

NORTHGATE MINERALS CORP  
Form 6-K  
June 23, 2004

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER  
PURSUANT TO RULE 13a-16 OR 15d-16 UNDER  
THE SECURITIES EXCHANGE ACT OF 1934

For the month of June 2004.

## Northgate Exploration Limited

(Translation of registrant's name into English)

2050 - 1055 West Georgia Street  
Vancouver, British Columbia  
Canada V6E 3R5  
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 401-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 whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes

No

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

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SIGNATURES

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

Registrant:  
Northgate Exploration Limited

Date: June 22, 2004.

(signed)  
Jon Douglas  
Chief Financial Officer

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Stock Symbol: NGX: TSX; NXG: AMEX  
Website: www.northgateminerals.com

Stock Symbol: DSR: TSX Venture  
Website: www.doublestar.net

## NORTHGATE MINERALS ACQUIRES THE SUSTUT COPPER DEPOSIT FROM DOUBLESTAR RESOURCES

Vancouver, June 22, 2004

Northgate Minerals Corporation and Doublestar Resources Ltd. are pleased to announce that they have signed a letter of intent whereby Northgate Minerals can acquire 100% of the high grade Sustut Copper deposit. This agreement is subject to legal due diligence and Board of Director approvals, with the definitive purchase agreement to be negotiated over the next few weeks. Closing of the transaction is expected by mid-summer.

The Sustut Copper deposit is located 40 km south of Northgate's Kemess South mine and milling complex in north-central British Columbia, where it is expected that the Sustut Copper ore will be processed. Since its discovery in 1971 by Falconbridge Limited, who retain a 9% Net Profits Interest (NPI) royalty, 21,588 metres of exploration and resource definition diamond drilling has been completed at Sustut. In 2002, Pincock Allen & Holt qualified a resource at Sustut in compliance with National Instrument 43-101. This work demonstrated a total measured resource for two zones, the Southeast and Southwest, of 4,871,000 tonnes grading 1.70% copper, and a total indicated resource of 2,761,000 tonnes at 1.61% copper, both at a 0.70% copper cut off. As part of a feasibility study completed in 2003, AMEC designed an open pit containing 4,676,000 tonnes of ore at an average grade of 2.02% copper and 6 grams per tonne silver using a 0.745% copper cut off. This represents an in-situ copper resource of 208 million pounds which would result in 150 million pounds of copper and 0.6 million ounces of silver based on the most recent metallurgical test work.

Under the terms of the agreement, Northgate will acquire 100% of the Sustut deposit for Cdn\$1,705,000, subject to a positive production decision by Dec. 31, 2006. Payments will be made in stages as the project progresses through the following development milestones:

- \$500,000 upon execution of the definitive purchase agreement
- \$500,000 upon the granting of a mining permit
- \$250,000 upon a Sustut Mine production decision
- \$250,000 when construction is completed
- \$205,000 90 days after the start of production

Doublestar will also receive a sliding scale royalty per tonne of ore mined based on the resource in the AMEC Feasibility Study, as follows:

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## Northgate Minerals Corporation &amp; Doublestar Resources Ltd.

## Joint News Release

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<i>Copper Price</i> (US \$)	<i>Royalty /Tonne</i> (CDN \$)
0.94-1.00	0.25
1.00-1.10	0.50
1.10-1.20	0.90
1.20-1.30	1.10
1.30-1.40	1.40
>1.40	2.00

Ken Stowe, President and CEO of Northgate said, "Our acquisition of 100% of the Sustut Copper deposit provides Northgate with the opportunity to substantially increase copper production at Kemess by blending high grade Sustut ore with ore from Kemess South and Kemess North, while preserving the low unit costs of these operations. Over the coming months, our operating team will be reviewing the Sustut feasibility study in order to identify synergies and determine the most effective way of integrating this exciting project with the Kemess operation."

Doublestar Chairman and CEO Alan Savage noted that "The Sustut operation will be the first source of recurring revenue from mining operations for Doublestar and the royalty structure allows us to participate in the upside on copper prices. This will enable Doublestar to target other acquisitions while contributing to the development of its existing projects."

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Northgate is a gold and copper mining company focused on operations and opportunities in North and South America. The Corporation's principal assets are the 300,000-ounce per year Kemess South mine in north-central British Columbia and the adjacent Kemess North deposit, which contains a Proven and Probable Reserve of 4.1 million ounces of gold. Northgate is listed on the Toronto Stock Exchange under the symbol NGX and on the American Stock Exchange under the symbol NXG.

Doublestar is a Canadian mineral resource exploration and development company with a large portfolio of advanced mineral properties containing base and precious metal resources extending from Canada's Northwest Territories to Honduras. Doublestar's mission is to advance its key properties to production while continuing to seek attractive exploration or early-stage development projects that will contribute to shareholder value. Doublestar's shares trade on the TSX Venture Exchange under the ticker symbol "DSR".

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**Northgate Minerals Corporation & Doublestar Resources Ltd.**

**Joint News Release**

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Forward-Looking Statements

This press release includes certain "forward-looking statements" within the meaning of section 21E of the *United States Securities Exchange Act of 1934*, as amended. Forward-looking statements include without limitation, statements regarding future production, potential mineralization and reserves, exploration results and future plans and objectives of Northgate and Doublestar. Forward-looking statements generally can be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe," or "continue" or the negative thereof or variations thereon or similar terminology. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from Northgate's and Doublestar's expectations are disclosed under the heading "Risk Factors" in their 2003 Annual Reports and under the heading "Trends, Risks and Uncertainties" in Northgate's 2003 Annual Information Form (AIF) all of which are filed with Canadian regulators on SEDAR ( [www.sedar.com](http://www.sedar.com) ) and in the case of Northgate with the United States Securities and Exchange Commission ( [www.sec.gov](http://www.sec.gov) ).

**Contacts:**

For further information contact:

**Ken Stowe**

*President and Chief Executive Officer*

**Northgate Minerals Corporation**

416-216-2772

**Alan Savage**

*Chairman and Chief Executive Officer*

**Doublestar Resources Ltd.**

604-922-7377

The TSX Venture Exchange has not reviewed and does not accept responsibility  
for the adequacy or the accuracy of the content of this news release.

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