial fuel cycle specifications. Urizon’s USM Ore Program is intended to provide a method for DOE to deal with the material, while at the same time recycling the material as a valuable energy resource for reintroduction into the nuclear fuel cycle.

The first phase of the project would be the preparation and submittal of a request for an amendment to the mill’s licence. Assuming receipt of regulatory approvals, construction of the blending facility at NFS’ site in Erwin, Tennessee could be completed within two years of submittal. Commercial production would be expected to last three to six years or longer depending on the amount of DOE materials that are available.

Application testing was conducted from 2002 to 2004. Pursuant to its agreement with NFS, the Company contributed \$1.5 million to the joint venture in December 2002 to be used in connection with this project. The success of the program will depend on DOE’s support of the program as a means to disposition these surplus nuclear materials within the DOE complex. An unsolicited proposal was submitted by NFS to DOE in April 2003 for funding of this program. The DOE informed Urizon in early 2004 that it was not prepared to accept the proposal at that time due to funding considerations and other DOE priorities. During 2006, the DOE announced a long term uranium disposition strategy of which the potential Urizon

feed materials were a component of this strategy. The Joint Venture anticipates that it will have an opportunity to propose the Urizon Program to the DOE as a suitable disposition option for this feedstock. In the interim, the Company will not be submitting its licence amendment application until the path forward is further defined. The Joint Venture anticipates a decision will be made in 2009 as to how DOE intends to proceed on this matter.

### *Denison Environmental Services*

DES, which is headquartered in Elliot Lake, Ontario, is engaged in the rehabilitation and monitoring of closed mine sites. DES offers a complete decommissioning package from mine closure planning, through to implementation of a closure plan, then long-term care and maintenance and monitoring. Services offered include site restoration, asset disposal, demolition, tailings relocation, dam construction and decant decommissioning, hazardous material abatement, and long term treatment and monitoring of mine and tailings effluents.

The primary activities of DES in 2008 were providing the ongoing monitoring of Denison's two closed mine sites, environmental monitoring, effluent treatment and maintenance services for Rio Algom's five closed Elliot Lake mines, effluent treatment and monitoring at the Ministry of Northern Development and Mines' Kam Kotia property, the care and maintenance of the closed Vale Shebandowan Mine west of Thunder Bay, Ontario and the care and maintenance of a closed base metal mine at Les Mines Selbaie in Quebec.

In July 2008, DES was awarded a three year contract to perform care and maintenance at the Faro Complex, in the Yukon Territory, which includes the former Anvil Range properties at Faro and nearby Vangorda Plateau. DES has been tasked with ensuring that effluent from the site meets all regulatory criteria and that the facilities have the capacity and flexibility to cope with the dynamically fluctuating hydrologic and chemical conditions. Part of the plan is to ensure that all care and maintenance workers and contractors are trained to execute their jobs in a safe and responsible manner and that the site is in a mode of constant improvement. Another objective for the project is to support training and work initiatives that will benefit the local town and First Nations during and beyond the care and maintenance mandate.

DES also carried out work on several other smaller contracts.

### *Environmental and Safety Matters*

The Company has adopted an Environmental, Health and Safety Policy (the "**EHS Policy**") that affirms Denison's commitment to environmentally responsible management and compliance with occupational health and safety laws. Under the EHS Policy, the Company has committed to run its operations in compliance with applicable legislation, in a manner that minimizes the impact on our ecosystem. The EHS Policy mandates the use of regular monitoring programs to identify risks to the environment, public and Denison's employees and to ensure compliance with regulatory requirements. The EHS Policy also sets out Denison's requirement to train its employees regarding environmental and health and safety compliance and best practices and to provide adequate resources in this regard. Finally, the EHS Policy requires regular reporting to the Board of Directors regarding the Company's compliance and the results of the Company's monitoring.

## Canada

### McClellan Lake

The McClellan Lake facility operated continuously for all 12 months of the year without a major shut down. The facility reported two lost time accidents in 2008. There were no environmental action level exceedances, and the hydraulic containment of the TMF was maintained throughout the year. All radiological monitoring was conducted in accordance with the routine monitoring schedule. The facility has maintained its internationally recognized ISO 14001:2004 certification. ARC is the operator of the McClellan Lake facility.

### *Reclamation*

The McClellan Lake property is subject to decommissioning liabilities. ARC, the operator, filed with the Saskatchewan government a conceptual decommissioning plan. Financial assurances are in place for the total amount of Cdn\$35 million (Denison's share Cdn\$7.875 million) to cover the estimated costs of this decommissioning work. An updated decommissioning plan has been filed with the regulatory bodies, showing estimated decommissioning costs reduced to Cdn\$29 million.

### Midwest Facility

#### *Reclamation*

The Midwest property is subject to decommissioning liabilities. ARC, the operator, filed with the Saskatchewan government the "Midwest Project Preliminary Decommissioning Plan, December 2001 – Version 2." Financial assurances are in place for the total amount of Cdn\$0.75 million (Denison's share Cdn\$0.189 million) to cover the estimated costs of this decommissioning work.

### Elliot Lake

Denison's uranium mine at Elliot Lake, Ontario, which started operations in 1957, was permanently closed upon completion of deliveries of U<sub>3</sub>O<sub>8</sub> to Ontario Hydro in May 1992. During its 35 years of continuous operation, the facility produced 147 million pounds of U<sub>3</sub>O<sub>8</sub> in concentrates from the milling of 70 million tons of ore.

By 1998, all significant capital reclamation activities at Denison's two closed Elliot Lake mines had been completed and, for the most part, decommissioning has progressed to the long-term monitoring phase.

During 2008, the treatment plants operated as planned and all environmental targets were met. Monitoring and other remedial expenses were Cdn\$0.7 million in 2008. Monitoring costs for 2009 are budgeted to be Cdn\$1.1 million. All expenditures are funded from the Reclamation Trust described below under "Reclamation." It is expected that sufficient funds are in the Reclamation Trust to meet all monitoring costs through 2015.

All activities and monitoring results are reviewed regularly by the CNSC and the Elliot Lake Joint Regulatory Group (the "JRG") consisting of federal and provincial regulators. During the course of its monitoring, Denison detected and reported to the JRG on a number of matters, including the levels of acidity in the effluent run off from one area associated with one of its Elliot Lake mine sites. In consultation with the JRG, the Company took steps to identify the source of and to address the acidity, though the source of the acidity has to date not been determined. Despite the Company's compliance with its CNSC licence, cooperation with the JRG and compliance with a Direction from Environment Canada that was contrary to a memorandum of agreement between the CNSC and Environment Canada, Environment Canada charged Denison with violating the *Fisheries Act* (Canada). In 2007, the Company settled these charges. Except as outlined above, Denison continues to be in full compliance with its licensing and environmental requirements at Elliot Lake.

### *Reclamation*

Pursuant to a Reclamation Funding Agreement, effective June 30, 1994, with the Governments of Canada and Ontario, Denison has established a Reclamation Trust from which all spending on its Elliot Lake reclamation activities is funded. When the Reclamation Trust was first established in 1994, Denison was required to deposit 90% of its cash receipts after deducting permitted expenses, as defined in such agreement, into the Reclamation Trust. In 1997, the Governments of Canada and Ontario agreed to suspend the 90% funding requirement provided Denison maintained four years of cash requirements in the Reclamation Trust. Early in 1999, the Governments of Canada and Ontario agreed to further amend the Reclamation Funding Agreement, effective when Denison received an amended site decommissioning licence, which was obtained on April 22, 1999. Pursuant to that amendment, Denison is required to maintain in the Reclamation Trust sufficient funds to meet six years of cash requirements.

### Denison Environmental Services

DES was formed to assist the mining industry with the final stages of the mining cycle. Through DES, it is the Company's goal to lead the industry in cost effective and environmentally sound solutions to mine closure issues. DES has maintained its internationally recognized ISO 9001:2000 certification. In 2008, DES did not have any first aid, medical aid or lost time accidents.

### Exploration

The Denison exploration office in Saskatchewan had no lost time accidents in 2008. All required permits were obtained and the exploration sites were remediated as required.

## **U.S. Environmental Regulation**

### White Mesa Mill

The White Mesa mill operated continuously for all 12 months of the year without a major shut down or serious accident. The mill has not had a lost time accident since May, 2001.

The Company has detected some chloroform contamination at the White Mesa mill site that appears to have resulted from the operation of a temporary laboratory facility that was located at the site prior to and during the construction of the mill facility, and from septic drain fields that were used for laboratory and sanitary wastes prior to construction of the mill's tailings cells. In April 2003, the Company commenced an interim remedial program of pumping the chloroform contaminated water from the groundwater to the mill's tailings cells. This will enable the Company to begin clean up of the contaminated areas and to take a further step towards resolution of this outstanding issue. Pumping from the wells continued in 2008. Denison is continuing to work with the State of Utah to develop a long-term corrective action plan. A draft of an action plan was submitted by Denison and is currently being reviewed by the State.

Associated with the chloroform contamination are some elevated concentrations of nitrate, which have been assumed to have resulted from the septic drain fields and which have been included in the investigation and remedial action to date. Recent sample results suggest, however, that there may be other contributing historic or off-site sources of nitrate, which are currently under investigation, although at this time there has been no change to the interim remedial action. While the investigations to date indicate that this chloroform and nitrate contamination appears to be contained in a manageable area, the scope and costs of final remediation have not yet been determined and could be significant.

The Company has submitted to UDEQ a Background Groundwater Quality Report ("BGQR") to establish background levels for groundwater monitoring parameters under its State of Utah groundwater discharge permit ("GWDP"). This permit was issued by UDEQ in March 2005, after the State assumed regulatory responsibility from NRC over uranium mills in Utah. Pending determination of background levels, the permit sets drinking water standards as compliance limits for the site, which will be adjusted

once background levels for these parameters are established and accepted by the State. Pending adjustment of the compliance limits, groundwater at the mill will exceed certain of these limits, and the mill will be technically out of compliance with the provisions of the GWDP. On August 24, 2006, Denison received a Notice of Violation (“NOV”) to that effect. This NOV was resolved by the Company agreeing to submit the BGQR by January 2, 2007. The Company submitted the BGQR prior to that date. The BGQR was reviewed by UDEQ and a revised BGQR was submitted by the Company in October 2007. UDEQ and the Company are currently in the process of determining revised groundwater compliance limits for the site based on the conclusions in the revised BGQR.

#### *Reclamation*

The White Mesa mill is subject to decommissioning liabilities. Denison, as part of its Radioactive Materials Licence, is required to annually review its estimate for the decommissioning of the White Mesa mill site and submit it to the UDEQ for approval. Financial assurances of \$15.0 million are in place for the estimated closure costs of the mill.

#### U.S. Mines

The mines recommenced operations in September 2006. In 2008 there were three lost time accidents resulting in a total of 66 lost workdays.

#### *Reclamation*

All of the Company’s mines in the U.S. are subject to closure and reclamation liabilities. Financial assurance of \$3.7 million are in place for the estimated closure costs of the mining operations in Colorado, Utah and Arizona.

#### **Mongolia**

There were no medical aid or lost time accidents during the 2008 drilling and other field programs.

#### **Zambia**

There were no medical aid or lost time accidents.

#### *Employees*

At December 31, 2008, the Company had a total of 272 active employees, of which 61 are in Canada, 139 in the United States, 6 in Mongolia and 66 in Zambia. None of the Company’s employees are unionized.

In the United States, the Company also retains the services of White Mesa Inc., an independent local native-owned company that provides the services of 107 additional personnel to the mill and mine operations.

#### *Government Regulation*

##### **Canadian Uranium Industry**

The federal government recognizes that the uranium industry has special importance in relation to the national interest and therefore regulates the mining, extraction, use and export of uranium under the *Nuclear Safety and Control Act* (“NSCA”) which replaced the *Atomic Energy Control Act* in 1997. The NSCA is administered by the CNSC which issues licences pursuant to the regulations under the NSCA. All of the McClean Lake and Midwest uranium operations are governed primarily by such licences and are subject to all applicable federal statutes and regulations and to all laws of general application in

Saskatchewan, except to the extent that such laws conflict with the terms and conditions of the licences or applicable federal laws.

Environmental matters related to the McClean Lake uranium facility and the Midwest project are regulated by the CNSC and Saskatchewan Environment. A number of other ministries and departments of the federal and Saskatchewan governments also regulate certain aspects of the operation. Prior to proceeding with development of the McClean Lake uranium facility and Midwest project, the proponents were required to submit Environmental Impact Statements for review. After completion of that review and receipt of recommendations, the federal and Saskatchewan governments issued the appropriate authorizations, subject to the normal licensing process, for the McClean Lake uranium facility in 1995 and for Midwest in 1998.

Decommissioning activities at Elliot Lake are carried out under two decommissioning licences issued by the CNSC, one for the Stanrock tailings area and one for the Denison mine site and tailings areas. These licences are issued for an indefinite period.

Decommissioning of the facilities pursuant to the terms of the decommissioning licences has been completed and, after a lengthy period of care, maintenance and monitoring, Denison may then apply to the CNSC for permission to abandon the sites.

### **U.S. Uranium Industry**

Uranium milling in the U.S. is primarily regulated by the NRC pursuant to the *Atomic Energy Act of 1954*, as amended. Its primary function is to ensure the protection of employees, the public and the environment from radioactive materials and it also regulates most aspects of the uranium recovery process. The NRC regulations pertaining to uranium recovery facilities are codified in Title 10 of the Code of Federal Regulations (“**10 CFR**”).

On August 16, 2004, the State of Utah became an Agreement State for the regulation of uranium mills. This means that the primary regulator for the mill is now the UDEQ rather than the U.S. Nuclear Regulatory Commission. At that time, the mill’s NRC Source Materials Licence was transferred to the State and became a Radioactive Materials Licence. The State of Utah incorporates, through its own regulations or by reference, all aspects of 10 CFR pertaining to uranium recovery facilities. The White Mesa mill’s licence was due for renewal on March 31, 2007. Denison submitted its application for renewal of the licence on February 28, 2007. During the period that the State is reviewing the licence renewal application, the mill can continue to operate under its existing Radioactive Materials Licence. The mill’s licence was initially issued in 1980 and was renewed in 1987 and 1997.

When the State became an Agreement State it required that a GWDP be put in place. The GWDP is required for all similar facilities in the State of Utah, and specifically tailors the implementation of the State groundwater regulations to the mill site. The State of Utah requires that every operating uranium mill in the State have a GWDP, regardless of whether or not the facility discharges to groundwater.

The GWDP for the mill was finalized and implemented in March 2005. The GWDP required that the mill add over 40 additional monitoring parameters and fifteen additional monitoring wells. In addition, the State and the Company are currently determining the compliance levels for all the monitoring parameters.

Uranium mining is subject to regulation by a number of agencies including the applicable State divisions responsible for mining within the State, the BLM and the Mine Safety and Health Administration.

## **Land Tenure**

### *Canada*

The right to mine minerals in Saskatchewan is acquired under a mineral lease from the province (a “**Mining Lease**”). A Mining Lease is for a term of 10 years, with a right to renew for successive 10-year terms in the absence of default by the lessee. The lessee is required to spend certain amounts for work during each year of a Mining Lease. A Mining Lease cannot be terminated except in the event of default and for certain environmental concerns, as prescribed in *The Crown Minerals Act* (Saskatchewan). However, Mining Leases may be amended unilaterally by the lessor by amendment to *The Crown Minerals Act* (Saskatchewan) or *The Mineral Disposition Regulations*, 1986 (Saskatchewan).

The right to explore for minerals is acquired in Saskatchewan under a mineral claim from the province of Saskatchewan (a “**Mineral Claim**”). The initial term of a Mineral Claim is two years, renewable for successive one-year periods, provided the Mineral Claim is in good standing. To maintain a Mineral Claim in good standing, generally, the holder of a Mineral Claim must expend a prescribed amount on exploration. Excess expenditures can be applied to satisfy expenditure requirements for future claim years. Except for exploration purposes, a Mineral Claim does not grant the holder the right to mine minerals. A holder of a Mineral Claim in good standing has the right to convert a Mineral Claim into a Mineral Lease. Surface exploration work of a Mineral Claim requires additional governmental approvals. The surface facilities and mine workings are located on lands owned by the Province of Saskatchewan. The right to use and occupy lands is acquired under a surface lease (a “**Surface Lease**”) from the Province of Saskatchewan. A Surface Lease is for a period of time, up to a maximum of 33 years, as is necessary to allow the lessee to operate its mine and plant and thereafter to carry out the reclamation of the lands involved. Surface Leases are also used by the Province of Saskatchewan as a mechanism to achieve certain environmental protection, radiation protection and socio-economic objectives and contain certain undertakings in this regard.

### *United States*

The Company’s land holdings in the U.S. are held either by leases from the fee simple owners (private parties or the state) or unpatented mining claims located on property owned by the U.S. Federal Government. Annual fees must be paid to maintain unpatented mining claims, but work expenditures are not required. Holders of unpatented mining claims are generally granted surface access to conduct mineral exploration and mining activities. However, additional mine permits and plans are generally required prior to conducting exploration or mining activities on such claims.

## **Canadian Royalties**

Denison pays royalties to the Province of Saskatchewan on the sale of uranium extracted from ore bodies in the province under the terms of Part III of the Crown Mineral Royalty Schedule, 1986 (Saskatchewan) (the “**Royalty Schedule**”) as amended. The calculations call for the payment of a basic royalty (currently 5% of gross sales of uranium), reduced by a Saskatchewan resource credit (currently 1% of gross sales of uranium).

The Schedule also provides for additional tiered royalties to become payable as a percentage of revenue after Denison has deducted from revenue its capital costs for mill expansion and mine development in accordance with provisions set out in the Royalty Schedule. Denison currently has sufficient capital recovery banks and anticipates that at current selling prices, it will not be subject to tiered royalties until late in 2009. Following recovery of the capital investment, revenues are subject to an additional tiered royalty as follows:

Average Price per Kilogram of U <sub>3</sub> O <sub>8</sub> * in Cdn \$	Tiered Royalty as a % of Revenues within the Bracket
Up to \$30	0%
\$30 to \$45	6%
\$45 to \$60	10%
More than \$60	15%

\* 1999 bracket value to be indexed annually

### **Canadian Income and Other Taxes**

Denison is subject to capital tax on paid-up capital (as defined in the relevant provincial legislation) in respect of its operations in Saskatchewan and Ontario. In Ontario, Denison currently pays a rate of 0.285% on paid up capital allocated to Ontario in excess of Cdn\$12.5 million and in Saskatchewan pays capital tax of 0.225% on paid up capital allocated to Saskatchewan in excess of Cdn\$20 million. A resource corporation in Saskatchewan also pays a corporate surcharge of between 3.1% and 3.0% of the gross sales to the extent that the amount so calculated exceeds the Saskatchewan capital tax.

Denison is subject to federal and provincial income taxes in Canada. Because of various tax deductions available, Denison was able to shelter its taxable income for fiscal 2008.

### **U.S. Income and Other Taxes**

Denison pays property and sales taxes in each of the states it operates.

The Company's U.S. subsidiaries are subject to U.S. federal and state income tax. The Company was not liable for any regular U.S. federal or state income tax for its fiscal 2008 tax period; however, it did incur a liability for alternate minimum tax.

## **RISK FACTORS**

---

There are a number of factors that could negatively affect Denison's business and the value of Denison's Common Shares, including the factors listed below. The following information pertains to the outlook and conditions currently known to Denison that could have a material impact on the financial condition of Denison. Other factors may arise in the future that are currently not foreseen by management of Denison that may present additional risks in the future. Current and prospective security holders of Denison should carefully consider these risk factors.

### **Current Global Financial Conditions**

Current global financial conditions have been subject to increased volatility and numerous financial institutions have either gone into bankruptcy or have had to be rescued by governmental authorities. Access to financing has been negatively impacted by both sub-prime mortgages and the liquidity crisis affecting the asset-backed commercial paper market and the effect of these events on Canadian and global credit markets. These factors may impact the ability of Denison to obtain equity or debt financing in the future and, if obtained, on terms favourable to Denison. If these increased levels of volatility and market turmoil continue, Denison's operations could be adversely impacted and the trading price of the Common Shares could continue to be adversely affected.

### **Market Price of Shares**

Securities of mining companies have experienced substantial volatility in the past, including during the current credit crisis, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic conditions in North America and globally,

and market perceptions of the attractiveness of particular industries. The price of Denison's securities is also likely to be significantly affected by short-term changes in commodity prices, other mineral prices, currency exchange fluctuation, or in its financial condition or results of operations as reflected in its periodic earnings reports. Other factors unrelated to the performance of Denison that may have an effect on the price of the securities of Denison include the following: the extent of analytical coverage available to investors concerning the business of Denison may be limited if investment banks with research capabilities do not follow Denison's securities; lessening in trading volume and general market interest in Denison's securities may affect an investor's ability to trade significant numbers of securities of Denison; the size of Denison's public float and its inclusion in market indices may limit the ability of some institutions to invest in Denison's securities; and a substantial decline in the price of the securities of Denison that persists for a significant period of time could cause Denison's securities to be delisted from an exchange, further reducing market liquidity. If an active market for the securities of Denison does not continue, the liquidity of an investor's investment may be limited and the price of the securities of the Company may decline. If an active market does not exist, investors may lose their entire investment in the Company. As a result of any of these factors, the market price of the securities of Denison at any given point in time may not accurately reflect the long-term value of Denison. Securities class-action litigation often has been brought against companies following periods of volatility in the market price of their securities. Denison may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

#### **Dilution from Further Equity Financing**

If Denison raises additional funding by issuing additional equity securities, such financing may substantially dilute the interests of shareholders of Denison and reduce the value of their investment.

#### **Volatility and Sensitivity to Prices and Costs**

Because the majority of Denison's revenues are derived from the sale of uranium and vanadium, Denison's net earnings and operating cash flow are closely related and sensitive to fluctuations in the long and short term market price of  $U_3O_8$  and  $V_2O_5$ . Among other factors, these prices also affect the value of Denison's reserves and the market price of Denison's Common Shares. Historically, these prices have fluctuated and have been and will continue to be affected by numerous factors beyond Denison's control.

With respect to uranium, such factors include, among others: demand for nuclear power, political and economic conditions in uranium producing and consuming countries, reprocessing of used reactor fuel and the re-enrichment of depleted uranium tails, sales of excess civilian and military inventories (including from the dismantling of nuclear weapons) by governments and industry participants, uranium supply, including the supply from other secondary sources and production levels and costs of production. With respect to vanadium, such factors include, among others: demand for steel, political and economic conditions in vanadium producing and consuming countries, world production levels and costs of production.

Although Denison employs various pricing mechanisms within its sales contracts to manage its exposure to price fluctuations, there can be no assurance that such a program will be successful.

#### **Ability to Maintain Obligations under Credit Facility and Other Debt**

Denison has borrowed a significant amount of cash under the Credit Facility. Denison is required to satisfy certain financial covenants in order to maintain its good standing under the Credit Facility. Denison may from time to time enter into other arrangements to borrow money in order to fund its operations and expansion plans, and such arrangements may include covenants that have similar obligations or that restrict its business in some way. Events may occur in the future, including events out of Denison's control, that would cause Denison to fail to satisfy its obligations under the Credit Facility or other debt instruments. In such circumstances, the amounts drawn under Denison's debt agreements may

become due and payable before the agreed maturity date and Denison may not have the financial resources to repay such amounts when due. The Credit Facility is secured by all of DMI's property and by a pledge of the shares of DMI, and with the property of its material U.S. subsidiaries. If Denison were to default on its obligations under the Credit Facility or other secured debt instruments in the future, the lender(s) under such debt instruments could enforce their security and seize significant portions of Denison's assets.

### **Competition from Other Energy Sources and Public Acceptance of Nuclear Energy**

Nuclear energy competes with other sources of energy, including oil, natural gas, coal and hydro-electricity. These other energy sources are to some extent interchangeable with nuclear energy, particularly over the longer term. Sustained lower prices of oil, natural gas, coal and hydroelectricity may result in lower demand for uranium concentrates. Technical advancements in renewable and other alternate forms of energy, such as wind and solar power, could make these forms of energy more commercially viable and put additional pressure on the demand for uranium concentrates. Furthermore, growth of the uranium and nuclear power industry will depend upon continued and increased acceptance of nuclear technology as a means of generating electricity. Because of unique political, technological and environmental factors that affect the nuclear industry, the industry is subject to public opinion risks that could have an adverse impact on the demand for nuclear power and increase the regulation of the nuclear power industry.

### **Uranium Industry Competition and International Trade Restrictions**

The international uranium industry, including the supply of uranium concentrates, is competitive. Denison markets uranium in direct competition with supplies available from a relatively small number of western world uranium mining companies, from certain republics of the former Soviet Union and the People's Republic of China, from excess inventories, including inventories made available from decommissioning of nuclear weapons, from reprocessed uranium and plutonium, from used reactor fuel, and from the use of excess Russian enrichment capacity to re-enrich depleted uranium tails held by European enrichers in the form of UF<sub>6</sub>. The supply of uranium from Russia and from certain republics of the former Soviet Union is, to some extent, impeded by a number of international trade agreements and policies. These agreements and any similar future agreements, governmental policies or trade restrictions are beyond the control of Denison and may affect the supply of uranium available in the United States and Europe, which are the largest markets for uranium in the world.

### **Competition for Properties**

Significant competition exists for the limited supply of mineral lands available for acquisition. Many participants in the mining business include large, established companies with long operating histories. The Company may be at a disadvantage in acquiring new properties as many mining companies have greater financial resources and more technical staff. Accordingly, there can be no assurance that the Company will be able to compete successfully to acquire new properties or that any such acquired assets would yield reserves or result in commercial mining operations.

### **Replacement of Reserves and Resources**

McClean Lake, Midwest, Arizona Strip, Colorado Plateau, Henry Mountains, GSJV and Mutanga and Dibwe reserves and resources are Denison's sources of uranium concentrates. Unless other reserves and resources are discovered or extensions to existing ore bodies are found, Denison's sources of production for uranium concentrates will decrease over time as its current reserves and resources are depleted. There can be no assurance that Denison's future exploration, development and acquisition efforts will be successful in replenishing its reserves and resources. In addition, while Denison believes that the Midwest deposit, certain of its US properties, and its Mongolian and Zambian properties will be put into production, there can be no assurance that they will be.

### **Imprecision of Reserve and Resource Estimates**

Reserve and resource figures are estimates, and no assurances can be given that the estimated levels of uranium and vanadium will be produced or that Denison will receive the prices assumed in determining its reserves and resources. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While Denison believes that the reserve and resource estimates included are well established and reflect management's best estimates, by their nature, reserve and resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. Furthermore, market price fluctuations, as well as increased capital or production costs or reduced recovery rates, may render ore reserves and resources containing lower grades of mineralization uneconomic and may ultimately result in a restatement of reserves and resources. The evaluation of reserves or resources is always influenced by economic and technological factors, which may change over time.

### **Decommissioning and Reclamation**

As owner and operator of the White Mesa mill and numerous uranium and uranium/vanadium mines located in the United States and as part owner of the McClean Lake mill, McClean Lake mines, the Midwest uranium project and certain exploration properties, and for so long as the Company remains an owner thereof, the Company is obligated to eventually reclaim or participate in the reclamation of such properties. Most, but not all, of the Company's reclamation obligations are bonded, and cash and other assets of the Company have been reserved to secure this bonded amount. Although the Company's financial statements record a liability for the asset retirement obligation, and the bonding requirements are generally periodically reviewed by applicable regulatory authorities, there can be no assurance or guarantee that the ultimate cost of such reclamation obligations will not exceed the estimated liability contained on the Company's financial statements.

In addition, effective January 20, 2001, the BLM implemented new Surface Management (3809) Regulations pertaining to mining operations conducted on mining claims on public lands. The new 3809 regulations impose additional requirements for permitting of mines on federal lands and may have some impact on the closure and reclamation requirement for Company mines on public lands. If more stringent and costly reclamation requirements are imposed as a result of the new 3809 rules, the amount of reclamation bonds held by the Company and the reclamation liability recorded in the Company's financial statements may need to be increased.

Decommissioning plans for the Company's properties have been filed with applicable regulatory authorities. These regulatory authorities have accepted the decommissioning plans in concept, not upon a detailed performance forecast, which has not yet been generated. As Denison's properties approach or go into decommissioning, further regulatory review of the decommissioning plans may result in additional decommissioning requirements, associated costs and the requirement to provide additional financial assurances. It is not possible to predict what level of decommissioning and reclamation (and financial assurances relating thereto) may be required in the future by regulatory authorities.

### **Technical Obsolescence**

Requirements for Denison's products and services may be affected by technological changes in nuclear reactors, enrichment and used uranium fuel reprocessing. These technological changes could reduce the demand for uranium or reduce the value of Denison's environmental services to potential customers. In addition, Denison's competitors may adopt technological advancements that give them an advantage over Denison.

### **Property Title Risk**

The Company has investigated its rights to explore and exploit all of its material properties and, to the best of its knowledge, those rights are in good standing. However, no assurance can be given that such rights will not be revoked, or significantly altered, to its detriment. There can also be no assurance that the Company's rights will not be challenged or impugned by third parties, including the local governments, and in Canada, by First Nations and Metis.

The validity of unpatented mining claims on U.S. public lands is sometimes uncertain and may be contested. Due to the extensive requirements and associated expense required to obtain and maintain mining rights on U.S. public lands, the Company's U.S. properties may be subject to various uncertainties which are common to the industry, with the attendant risk that its title may be defective.

### **Production Estimates**

Denison prepares estimates of future production for particular operations. No assurance can be given that production estimates will be achieved. Failure to achieve production estimates could have an adverse impact on Denison's future cash flows, earnings, results of operations and financial condition. These production estimates are based on, among other things, the following factors: the accuracy of reserve estimates; the accuracy of assumptions regarding ground conditions and physical characteristics of ores, such as hardness and presence or absence of particular metallurgical characteristics; and the accuracy of estimated rates and costs of mining and processing.

Denison's actual production may vary from estimates for a variety of reasons, including, among others: actual ore mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; short term operating factors relating to the ore reserves, such as the need for sequential development of ore bodies and the processing of new or different ore grades; risk and hazards associated with mining; natural phenomena, such as inclement weather conditions, underground floods, earthquakes, pit wall failures and cave-ins; and unexpected labour shortages or strikes.

### **Mining and Insurance**

Denison's business is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions earthquakes, pit wall failures and cave-ins) and encountering unusual or unexpected geological conditions. Many of the foregoing risks and hazards could result in damage to, or destruction of, Denison's mineral properties or processing facilities, personal injury or death, environmental damage, delays in or interruption of or cessation of production from Denison's mines or processing facilities or in its exploration or development activities, delay in or inability to receive regulatory approvals to transport its uranium concentrates, or costs, monetary losses and potential legal liability and adverse governmental action. In addition, due to the radioactive nature of the materials handled in uranium mining and processing, additional costs and risks are incurred by Denison on a regular and ongoing basis.

Although Denison maintains insurance to cover some of these risks and hazards in amounts it believes to be reasonable, such insurance may not provide adequate coverage in the event of certain circumstances. No assurance can be given that such insurance will continue to be available or it will be available at economically feasible premiums or that it will provide sufficient coverage for losses related to these or other risks and hazards.

Denison may be subject to liability or sustain loss for certain risks and hazards against which it cannot insure or which it may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to Denison.

### **Dependence on Issuance of Licence Amendments and Renewals**

The Company maintains regulatory licences in order to operate its mills at White Mesa and McClean Lake, all of which are subject to renewal from time to time and are required in order for the Company to operate in compliance with applicable laws and regulations. In addition, depending on the Company's business requirements, it may be necessary or desirable to seek amendments to one or more of its licences from time to time. While the Company has been successful in renewing its licences on a timely basis in the past and in obtaining such amendments as have been necessary or desirable, there can be no assurance that such licence renewals and amendments will be issued by applicable regulatory authorities on a timely basis or at all in the future.

### **Nature of Exploration and Development**

Exploration for and development of mineral properties is speculative, and involves significant uncertainties and financial risks that even a combination of careful evaluation, experience and knowledge may not eliminate. While the discovery of an ore body may result in substantial rewards, few properties which are explored are commercially mineable or ultimately developed into producing mines. Major expenses may be required to establish reserves by drilling, constructing mining and processing facilities at a site, developing metallurgical processes and extracting uranium from ore. It is impossible to ensure that the current exploration and development programs of Denison will result in profitable commercial mining operations or that current production at existing mining operations will be replaced with new reserves.

Denison's ability to sustain or increase its present levels of uranium production is dependent in part on the successful development of new ore bodies and/or expansion of existing mining operations. The economic feasibility of development projects is based upon many factors, including, among others: the accuracy of reserve estimates; metallurgical recoveries; capital and operating costs of such projects; government regulations relating to prices, taxes, royalties, infrastructure, land tenure, land use, importing and exporting, and environmental protection; and uranium prices, which are historically cyclical. Development projects are also subject to the successful completion of engineering studies, issuance of necessary governmental permits and availability of adequate financing.

Development projects have no operating history upon which to base estimates of future cash flow. Denison's estimates of proven and probable reserves and cash operating costs are, to a large extent, based upon detailed geological and engineering analysis. Denison also conducts feasibility studies which derive estimates of capital and operating costs based upon many factors, including, among others: anticipated tonnage and grades of ore to be mined and processed; the configuration of the ore body; ground and mining conditions; expected recovery rates of the uranium from the ore; and alternate mining methods.

It is possible that actual costs and economic returns of current and new mining operations may differ materially from Denison's best estimates. It is not unusual in the mining industry for new mining operations to experience unexpected problems during the start-up phase, take much longer time than originally anticipated to bring into a producing phase, and to require more capital than anticipated.

### **Governmental Regulation and Policy Risks**

The Company's mining and milling operations and exploration activities, as well as the transportation and handling of the products produced, are subject to extensive regulation by state, provincial and federal governments. Such regulations relate to production, development, exploration, exports, imports, taxes and royalties, labour standards, occupational health, waste disposal, protection and remediation of the environment, mine decommissioning and reclamation, mine safety, toxic substances, transportation safety and emergency response, and other matters. Compliance with such laws and regulations has increased the costs of exploring, drilling, developing, constructing, operating and closing Denison's mines and processing facilities. It is possible that, in the future, the costs, delays and other effects associated with such laws and regulations may impact Denison's decision as to whether to operate existing mines, or,

with respect to exploration and development properties, whether to proceed with exploration or development, or that such laws and regulations may result in Denison incurring significant costs to remediate or decommission properties that do not comply with applicable environmental standards at such time. Denison expends significant financial and managerial resources to comply with such laws and regulations. Denison anticipates it will have to continue to do so as the historic trend toward stricter government regulation may continue. Because legal requirements are frequently changing and subject to interpretation, Denison is unable to predict the ultimate cost of compliance with these requirements or their effect on operations. Furthermore, future changes in governments, regulations and policies, such as those affecting Denison's mining operations and uranium transport could materially and adversely affect Denison's results of operations and financial condition in a particular period or its long term business prospects.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions. These actions may result in orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Companies engaged in uranium exploration operations may be required to compensate others who suffer loss or damage by reason of such activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Worldwide demand for uranium is directly tied to the demand for electricity produced by the nuclear power industry, which is also subject to extensive government regulation and policies. The development of mines and related facilities is contingent upon governmental approvals that are complex and time consuming to obtain and which, depending upon the location of the project, involve multiple governmental agencies. The duration and success of such approvals are subject to many variables outside Denison's control. Any significant delays in obtaining or renewing such permits or licences in the future could have a material adverse effect on Denison. In addition, the international marketing of uranium is subject to governmental policies and certain trade restrictions, such as those imposed by the suspension agreement between the United States and Russia and the agreement between the United States and Russia related to the supply of Russian HEU into the United States. Changes in these policies and restrictions may adversely impact Denison's business.

### **Operations in Foreign Jurisdictions**

The Company owns uranium properties directly and through joint venture interests and is undertaking uranium development programs in Mongolia and Zambia. As with any foreign operation, these international properties and interests are subject to certain risks, such as the possibility of adverse political and economic developments, foreign currency controls and fluctuations, as well as risks of war and civil disturbances. Other events may limit or disrupt activities on these properties, restrict the movement of funds, result in a deprivation of contract rights or the taking of property or an interest therein by nationalization or expropriation without fair compensation, increases in taxation or the placing of limits on repatriations of earnings. No assurance can be given that current policies of Mongolia or Zambia or the political situations within these countries will not change so as to adversely affect the value or continued viability of the Company's interest in these assets.

In addition, the Company may become involved in a dispute with respect to one of its foreign operations and may become subject to the exclusive jurisdiction of a foreign court or may find that it is not successful in subjecting foreign persons to the jurisdiction of the courts in Canada. The Company may also be precluded from enforcing its rights with respect to a government entity because of the doctrine of sovereign immunity.

### **Environmental, Health and Safety Risks**

Denison has expended significant financial and managerial resources to comply with environmental protection laws, regulations and permitting requirements in each jurisdiction where it operates, and anticipates that it will be required to continue to do so in the future as the historical trend toward stricter environmental regulation may continue. The uranium industry is subject to, not only the worker health, safety and environmental risks associated with all mining businesses, including potential liabilities to third parties for environmental damage, but also to additional risks uniquely associated with uranium mining and processing. The possibility of more stringent regulations exists in the areas of worker health and safety, the disposition of wastes, the decommissioning and reclamation of mining and processing sites, and other environmental matters each of which could have a material adverse effect on the costs or the viability of a particular project.

Denison's facilities operate under various operating and environmental permits, licences and approvals that contain conditions that must be met, and Denison's right to continue operating its facilities is, in a number of instances, dependent upon compliance with such conditions. Failure to meet any such condition could have a material adverse effect on Denison's financial condition or results of operations.

Although the Company believes its operations are in compliance, in all material respects, with all relevant permits, licences and regulations involving worker health and safety as well as the environment, there can be no assurance regarding continued compliance or ability of the Company to meet stricter environmental regulation, which may also require the expenditure of significant additional financial and managerial resources.

### **Aboriginal Title and Consultation Issues**

First Nations and Métis title claims as well as related consultation issues may impact Denison's ability and that of its joint venture partners to pursue exploration, development and mining at its Saskatchewan properties. Pursuant to historical treaties, First Nations bands in Northern Saskatchewan ceded title to most traditional lands but continue to assert title to the minerals within the lands. Managing relations with the local native bands is a matter of paramount importance to Denison. There may be no assurance however that title claims as well as related consultation issues will not arise on or with respect to the Company's properties.

### **Accounting Policies**

The accounting policies and methods employed by the Company determine how it reports its financial condition and results of operations, and they may require management to make judgements or rely on assumptions about matters that are inherently uncertain. The Company's results of operations are reported using policies and methods in accordance with Canadian GAAP. Management of Denison exercises judgement in applying accounting methods to ensure that, while GAAP compliant, they reflect the most appropriate manner in which to record the Company's financial condition and operating results. In certain instances, Canadian GAAP allows accounting policies and methods to be selected from two or more alternatives, any of which might be reasonable but may result in Denison reporting materially different amounts. Management regularly re-evaluates its assumptions but the choice of method or policy employed may have a significant impact on the actual values reported.

### **Credit Risk**

Denison's sales of uranium and vanadium products and its environmental services expose Denison to the risk of non-payment. Denison manages this risk by monitoring the credit worthiness of its customers and requiring pre-payment or other forms of payment security from customers with an unacceptable level of credit risk.

Although Denison seeks to manage its credit risk exposure, there can be no assurance that Denison will be successful and that some of Denison's customers will fail to pay for the uranium or vanadium purchased or the environmental services provided.

### **Currency Fluctuations**

Most of Denison's revenue is denominated in U.S. dollars; however, its operating costs are incurred in the currencies of the United States, Canada, Mongolia and Zambia. Consequently, changes in the relative value of the different currencies affect Denison's earnings and cash flows.

### **Capital Intensive Industry; Uncertainty of Funding**

The exploration and development of mineral properties and the ongoing operation of mines requires a substantial amount of capital and may depend on Denison's ability to obtain financing through joint ventures, debt financing, equity financing or other means. General market conditions, volatile uranium and vanadium markets, a claim against the Company, a significant disruption to the Company's business or operations or other factors may make it difficult to secure financing necessary to the expansion of mining activities or to take advantage of opportunities for acquisitions. There is no assurance that the Company will be successful in obtaining required financing as and when needed on acceptable terms.

### **Dependence on Key Personnel and Qualified and Experienced Employees**

Denison's success will largely depend on the efforts and abilities of certain senior officers and key employees. Certain of these individuals have significant experience in the uranium industry. The number of individuals with significant experience in this industry is small. While Denison does not foresee any reason why such officers and key employees will not remain with Denison, if for any reason they do not, Denison could be adversely affected. Denison has not purchased key man life insurance for any of these individuals.

Denison's success will also depend on the availability of qualified and experienced employees to work in Denison's operations and Denison's ability to attract and retain such employees. The number of individuals with relevant mining and operational experience in this industry is small.

### **Internal Controls**

Internal controls over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance with respect to the reliability of financial reporting and financial statement preparation.

### **Conflicts of Interest**

Some of the directors of Denison are also directors of other companies that are similarly engaged in the business of acquiring, exploring and developing natural resource properties. Such associations may give rise to conflicts of interest from time to time. In particular, one of the consequences will be that corporate opportunities presented to a director of Denison may be offered to another company or companies with which the director is associated, and may not be presented or made available to Denison. The directors of Denison are required by law to act honestly and in good faith with a view to the best interests of Denison, to disclose any interest which they may have in any project or opportunity of Denison, and to abstain from voting on such matter. Conflicts of interest that arise will be subject to and governed by the procedures prescribed by the OBCA.

### **Reliance on ARC as Operator**

As ARC is the operator and majority owner of the McClean Lake and Midwest properties in Saskatchewan, Canada, Denison is and will be, to a certain extent, dependent on ARC for the nature and timing of activities related to these properties and may be unable to direct or control such activities.

### **Labour Relations**

Both the McClean Lake mill and the Midwest properties employ unionized workers who work under collective agreements. ARC, as the operator of both of these projects, is responsible for all dealings with unionized employees. ARC may not be successful in its attempts to renegotiate the collective agreements, which may impact mill and mining operations. Any lengthy work stoppages may have a material adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

### **Indemnities**

As part of a reorganization in 2004, DMI acquired from Denison Energy all of Denison Energy's mining and environmental services assets and agreed to assume all debts, liabilities and obligations relating to such assets before the date of the reorganization. In addition, DMI agreed to provide certain indemnities in favour of Denison Energy for certain claims and losses relating to matters with respect to Denison Energy's mining business prior to the date of the arrangement, to breaches by DMI of certain of its agreements, covenants, representations and warranties in the agreements governing such reorganization, and to damages caused by breaches by DMI of its representations and warranties in certain agreements related to such arrangement. Denison cannot predict the outcome or the ultimate impact of any legal or regulatory proceeding against Denison or affecting the business of Denison and cannot predict the potential liabilities associated with the indemnities provided in favour of Denison Energy. Consequently, there can be no assurance that the legal or regulatory proceedings referred to in this AIF or any such proceedings that may arise in the future will be resolved without a material adverse effect on the business, financial condition, results of operation or cash flows of Denison.

## **DESCRIPTION OF SECURITIES**

---

### *Common Shares*

The holders of Common Shares are entitled to receive notice of, and to one vote per share at, every meeting of shareholders of Denison, to receive such dividends as the Board of Directors declares and to share equally in the assets of Denison remaining upon the liquidation, dissolution or winding up of Denison after the creditors of Denison have been satisfied. As of December 31, 2008, Denison had an aggregate of 197,295,415 Common Shares issued and outstanding. As at March 26, 2009, Denison had an aggregate of 226,045,415 Common Shares issued and outstanding. The Common Shares trade on the Toronto Stock Exchange under the symbol "DML" and on the NYSE Amex under the symbol "DNN".

### *2004 Warrants*

On November 24, 2004, DMI issued 1,100,001 common share purchase warrants (the "**2004 Warrants**"). The 2004 Warrants expire on November 24, 2009. Upon issue, each 2004 Warrant entitled the holder to acquire one common share of DMI at a price of Cdn\$15.00.

The 2004 Warrants traded on the TSX under the symbol "DEN.WT" until December 6, 2006. As part of the Denison Arrangement, the Company agreed to assume the obligations relating to the 2004 Warrants and to issue Common Shares to holders upon exercise. Accordingly, effective December 1, 2006, each

2004 Warrant entitles the holder to acquire 2.88 Common Shares of Denison at a price of Cdn\$15.00. As a result of the Denison Arrangement, the 2004 Warrants continued trading under the symbol “DML.WT.” Except as stated, no other terms of the 2004 Warrants were changed.

As at December 31, 2008, an aggregate of 1,096,151 2004 Warrants were outstanding, and as at March 26, 2009, an aggregate of 1,096,151 2004 Warrants were outstanding.

### ***2006 Warrants***

On March 1, 2006, DMI issued 2,225,000 common share purchase warrants (the “**2006 Warrants**”). The 2006 Warrants expire on March 1, 2011. Each 2006 Warrant entitled the holder to acquire one common share of DMI at a price of Cdn\$30.00. The 2006 Warrants were listed on the TSX on March 1, 2006 and traded under the symbol “DEN.WT.A.”

As part of the Denison Arrangement, the Company agreed to assume the obligations relating to the 2006 Warrants and to issue Common Shares to holders upon exercise. Accordingly, effective December 1, 2006, each 2006 Warrant entitles the holder to acquire 2.88 Common Shares of Denison at a price of C\$30.00. As a result of the Denison Arrangement, the 2006 Warrants continued trading under the symbol “DML.WT.A.” Except as stated, no other terms of the 2006 Warrants were changed.

As at December 31, 2008, an aggregate of 2,225,000 2006 Warrants were outstanding, and as at March 26, 2009, an aggregate of 2,225,000 2006 Warrants were outstanding.

### ***Dividend Policy***

Holders of Common Shares are entitled to receive dividends if, as and when declared by the Board of Directors. The Directors have adopted a policy of dedicating cash flow to reinvestment in the business. Accordingly, no dividends have been declared to date. Further, the Company is restricted from paying dividends under its Credit Agreement.

### ***Market for Securities***

#### **Trading Price and Volume of the Common Shares**

The following table sets forth, for the months indicated, the high and low closing sale prices and trading volumes for the Common Shares, as reported on the TSX:

Month	Common Shares	
	Cdn\$ Price Range	Trading Volume ('000s)
2008		
January	6.37 – 9.35	27,827
February	6.19 – 9.50	50,065
March	6.48 – 9.24	27,961
April	6.59 – 7.76	35,783
May	6.65 – 8.75	36,610
June	6.97 – 8.91	18,154
July	6.56 – 8.70	22,788
August	5.30 – 6.56	24,594
September	3.14 – 5.73	27,876
October	1.31 – 3.00	39,416
November	0.99 – 1.83	45,684
December	0.72 – 1.46	42,046

Data supplied by the TSX.

## Trading Price and Volume of the 2004 Warrants and the 2006 Warrants

The following table sets forth, for the months indicated, the high and low closing sale prices and trading volumes for the 2004 Warrants and the 2006 Warrants as reported on the TSX.

Month	2006 Warrants		2004 Warrants	
	Cdn\$ Price Range	Trading Volume ('000s)	Cdn\$ Price Range	Trading Volume ('000s)
2008				
January	4.84 – 10.05	38	6.44 – 13.31	198
February	4.43 – 7.90	60	6.75 – 13.45	82
March	5.30 – 8.60	71	7.50 – 13.00	69
April	5.00 – 6.40	19	7.00 – 10.50	38
May	6.00 – 7.66	69	7.20 – 12.25	53
June	5.55 – 8.00	16	8.50 – 11.75	60
July	4.85 – 7.95	40	7.12 – 11.00	26
August	3.40 – 4.92	38	4.15 – 7.25	62
September	1.25 – 4.00	58	1.20 – 4.77	102
October	0.20 – 1.01	218	0.33 – 1.12	139
November	0.22 – 0.52	75	0.20 – 0.75	44
December	0.20 – 0.50	73	0.10 – 0.40	229

Data supplied by the TSX.

## DIRECTORS AND OFFICERS

### Directors

The following table sets out the names and the provinces and countries of residence of each of the directors of Denison, their respective positions and offices held with Denison and their principal occupations as of the date hereof. The following table also identifies the members of each committee of the Board of Directors.

Name and Province and Country of Residence	Principal Occupation and Employment for Past Five Years	Director Since <sup>(1)</sup>
CRAIG, JOHN H. <sup>(2,4)</sup> Ontario, Canada	Lawyer, Partner, Cassels Brock & Blackwell LLP.	1997
W. ROBERT DENGLER <sup>(3,4)</sup> Ontario, Canada	Corporate Director, commencing in 2006; prior: Vice-Chairman and Director of Dynatec Corporation in 2005; President and Chief Executive Officer of Dynatec Corporation.	2006
BRIAN D. EDGAR <sup>(2)</sup> British Columbia, Canada	President and Chief Executive Officer of Dome Ventures Corporation.	2005
E. PETER FARMER Ontario, Canada	Chief Executive Officer of the Company, commencing in 2006; prior: President and Chief Executive Officer and Director of DMI from 2003-2006; President and Chief Executive Officer and Director of Denison Energy from 2002-2004.	2006
RON F. HOCHSTEIN <sup>(4)</sup> British Columbia, Canada	President and Chief Operating Officer of the Company, commencing 2006; prior: President and Chief Executive Officer and Director of the Company.	2000
PAUL F. LITTLE <sup>(3,5)</sup> Ontario, Canada	Lead Director of the Company; Corporate Director and Financial Consultant; prior: Chairman of the Board of DMI from 2004-2006.	2006

<b>Name and Province and Country of Residence</b>	<b>Principal Occupation and Employment for Past Five Years</b>	<b>Director Since<sup>(1)</sup></b>
LUKAS H. LUNDIN <sup>(3)</sup> British Columbia, Canada	Chairman of the Board of the Company; Mining Executive.	1997
WILLIAM A. RAND <sup>(5)</sup> British Columbia, Canada	Director of Rand Edgar Investment Corp.	1997
ROY J. ROMANOW P.C., O.C., Q.C. <sup>(2)</sup> Saskatchewan, Canada	Senior Fellow, Department of Political Studies, University of Saskatchewan.	2006
CATHERINE J. G. STEFAN <sup>(5,6)</sup> Ontario, Canada	President, Stefan & Associates.	2006

**Notes:**

- (1) The term of office of each of the directors of Denison will expire at the Annual Meeting of the shareholders to be held on April 30, 2009.
- (2) Member, Corporate Governance and Nominating Committee
- (3) Member, Compensation Committee
- (4) Member, Environment, Health and Safety Committee
- (5) Member, Audit Committee
- (6) Chair, Audit Committee

***Executive Officers***

The following table sets out the names and the provinces and countries of residence of each of the executive officers of Denison, their respective positions and offices held with Denison and their principal occupations as of the date hereof. Messrs. Farmer and Hochstein, the Chief Executive Officer and President and Chief Operating Officer of the Company, respectively, are discussed under “Directors” above.

<b>Name and Province and Country of Residence</b>	<b>Position with Denison and Employment for Past Five Years</b>
JAMES R. ANDERSON Ontario, Canada	Executive Vice President and Chief Financial Officer, commencing in 2006; prior: Executive Vice President and Chief Financial Officer of DMI from 2004 – 2006; Managing Director of Excel Energy Group Inc. from 2003 – 2004.
PHILIP G. BUCK Colorado, U.S.A.	Vice President, Mining, commencing in January, 2008; prior: General Manager, Canada Dynatec Corporation from 2006 – 2008; prior: Area Manager of Dynatec 2003 – 2005; Project Manager for Barrick Gold Corporation 2001 – 2003
DONALD C. CAMPBELL Ontario, Canada	Vice President, Commercial, commencing in 2006; prior: Vice President, Marketing and Special Projects of DMI from 2004 - 2006 and of Denison Energy and its predecessor from 1993 – 2004.
ANDRE DESAUTELS Ontario, Canada	Vice President, General Counsel and Corporate Secretary, commencing 2008; prior: member of the New Media Executive Team at Canwest Publishing Inc., 2005 - 2008; prior: Associate General Counsel, Canadian division of Time Warner Inc, 2001-2005.
DAVID C. FRYDENLUND Colorado, U.S.A.	Vice-President, U.S. Legal and Regulatory Affairs and Assistant Corporate Secretary, commencing 2006; prior: Vice-President and General Counsel and Corporate Secretary of the Company from 1997 – 2006; Chief Financial Officer and Treasurer of the Company from 2000 – 2005; Director of the Company from 1997 – 2006.
WILLIAM C. KERR Ontario, Canada	Vice-President, Exploration, commencing 2006; prior: Vice-President Exploration and Development for DMI in 2006; Director, Resources for DMI from 2004 – 2006; Director, Resource Evaluation for Denison Energy and its predecessor from 1997 – 2003.

**Name and Province and  
Country of Residence**

**Position with Denison and Employment for Past Five Years**

HAROLD R. ROBERTS  
Colorado, U.S.A.

Executive Vice President, U.S. Operations, commencing 2006; prior: Vice President, Corporate Development of International Uranium (USA) Corporation ("IUSA") from 2005 – 2006; Consultant to the Company 2003 – 2004; Vice President, Corporate Development of IUSA from 2001 – 2003.

CURT D. STEEL  
Connecticut, U.S.A.

Vice President, Sales and Marketing, commencing in 2008; prior: Senior Trader, NUKEM Inc. from 1998 – 2007.

---

As of March 26, 2009, the directors and executive officers of Denison, as a group, beneficially own or exercise control over, directly or indirectly, 3,168,631 Common Shares or about 1% of the Common Shares of Denison as of the date of this AIF. No single director or officer owns or exercises control of, directly or indirectly, 1% or more of the Common Shares as of the date of this AIF. The information as to Common Shares beneficially owned or over which the directors and officers exercise control or direction, not being within the knowledge of the Company, has been furnished by each such individual.

**Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

Other than as referred to below, no director or executive officer of the Company or a shareholder holding a sufficient number of securities of Denison to affect materially the control of Denison:

- (a) is, at the date of this AIF, or has, within the previous ten year period, been a director or officer of any company, that, while the person was acting in that capacity:
  - (i) was the subject of a cease trade or similar order or an order that denied the relevant company access to any exemptions under applicable securities legislation for a period of more than 30 consecutive days;
  - (ii) was subject to an event that resulted, after the director or executive officer ceased to be a director or officer, in the company being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemptions under applicable securities legislation for a period of more than 30 consecutive days; or
  - (iii) within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
  
- (b) has, within the previous ten year period, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

Messrs. Rand and Edgar are currently and were directors of New West Energy Services Inc. (TSX-V), when on September 5, 2006, a cease trade order was issued by the British Columbia Securities Commission against that company for its failure to file financial statements within the prescribed time. The default was rectified and the order was rescinded on November 9, 2006.

**Conflicts of Interest**

Some of Denison's directors are also directors and officers of other natural resource companies and, consequently, there exists the possibility for such directors and officers to be in a position of conflict relating to any future transactions or relationships between the Company or common third parties. However, the Company is unaware of any such pending or existing conflicts between these parties. Any decision made by any of such directors and officers involving the Company are made in accordance with

their duties and obligations to deal fairly and in good faith with the Company and such other companies. In addition, each of the directors of the Company discloses and refrains from voting on any matter in which such director may have a conflict of interest.

None of the present directors, senior officers or principal shareholders of the Company and no associate or affiliate of any of them has any material interest in any transaction of the Company or in any proposed transaction which has materially affected or will materially affect the Company except as described herein.

During the 15-month period ending December 31, 2006, the Company incurred legal fees of \$292,000 with a law firm of which John H. Craig, a director of the Company. No amounts were incurred with this firm for the financial years ending December 31, 2007 and 2008.

During the 12-month period ending December 31, 2008, the Company incurred management and administrative service fees of \$162,000 with a company owned by the Chairman of the Company, which provides investor relations, office premises, secretarial and other services in Vancouver. No amounts were due to this company as of December 31, 2008.

## STANDING COMMITTEES

---

### *The Audit Committee*

#### **Overview**

The audit committee of the Company's Board of Directors is principally responsible for:

- recommending to the Company's Board of Directors the external auditor to be nominated for election by the Company's shareholders at each annual general meeting and negotiating the compensation of such external auditor;
- overseeing the work of the external auditor;
- reviewing the Company's annual and interim financial statements, MD&A and press releases regarding earnings before they are reviewed and approved by the Board of Directors and publicly disseminated by the Company; and
- reviewing the Company's financial reporting procedures for the Company's public disclosure of financial information extracted or derived from its financial statements.

#### **Audit Committee Mandate/Terms of Reference**

The Company's Board of Directors has adopted an audit committee mandate/terms of reference (the "**Mandate**") which sets out the audit committee's mandate, organization, powers and responsibilities. The complete Mandate is attached as Schedule A to this AIF.

#### **Composition of the Audit Committee**

Below are the details of each audit committee member, including his or her name, whether she or he is independent and financially literate as such terms are defined under National Instrument 52-110 - *Audit Committees of the Canadian Securities Administrators* ("**NI 52-110**") and his or her education and experience as it relates to the performance of his or her duties as an audit committee member. All three audit committee members have "financial expertise" within the meaning of the U.S. Sarbanes-Oxley Act of 2002 and are financially literate under NI 52-110. The qualifications and independence of each member is discussed below and in the Company's Management Proxy Circular dated March 23, 2009 (the

“Circular”), a copy of which is available on the Company’s profile on the SEDAR website at [www.sedar.com](http://www.sedar.com).

<u>Member Name</u>	<u>Independent</u> <sup>(1)</sup>	<u>Financially Literate</u> <sup>(2)</sup>	<u>Education &amp; Experience Relevant to Performance of Audit Committee Duties</u>
Paul F. Little	Yes	Yes	<ul style="list-style-type: none"> <li>Chartered Accountant (ICAO)</li> <li>M.B.A. (Finance)</li> <li>Held position of Chief Financial Officer of one public company and two private companies.</li> </ul>
Catherine J.G. Stefan, Chair of the Audit Committee	Yes	Yes	<ul style="list-style-type: none"> <li>Chartered Accountant (ICAO)</li> <li>B.Comm</li> <li>Held position of Senior Vice President, O&amp;Y Properties Inc., President of Stefan &amp; Associates and Executive Vice-President of Bramalea Group, Chair, Tax Committee of the Canadian Institute of Public Real Estate Companies (CIPREC).</li> </ul>
William A. Rand	Yes	Yes	<ul style="list-style-type: none"> <li>B.Comm (Accounting)</li> <li>Two law degrees, with extensive corporate finance experience</li> <li>Has served on audit committees of a number of public companies</li> </ul>

- (1) To be considered independent, a member of the Committee must not have any direct or indirect “material relationship” with the Company. A material relationship is a relationship which could, in the view of the Board of Directors of the Company, reasonably interfere with the exercise of a member’s independent judgment.
- (2) To be considered financially literate, a member of the Committee must have the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company’s financial statements.

### **Reliance on Certain Exemptions**

Since the commencement of the Company’s most recently completed financial year, the Company has not relied on the exemption in Section 2.4 (De Minimis Non-audit Services), Section 3.2 (Initial Public Offerings), Section 3.4 (Events Outside Control of Member), Section 3.5 (Death, Disability or Resignation of Audit Committee Member) of NI 52-110 or an exemption from NI 52-110, in whole or in part, granted under Part 8 (Exemptions) of NI 52-110.

### **Audit Committee Oversight**

Since the commencement of the Company’s most recently completed financial year, there has not been a recommendation of the Audit Committee to nominate or compensate an internal auditor which was not adopted by the Company’s Board of Directors.

### **Pre-Approval Policies and Procedures**

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services as described in Section D of the Mandate.

### **External Auditor Service Fees (By Category)**

The following table discloses the fees billed to the Company by its external auditor during the last two fiscal years. Services were billed and paid in Canadian dollars and have been translated into U.S. dollars using an average annual exchange rate of: \$1.0660 for 2008 and \$1.0749 for 2007. The Company’s external auditor was also the auditor for DMI prior to the Denison Arrangement.

<b>Financial Year Ending</b>	<b>Audit Fees<sup>(1)</sup></b>	<b>Audit Related Fees<sup>(2)</sup></b>	<b>Tax Fees<sup>(3)</sup></b>	<b>All Other Fees<sup>(4)</sup></b>
December 31, 2007	\$ 301,882	\$ 247,832	\$ 108,889	\$ 29,710
December 31, 2008	402,586	163,037	203,403	38,884

**Notes:**

- (1) The aggregate fees billed for audit services.
- (2) The aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the company's financial statements and are not disclosed in the Audit Fees column.
- (3) The aggregate fees billed for tax compliance, tax advice, and tax planning services.
- (4) The aggregate fees billed for professional services other than those listed in the other three columns. For 2008, "All Other Fees" relates to assisting the Company with the adoption of International Financial Reporting Standards. For 2007, "All Other Fees" relates to due diligence reporting of the Denison Arrangement.

### ***Other Board Committees***

The Board currently has three other standing committees in addition to the Audit Committee, namely the Corporate Governance and Nominating Committee, the Compensation Committee and the Environment, Health and Safety Committee. Each standing committee of the Board operates according to its mandate, approved by the Board, which sets out the committee's duties and responsibilities. A discussion of each committee and its composition can be found in the Circular.

## **LEGAL PROCEEDINGS**

The Company is not currently a party to any material legal proceedings. However, from time to time, the Company may become party to routine litigation incidental to Denison's business. DMI has provided certain indemnities in favour of Denison Energy against any future liabilities it may incur related to the assets and liabilities transferred to DMI on March 8, 2004.

## **INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Other than as disclosed in this AIF, none of the directors, executive officers or principal shareholders of Denison, and no associate or affiliate of any of them, has or has had, within the three most recently completed financial years or during the current financial year, any material interest in any transaction which materially affects Denison.

## **REGISTRAR AND TRANSFER AGENT**

Computershare Investor Services Inc. acts as the registrar and transfer agent for the Common Shares and 2004 Warrants and the 2006 Warrants. The address for Computershare Investor Services Inc. is 100 University Avenue, 9th Floor, Toronto, ON, M5J 2Y1, Canada, and the telephone number is 1-800-564-6253.

## **MATERIAL CONTRACTS**

Reference is made to the material contracts which have been filed by Denison with the Canadian securities regulatory authorities on the SEDAR website at [www.sedar.com](http://www.sedar.com).

Below are the particulars of each contract, other than those entered into in the ordinary course of business, that is material to Denison and that was entered into between January 1, 2008 and December 31, 2008 or was entered into before those dates but is still in effect. No disclosure is made regarding any contract that was entered into before January 1, 2002.

1. The Reclamation Funding Agreement made as of the 21<sup>st</sup> day of December 1995 among DML, Her Majesty the Queen in Right of Canada (the “**Government of Canada**”) and Her Majesty the Queen in right of the Province of Ontario (the “**Government of Ontario**”) as amended by the Amending Agreement made as of the 11<sup>th</sup> day of April 1997 among DML, the Government of Canada and the Government of Ontario and as further amended by the Amending Agreement made as of the 25<sup>th</sup> day of February 1999 among DML, the Government of Canada and the Government of Ontario and further amended by an Assignment and Novation Agreement made as of the 29<sup>th</sup> day of December, 2003 among Denison Energy, the Company, the Government of Canada and the Government of Ontario.

According to the Reclamation Funding Agreement, the Company is required to maintain funds in an Environmental Trust sufficient for the succeeding 6 years of the estimated reclamation and on-going care and monitoring expenditures for the Company’s closed Elliot Lake mining facility.

2. The Arrangement Agreement dated as of September 18, 2006, as amended and restated as of October 16, 2006, with effect as and from September 18, 2006, among DMI, IUC and IUC Subco. A copy of this agreement, as amended, was filed on the Company’s profile on the SEDAR website at [www.sedar.com](http://www.sedar.com) on October 25, 2006.

According to the Arrangement Agreement, IUC, DMI and IUC Subco completed the Denison Arrangement pursuant to which DMI and IUC Subco amalgamated, and each shareholder of DMI received 2.88 Common Shares of IUC for each share of DMI held. In addition, pursuant to the Arrangement Agreement, IUC filed Articles of Amendment to change IUC’s name to “Denison Mines Corp.”.

3. The Credit Facility dated as of June 30, 2008

According to the Credit Facility, The Bank of Nova Scotia has agreed to provide Denison with a \$125,000,000 revolving term credit facility. The Credit Facility is repayable in full on June 30, 2011. The borrower under the Credit Facility is DMI and the Company has provided an unlimited full recourse guarantee and a pledge of all of the shares of DMI. DMI has provided a first priority security interest in all present and future personal property and an assignment of its rights and interests under all material agreements relative to the McClean Lake and the Midwest projects. In addition, each of the Company’s material U.S. subsidiaries has provided an unlimited full recourse guarantee secured by a pledge of all of its shares and a first priority security interest in all of its present and future personal property. The Company is required to maintain certain financial covenants on a consolidated basis.

## **NAMES AND INTERESTS OF EXPERTS**

---

PricewaterhouseCoopers LLP is the auditor of the Company and audited the consolidated financial statements of the Company as at and for the year ended December 31, 2008, parts of which are incorporated by reference herein as provided.

PricewaterhouseCoopers LLP is an independent auditor within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of Ontario.

William C. Kerr, Vice-President Exploration of Denison, who is a "qualified person" within the meaning of this term in NI 43-101, has prepared sections of this AIF that are of a scientific or technical nature. To the knowledge of Denison, William Kerr beneficially owns, directly or indirectly, less than one percent of the outstanding Common Shares.

The Arizona Strip Technical Report, Elliot Lake Report, Mongolia Technical Report, Henry Mountains Technical Report, McClean Technical Report, the McClean North Technical Report, the Sue D Report, the Midwest Technical Report and the Tony M Report were prepared by Lawrence B. Cochrane, Ph.D., P.Eng., Luke Evans, M.Sc., P.Eng., Neil N. Gow, P.Geo., James W. Hendry, P.Eng., Leo R. Hwozdyk, P.Eng., Thomas C. Pool, P.E., David A. Ross, P.Geo., Richard E. Routledge, M.Sc., P.Geo., Douglas H. Underhill, Ph.D., C.P.G. and William Roscoe, Ph.D., P.Eng. of Scott Wilson RPA, which was retained to independently review and audit the reserves and resources in accordance with the requirements of NI 43-101.

The Midwest A Technical Report was prepared by Michel Dagbert, P.Eng. of Geostat, which was retained to independently review and audit the reserves in accordance with the requirements of NI 43-101.

The Mutanga Technical Report was prepared by Malcolm Titley, B.Sc. (Geology and Chemistry), MAusIMM, MAIG, of CSA Global, which was retained to independently review and audit the reserves and resources in accordance with the requirements of NI 43-101.

To the knowledge of Denison as of the date hereof, the partners, employees and consultants of each of Scott Wilson RPA, Geostat and CSA Global who participated in the preparation of the aforementioned reports, or who were in a position to influence the outcome of such reports and each of Scott Wilson RPA, Geostat and CSA Global beneficially own, directly or indirectly, less than one percent of the outstanding Common Shares.

## **ADDITIONAL INFORMATION**

---

Additional information regarding the Company is available on the SEDAR website at [www.sedar.com](http://www.sedar.com). Further information concerning the Company, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities and interests of insiders in material transactions, where applicable, will be contained in the Circular for the Annual General Meeting of Shareholders to be held on April 30, 2009. Additional financial information is provided in the Company's Financial Statements and MD&A for the 12-months ended December 31, 2008.

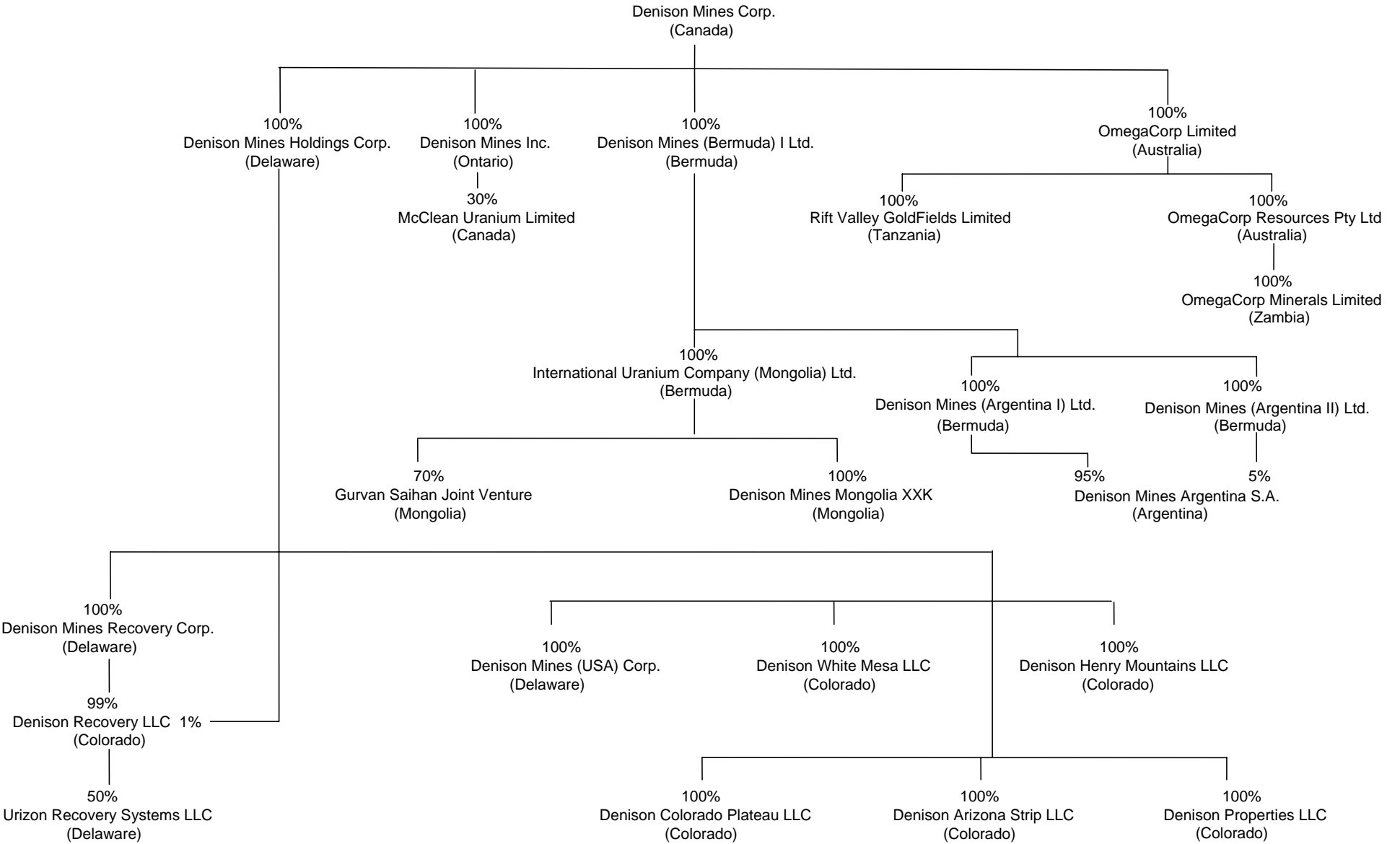
A copy of this AIF, as well as the Circular and such other information and documentation that the Company makes available via SEDAR, can be found at [www.sedar.com](http://www.sedar.com). Certain of this information is distributed to shareholders in connection with Denison's Annual General Meeting of Shareholders. The Company will provide any of the foregoing documents subject to its rights to require people who are not security holders of the Company to pay a reasonable charge. Copies of these documents may be obtained by writing to:

Corporate Secretary  
Denison Mines Corp.  
Atrium on Bay

Suite 402  
595 Bay Street  
Toronto, Ontario  
M5G 2C2

Telephone: (416) 979-1991 Ext. 235  
Facsimile: (416) 979-5893  
Email: [adesautels@denisonmines.com](mailto:adesautels@denisonmines.com)

**EXHIBIT 1 – ORGANIZATIONAL STRUCTURE  
AS AT DECEMBER 31, 2008**



## SCHEDULE A

### Denison Mines Corp. Audit Committee Mandate and Charter

#### A. Composition of the Committee

- (1) The Board shall appoint annually from among its members at the first meeting of the Board following the annual meeting of the shareholders a committee to be known as the Audit Committee (the “Committee”) to be composed of three (3) directors or such other number not less than three (3) as the Board may from time to time determine.
- (2) Any member of the Committee may be removed or replaced at any time by the Board. Any member of the Committee ceasing to be a director or ceasing to qualify under A(3) below shall cease to be a member of the Committee. Subject to the foregoing, each member of the Committee shall hold office as such until the next annual appointment of members to the Committee after his or her election. Any vacancy occurring in the Committee shall be filled at the next meeting of the Board.
- (3) Each member of the Committee shall:
  - (a) be a member of the Board;
  - (b) not be an officer or employee of the Company or any of its affiliates;
  - (c) be an unrelated director as defined in the Toronto Stock Exchange (the “TSX”) Corporate Governance Guidelines (“TSX Guidelines”) as the same may be amended from time to time;
  - (d) satisfy the independence requirements applicable to members of audit committees under each of Multilateral Instrument 52-110 – *Audit Committees* of the Canadian Securities Administrators (“M1 52-110”), Rule 10A-3(b)(1)(ii) of the United States Securities and Exchange Commission, and any other applicable laws and regulations, as the same may be amended from time to time (with the TSX Guidelines, “Applicable Laws”); and
  - (e) satisfy the financial literacy requirements prescribed by Applicable Laws.
- (4) A majority of the Committee shall constitute a quorum.
- (5) The Committee shall elect annually a chairperson from among its members.

#### B. Purpose

- (1) The Committee’s purpose is to assist the Board in its supervision of the management of the business and affairs of the Company through oversight of:
  - (a) the integrity of the Company’s financial statements, Management’s Discussion and Analysis (“MD&A”) and other financial reporting;
  - (b) the integrity of the Company’s internal control and management information systems;

- (c) the Company's compliance with all applicable laws, rules, regulations, policies and other requirements of governments, regulatory agencies and stock exchanges relating to accounting matters and financial disclosure;
- (d) the auditor's qualifications and activities;
- (e) communication among the auditor, management and the Board; and
- (f) such other matters as are determined by the Board from time to time.

**C. Committee Resources**

- (1) The Committee shall have direct channels of communication with the Company's auditor to discuss and review specific issues as appropriate.
- (2) The Committee, or any member of the Committee with the approval of the Committee, may retain at the expense of the Company such independent legal, accounting (other than the auditor) or other advisors on such terms as the Committee may consider appropriate and shall not be required to obtain the approval of the Board in order to retain or compensate any such advisors.
- (3) The Committee shall have unrestricted access to Company personnel and documents and shall be provided with all necessary funding and other resources to carry out its responsibilities;

**D. Committee Responsibilities**

- (1) The responsibilities of the Committee shall be to:
  - (a) with respect to financial accounting matters:
    - (i) review with management and the external auditors the annual consolidated financial statements, MD&A and press release announcing annual financial results of operations before making recommendations to the Board relating to approval of such documents;
    - (ii) review with management and the external auditors interim financial statements, MD&A and press release announcing interim financial results of operations before making recommendations to the Board relating to approval of such documents;
    - (iii) review and discuss with management and the external auditors all public disclosure documents containing audited or unaudited financial information including: any Prospectus; the Annual Report; interim unaudited reports; the Annual Information Form; Management Information Circular, and any material change report pertaining to the Company's financial matters. The Committee will review the consistency of the foregoing documents with facts, estimates or judgments contained in the audited or unaudited financial statements;
    - (iv) satisfy itself that adequate procedures are in place for the review of the Company's disclosure of financial information extracted or derived from the

Company's financial statements, other than the Company's financial statements, MD&A and earnings press releases, and shall periodically assess the adequacy of those procedures;

- (v) prior to the completion of the annual audit, and at any other time deemed advisable by the Committee, review and discuss with management and the auditor the quality of the Company's accounting policies and financial statement presentation, including, without limitation, the following:
    - 1. all critical accounting policies and practices to be used, including, without limitation, the reasons why certain estimates or policies are or are not considered critical and how current and anticipated future events may impact those determinations as well as an assessment of any proposed modifications by the auditors that were not made;
    - 2. all alternative accounting treatments for policies and practices that have been discussed by management and the auditors; and
    - 3. other material written communications between the auditor and management, including, without limitation, any management letter, schedule of unadjusted differences, the management representation letter, report on internal controls, as well as the engagement letter and the independence letter;
  - (vi) review annually the accounting principles and practices followed by the Company and any changes in the same as they occur;
  - (vii) review new accounting principles of the Canadian Institute of Chartered Accountants and the Financial Accounting Standards Board which would have a significant impact on the Company's financial reporting as reported to the Committee by management;
  - (viii) review the status of material contingent liabilities as reported to the Committee by management;
  - (ix) review potentially significant tax problems as reported to the Committee by management; and
  - (x) review any errors or omissions in the current or prior year's financial statements which appear material as reported to the Committee by management;
- (b) with respect to the external auditors:
- (i) be directly responsible for the appointment, compensation, retention, termination and oversight of the work of the auditor (including, without limitation, resolution of disagreements between management and the auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or services for the Company;
  - (ii) approve, prior to the auditor's audit, the auditor's audit plan (including, without limitation, staffing), the scope of the auditor's review and all related fees;

- (iii) satisfy itself as to the independence of the auditor. The Committee shall pre-approve any non-audit services (including, without limitation, fees therefor) provided to the Company or its subsidiaries by the auditor or any auditor of any such subsidiary and shall consider whether these services are compatible with the auditor's independence, including, without limitation, the nature and scope of the specific non-audit services to be performed and whether the audit process would require the auditor to review any advice rendered by the auditor in connection with the provision of non-audit services. The Committee shall not allow the auditor to render any non-audit services to the Company or its subsidiaries that are prohibited by Applicable Law;
  - (iv) review and approve the Company's policies concerning the hiring of employees and former employees of the Company's auditor or former auditor.
- (c) with respect to internal controls:
- (i) oversee management's design, testing and implementation of the Company's internal controls and management information systems and review the adequacy and effectiveness thereof.
- (d) with respect to concerns and complaints:
- (i) establish procedures for:
    1. the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters; and
    2. the confidential, anonymous submission by employees of the Company of concern regarding questionable accounting or auditing matters.
- (e) with respect to ethics:
- (i) The Committee shall be responsible for oversight and enforcement of the Code of Ethics for the Chief Executive Officer, Senior Financial Officers and Other Officers of the Company, subject to the supervision of the Board.
- (f) with respect to general audit matters:
- (i) inquire of management and the external auditors as to any activities that may or may not appear to be illegal or unethical;
  - (ii) review with management, the operations analyst and the external auditors any frauds reported to the Audit Committee;
  - (iii) review with the external auditors the adequacy of staffing for accounting and financial responsibilities; and
  - (iv) report and make recommendations to the Board as the Committee considers appropriate.

- (2) In addition, the Board may refer to the Committee such matters and questions relating to the Company as the Board may from time to time see fit;
- (3) Any member of the Committee may require the auditors to attend any or every meeting of the Committee.

**E. Meetings**

- (1) The times of and the places where meetings of the Audit Committee shall be held and the calling of and procedure at such meetings shall be determined from time to time by the Committee, provided however that the Committee shall meet at least quarterly, and the Committee shall maintain minutes or other records of its meetings and activities. Notice of every such meeting to be given in writing not less than five (5) days prior to the date fixed for the meeting, and shall be given to the auditors of the Company, that the auditors shall be entitled to attend and be heard thereat. Meetings shall be convened whenever requested by the auditors, the operations analyst or any member of the Audit Committee in accordance with the *Ontario Business Corporations Act*.
- (2) As part of each meeting of the Committee at which it recommends that the Board approve the financial statements of the Company, and at such other times as the Committee deems appropriate, the Committee shall meet separately with the auditor to discuss and review specific issues as appropriate.

**F. Evaluation of Charter and Mandate**

- (1) On at least an annual basis, the Committee shall review and assess the adequacy of this Charter and Mandate and recommend any proposed changes to the Board of Directors.
- (2) All prior resolutions of the Board relating to the constitution and responsibilities of the Audit Committee are hereby repealed.

## SCHEDULE B

### Glossary of Technical Terms

Note: The terms related to mineral resources and reserves presented herein are as defined in “CIM DEFINITION STANDARDS on Mineral Resources and Mineral Reserves” prepared by the CIM Standing Committee on Reserve Definitions, adapted by CIM Council, December 11, 2005.

#### **eU<sub>3</sub>O<sub>8</sub>**

This term refers to equivalent U<sub>3</sub>O<sub>8</sub> grade derived by gamma logging of drill holes.

#### **Indicated Mineral Resource**

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

#### **Inferred Mineral Resource**

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes

#### **Measured Mineral Resource**

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

#### **Mineral Reserve**

A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

#### **Mineral Resource**

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial materials in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

**Preliminary Feasibility Study**

A Preliminary Feasibility Study is a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve.

**Probable Mineral Reserve**

A 'Probable Mineral Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

**Proven Mineral Reserve**

A 'Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

**Qualified Person**

A 'Qualified Person' means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report and is a member or licensee in good standing of a professional association.

**Spot market**

The buying and selling of uranium products for delivery within one year.

**Spot market price**

Price for product sold or purchased in the spot market rather than under long-term contract.

**U<sub>3</sub>O<sub>8</sub>**

Triuranium octoxide. It is in the form of concentrate; often called yellowcake. 1 pound U = 1.17924 pound U<sub>3</sub>O<sub>8</sub>.

**V<sub>2</sub>O<sub>5</sub>**

Vanadium pentoxide. It is the form of vanadium produced at the White Mesa mill; often called blackflake.