

# SECURITIES AND EXCHANGE COMMISSION

## FORM 6-K

Current report of foreign issuer pursuant to Rules 13a-16 and 15d-16 Amendments

Filing Date: **2013-01-17** | Period of Report: **2013-01-17**  
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### FILER

#### **DENISON MINES CORP.**

CIK: [1063259](#) | IRS No.: **000000000** | State of Incorporation: **A6** | Fiscal Year End: **1231**  
Type: **6-K** | Act: **34** | File No.: [001-33414](#) | Film No.: **13534324**  
SIC: **1090** Miscellaneous metal ores

| Mailing Address                                 | Business Address  |
|---|---|
| 595 BAY STREET, SUITE 402<br>TORONTO A6 M5G 2C2 | 595 BAY STREET, SUITE 402<br>TORONTO A6 M5G 2C2<br>(416) 979-1991 |

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM 6-K**

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**Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16 of  
the Securities Exchange Act of 1934**

**For the month of January, 2013**

**Commission File Number: 001-33414**

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**Denison Mines Corp.**

**(Translation of registrant' s name into English)**

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**Atrium on Bay  
595 Bay Street, Suite 402,  
Toronto, Ontario, Canada M5G 2C2  
(Address of principal executive offices)**

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

Form 20-F  Form 40-F

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

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

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The exhibits listed in the Exhibit Index below shall be deemed filed under the Securities Exchange Act of 1934, as amended, and are hereby incorporated by reference as exhibits to the Registration Statement of Denison Mines Corp. on Form F-80 (File No. 333-185906).

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## Signatures

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

**DENISON MINES CORP.**

*/s/ Sheila Colman*

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Sheila Colman

Corporate Counsel and Corporate Secretary

Date: January 17, 2013

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## EXHIBIT INDEX

| <b>Exhibit<br/>Number</b> | <b>Description</b>                            |
|---------------------------|---|
| 1.                        | Material Change Report dated January 16, 2013 |
| 2.                        | Consent of Roscoe Postle Associates Inc.      |
| 3.                        | Consent of William E. Roscoe                  |
| 4.                        | Material Change Report dated January 17, 2013 |

**FORM 51-102F3  
MATERIAL CHANGE REPORT**

**1. Name and Address of Company:**

Denison Mines Corp. (“Denison” or the “Company”)  
595 Bay Street, Suite 402  
Toronto, ON M5G C2C

**2. Date of Material Change:**

January 9, 2013

**3. News Release:**

The Company issued a news release with respect to the material change referred to in this report on January 9, 2013 via Marketwire L.P., and it was subsequently filed on SEDAR.

**4. Summary of Material Change:**

On January 9, 2013, Denison announced updated Mineral Resource Estimates prepared in accordance with National Instrument 43-101–Standards of Disclosure for Mineral Projects (“NI 43-101”) for the Phoenix A and Phoenix B uranium deposits at its 60% owned Wheeler River project in Northern Saskatchewan.

**5. Full Description of Material Change:**

On January 9, 2013, Denison announced an updated Mineral Resource Estimate for the Phoenix A and Phoenix B uranium deposits on its Wheeler River project in Northern Saskatchewan.

For the combined Phoenix A and B deposits, the total Indicated Mineral Resource is estimated to contain 52,300,000 lbs U<sub>3</sub>O<sub>8</sub> based on 152,400 tonnes of mineralization at an average grade of 15.6% U<sub>3</sub>O<sub>8</sub>. Additionally, the total Inferred Mineral Resource is estimated to contain 7,600,000 lbs U<sub>3</sub>O<sub>8</sub> based on 11,600 tonnes of mineralization with an average grade of 29.8% U<sub>3</sub>O<sub>8</sub>. This Mineral Resource estimate update represents a 47% increase in Indicated lbs U<sub>3</sub>O<sub>8</sub> and a 100% increase in Inferred lbs U<sub>3</sub>O<sub>8</sub> over the previous Mineral Resource estimate done in 2010.

The Wheeler River property lies between the McArthur River mine and Key Lake mill complex in the Athabasca Basin in northern Saskatchewan. Denison is the operator and holds a 60% interest in the project. Cameco Corporation holds a 30% interest and JCU (Canada) Exploration Company, Limited holds the remaining 10% interest.

**Summary Table**

The following table summarizes the Mineral Resource estimate by deposit and classification.

**2012 Phoenix Mineral Resource Estimate Summary**  
**(Effective Date December 31, 2012)**

| Category               | Deposit   | Tonnes         | Grade<br>(% U <sub>3</sub> O <sub>8</sub> ) | Million lbs<br>U <sub>3</sub> O <sub>8</sub> |
|------------------------|-----------|----------------|---|--|
| Indicated              | A Deposit | 133,500        | 15.8  | 46.5   |
| Indicated              | B Deposit | 19,000         | 14.1  | 5.9  |
| <b>Total Indicated</b> |           | <b>152,400</b> | <b>15.6</b>                                 | <b>52.3</b>                                  |
| Inferred               | A Deposit | 6,300          | 51.7  | 7.2  |
| Inferred               | B Deposit | 5,300          | 3.5   | 0.4  |
| <b>Total Inferred</b>  |           | <b>11,600</b>  | <b>29.8</b>                                 | <b>7.6</b>                                   |

Notes:

1. CIM Definitions were followed for classification of Mineral Resources.
2. Mineral Resources are reported above a cut-off grade of 0.8% U<sub>3</sub>O<sub>8</sub>.
3. The cut-off grade is based on internal conceptual studies and a price of \$50 per lb U<sub>3</sub>O<sub>8</sub>.
4. Numbers may not add due to rounding.

**Geology and Mineralization**

Mineralization at Phoenix shares many similarities with other unconformity related Athabasca uranium deposits. It occurs along the sub-Athabasca unconformity at its intersection with a moderately east dipping fault zone which results in an elongate and sub-horizontal shape to the deposits. Fault zones are best developed in graphitic metasediments in the underlying basement rocks. Mineralization varies from disseminated to massive, with several very high grade drill hole intersections averaging greater than 50% U<sub>3</sub>O<sub>8</sub> over true thicknesses up to 6.0 meters. With the completion of this Mineral Resource estimate, the Phoenix deposits now belong to a select group of very high grade unconformity uranium deposits that includes the prolific McArthur River mine (37 kilometers to the northeast) and the soon to be producing Cigar Lake deposit (80 kilometers to the northeast).

**Estimation Methodology**

Denison has estimated Mineral Resources for the Phoenix Deposits with data collected from several surface diamond drilling campaigns from 2008 to 2012. Uranium grade data is comprised of chemical assays on split drill core samples. All assays were completed by SRC Geoanalytical Laboratories in Saskatoon, Saskatchewan using the Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES) method. Quality control and quality assurance protocols for the chemical assays include the use of standard reference materials, blanks, check assays and duplicate samples. In those cases where drill core recovery is poor, chemical assays have been replaced with equivalent uranium grades obtained from down-hole radiometric probing.

Geology, structure, and the size and shape of the mineralized zones has been interpreted using data from 168 diamond drill holes which resulted in three dimensional wireframe models that represent 0.05% U<sub>3</sub>O<sub>8</sub> grade envelopes. Models of mineralization at each of the two deposits contain higher grade zones within an envelope of lower grade material, resulting in a total of four estimation domains—Phoenix A higher grade, Phoenix A lower grade, Phoenix B higher grade and Phoenix B lower grade.

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Based on 165 dry bulk density determinations, Denison developed a formula relating bulk density to grade which was used to assign a density value to each assay. Bulk density values were used to weight grades during the resource estimation process and to convert volume to tonnage.

Uranium grade times density (GxD) values and density (D) values were interpolated into each domain block model using an inverse distance squared (ID2) algorithm. Hard domain boundaries were employed such that drill hole grades from any given domain could not influence block grades in any other domain. Very high grade composites were not capped but grades greater than a designated threshold level for each domain were subject to restricted search ellipse dimensions in order to reduce their influence. Block grade was derived from the interpolated GxD value divided by the interpolated D value for each block. Block tonnage was based on volume times the interpolated D value.

The Mineral Resources for the Phoenix Deposits were classified as Indicated and Inferred based on drill hole spacing and apparent continuity of mineralization. The block models were validated by comparison of domain wireframe volumes with block volumes, visual comparison of composite grades with block grades, comparison of block grades with composite grades used to interpolate grades, and comparison with estimation by a different method.

Roscoe Postle Associates Inc. (RPA) was retained by Denison on behalf of the Wheeler River Joint Venture to audit the Mineral Resource estimate and to prepare an independent Technical Report in accordance with the requirements of National Instrument 43-101. William E. Roscoe, Ph.D. P.Eng. of RPA, is the independent "Qualified Person" responsible for the Mineral Resource estimate.

**6. Reliance on Subsection 7.1(2) or (3) of National Instrument 51-102.**

Not applicable.

**7. Omitted Information:**

No significant facts have been omitted from this Material Change Report.

**8. Executive Officer:**

For further information, please contact Ron F. Hochstein, President and Chief Executive Officer of Denison Mines Corp., at the above-mentioned address or at (416) 979-1991.

**9. Date of Report:**

January 16, 2013

**DENISON MINES CORP.**

Per: "Ron F. Hochstein" (Signed)

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Ron F. Hochstein

President and Chief Executive Officer



**CONSENT OF ROSCOE POSTLE ASSOCIATES INC.**

Ladies and Gentlemen:

The undersigned company hereby consents to (1) the references to the undersigned company' s name incorporated by reference in the registration statement on Form F-80 of Denison Mines Corp. in connection with the report entitled "Technical Report on a Mineral Resource Estimate Update for the Phoenix Deposits, Wheeler River Project, Eastern Athabasca Basin, Northern Saskatchewan, Canada" dated December 31, 2012 and (2) all other references to the undersigned company incorporated by reference in the registration statement on Form F-80 of Denison Mines Corp.

Dated: January 16, 2013

ROSCOE POSTLE ASSOCIATES INC.

By: /s/ William E. Roscoe, Ph.D., P.Eng.

Name: William E. Roscoe, Ph.D., P.Eng.

Title: Chairman Emeritus of Roscoe Postle Associates Inc.

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**RPA Inc.** 55 University Ave. Suite 501 | Toronto, ON, Canada M5J 2H7 | T +1 (416) 947 0907

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



**CONSENT OF ENGINEER**

Ladies and Gentlemen:

The undersigned hereby consents to (1) the references to the undersigned' s name incorporated by reference in the registration statement on Form F-80 of Denison Mines Corp. in connection with the report entitled “Technical Report on a Mineral Resource Estimate Update for the Phoenix Deposits, Wheeler River Project, Eastern Athabasca Basin, Northern Saskatchewan, Canada” dated December 31, 2012 and (2) all other references to the undersigned incorporated by reference in the registration statement on Form F-80 of Denison Mines Corp.

Dated: January 16, 2013

/s/ William E. Roscoe, Ph.D., P.Eng.

Name: William E. Roscoe, Ph.D., P.Eng.

Title: Principal Geologist of Roscoe Postle Associates Inc.

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**RPA Inc.** 55 University Ave. Suite 501 | Toronto, ON, Canada M5J 2H7 | T +1 (416) 947 0907

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

**FORM 51-102F3**  
**MATERIAL CHANGE REPORT**

**1. Name and Address of Company:**

Denison Mines Corp. (“Denison” or the “Company”)  
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Toronto, ON M5G C2C

**2. Date of Material Change:**

January 16, 2013

**3. News Release:**

The Company issued a news release with respect to the material change referred to in this report on January 16, 2013 via Marketwire L.P., and it was subsequently filed on SEDAR.

**4. Summary of Material Change:**

On January 16, 2013, Denison announced the signing of a Binding Letter of Intent (the “**Binding LOI**”) pursuant to which Denison will acquire a portfolio of uranium exploration projects from Fission Energy Corp. (“Fission”) including Fission’s 60% interest in the Waterbury Lake uranium project, as well as Fission’s exploration interests in all other properties in the eastern part of the Athabasca Basin, its interests in two joint ventures in Namibia plus its assets in Quebec and Nunavut (together, the “**Assets**”). Denison has agreed to offer shareholders of Fission 0.355 shares of Denison for each share of Fission held, conditional upon, among other things, certain assets of Fission being spun out to a new company (“**NewCo**”) to be held pro rata by current Fission shareholders (collectively, the “**Transaction**”).

**5. Full Description of Material Change:**

On January 16, 2013, Denison announced the signing of a Binding LOI pursuant to which Denison will acquire the Assets. Under the terms of the Binding LOI, Denison has agreed to offer shareholders of Fission 0.355 shares of Denison for each share of Fission held, conditional upon, among other things, certain assets of Fission being spun out to NewCo to be held pro rata by current Fission shareholders. NewCo assets will include, among others, a 50% interest in the Patterson Lake South (“**PLS**”) property located in the western Athabasca Basin. The Transaction values the Assets at approximately \$70 million based on the closing price of Denison as of January 15, 2013. Upon completion of the Transaction, shareholders of Fission will own approximately 11% of Denison.

The board of directors of Fission, following consultation with its financial and legal advisors, has approved the Transaction and recommends that Fission shareholders vote in favour of the Transaction. Fission’s board of directors has received a verbal opinion from Dundee Capital Markets that the consideration pursuant to the Transaction is fair, from a financial point of view, to Fission shareholders.

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## Transaction Benefits

Both Fission and Denison believe that the Transaction will provide a number of substantial benefits to the shareholders of both companies, including the following:

Substantial value offered to FIS shareholders for the Assets

The opportunity for FIS shareholders to participate in the assets of Denison, which include several advanced exploration properties plus an interest in the McClean Lake mill, as well as the highly prospective Western Athabasca exploration portfolio of NewCo

NewCo will hold approximately \$18 million in cash, fully funded to continue future programs at PLS and elsewhere

NewCo will continue forward under the leadership of the same successful management team that developed Fission

Further solidifies Denison as the consolidator of strategic assets in the Athabasca Basin, to the benefit of both sets of shareholders

## Transaction

Denison and Fission expect the Transaction will take place by way of a plan of arrangement whereby Denison and/or a wholly owned subsidiary will enter into an arrangement agreement with Fission in accordance with the terms of the Binding LOI. Pursuant to the terms of the Binding LOI, the completion of the Transaction is conditional upon a number of items, including, without limitation, approval of the shareholders of Fission, receipt of all necessary regulatory approvals, formalization of the legal structure of the Transaction, no material adverse change occurring with respect to either company, compliance by both parties with their respective obligations under the Binding LOI and satisfaction of other customary deal conditions.

The Binding LOI contains customary deal support provisions, including a reciprocal break fee of \$3.5 million, payable if the proposed Transaction is not completed in certain circumstances. In addition, the Binding LOI includes customary non-solicitation covenants by Fission together with customary exemptions to permit Fission's board of directors to exercise its fiduciary duties and a right in favour of Denison to match any superior proposal that may arise.

Full details of the Transaction will be included in the formal definitive agreement and management information circular to be filed with the regulatory authorities and mailed to Fission shareholders in accordance with applicable securities laws. All Fission shareholders are urged to read the information circular once it becomes available as it will contain additional important information about the Transaction.

Fission's outstanding options and warrants will be adjusted in accordance with their terms such that the number of Denison shares and NewCo shares received upon exercise and their respective exercise prices will reflect the exchange ratio and Transaction described above.

The proposed transaction is expected to be completed in April 2013 or such later date as the parties may agree. A special meeting of the shareholders of Fission will be held at a time yet to be determined to approve the Transaction.

This news release and the information contained herein do not constitute an offer of securities for sale in the United States. The securities have not been and will not be registered under the United States Securities Act of 1933, as amended, and may not be offered or sold in the United States absent registration or an applicable exemption from such registration requirements.

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**6. Reliance on Subsection 7.1(2) or (3) of National Instrument 51-102.**

Not applicable.

**7. Omitted Information:**

No significant facts have been omitted from this Material Change Report.

**8. Executive Officer:**

For further information, please contact Ron F. Hochstein, President and Chief Executive Officer of Denison Mines Corp., at the above-mentioned address or at (416) 979-1991.

**9. Date of Report:**

January 17, 2013

**DENISON MINES CORP.**

Per: "Ron F. Hochstein" (Signed) \_\_\_\_\_

Ron F. Hochstein

President and Chief Executive Officer