

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

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): June 8, 2004

Axcelis Technologies, Inc.

(Exact name of registrant as specified in charter)

Delaware
(State or other jurisdiction of
incorporation)

000-30941
(Commission File Number)

34-1818596
(IRS Employer Identification No.)

108 Cherry Hill Drive, Beverly, Massachusetts
(Address of principal executive offices)

01915
(Zip Code)

Registrant's telephone number, including area code: **(978) 787-4000**

(Former name or former address, if changed since last report)

Item 5. Other Events.

Axcelis Technologies, Inc. (the "Company") has been advised that on June 8, 2004 each of Mary G. Puma, its President and Chief Executive Officer and Michael J. Luttati, its Executive Vice President and Chief Operating Officer (collectively, the "Executives"), established a Rule 10b5-1 Sales Plan to sell a portion of their equity positions in the Company on a predetermined schedule of minimum prices. The Executives have informed the Company that the purpose of the plan is to gradually diversify their investment portfolios.

The Executives' plans have been established pursuant to Rule 10b5-1 of the Securities Exchange Act of 1934, as amended, which provides guidelines for corporate executives to prearrange sales of their company's securities in a manner that avoids concerns about initiating stock transactions while in possession of material nonpublic information. Other officers or directors of the Company may adopt plans pursuant to Rule 10b5-1 in the future.

Ms. Puma's plan covers an aggregate of 67,759 shares of common stock issuable upon exercise of outstanding options and will continue until all such shares are sold unless earlier terminated. Ms. Puma currently beneficially holds 61,263 shares of common stock and holds options to purchase 1,399,133 shares of common stock at exercise prices ranging from \$5.70 to \$22.00 per share and vesting on various dates through May 1, 2007.

Mr. Luttati's plan covers an aggregate of 401,503 shares of common stock issuable upon exercise of outstanding options and will continue until all such shares are sold unless earlier terminated. Mr. Luttati currently beneficially holds 15,338 shares of common stock and holds options to purchase 764,603 shares of common stock at exercise prices ranging from \$5.70 to \$22.00 per share and vesting on various dates through May 1, 2007.

Actual transactions completed under the Executives' plans will be reported from time to time on Forms 4 filed by the Executives with the Securities and Exchange Commission. Except as may be required by law, the Company does not by filing this Current Report on Form 8-K undertake to report modifications, terminations or other activities under the Executives' plans or the adoption, modification, termination or other activities under any future Rule 10b5-1 plans established by other officers or directors of the Company.

SIGNATURE

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 hereunto duly authorized.

Date: June 14, 2004

Axcelis Technologies, Inc.

By: /S/ STEPHEN G. BASSETT
Stephen G. Bassett
Chief Financial Officer