

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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): **April 25, 2005**

Bimini Mortgage Management, Inc.

(Exact Name of Registrant as Specified in Charter)

Maryland
(State or Other Jurisdiction of
Incorporation)

001-32171
(Commission
File Number)

72-1571637
(IRS Employer
Identification No.)

3305 Flamingo Drive, Vero Beach, Florida 32963
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code **(772) 231-1400**

N/A

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 2.02. RESULTS OF OPERATIONS AND FINANCIAL CONDITION

On April 25, 2005, Bimini Mortgage Management, Inc. (the "Company") issued a press release announcing its financial results for the quarter and three months ended March 31, 2005. A copy of the press release is furnished as Exhibit 99.1 to this report.

The information (including Exhibit 99.1) being furnished pursuant to this "Item 2.02. Results of Operations and Financial Condition" shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liabilities of that section and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended (the "Securities Act") or the Exchange Act regardless of any general incorporation language in such filing.

ITEM 7.01. REGULATION FD DISCLOSURE

As discussed in Item 2.02 above, the Company issued a press release, dated April 25, 2005, announcing its financial results for the quarter ended March 31, 2005, the text of which is incorporated herein by reference.

The information being furnished pursuant to this "Item 7.01 Regulation FD Disclosure" shall not be deemed to be "filed" for the purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section and shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act regardless of any incorporation language in such filing. The information will not be deemed an admission as to the materiality of such information that is required to be disclosed solely by Regulation FD.

ITEM 9.01. FINANCIAL STATEMENTS AND EXHIBITS

(c) Exhibits

99.1 Press Release dated April 25, 2005

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 hereunto duly authorized.

Date: April 25, 2005

BIMINI MORTGAGE MANAGEMENT, INC.

By: /s/ Jeffrey J. Zimmer
Jeffrey J. Zimmer
Chairman, Chief Executive Officer and President

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<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release dated April 25, 2005

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**BIMINI MORTGAGE MANAGEMENT, INC.
REPORTS FIRST QUARTER 2005 RESULTS**

VERO BEACH, Fla. (April 25, 2005) — Bimini Mortgage Management, Inc. (NYSE:BMM), a real estate investment trust that invests primarily in residential mortgage-related securities, today announced financial results for the first quarter ended March 31, 2005.

For the first quarter, the Company recorded GAAP income of \$10.9 million or \$0.52 per diluted Class A Common Share. Approximate taxable income for the quarter, as well as dividends paid for the quarter, were \$0.53 per share. Annualized return on equity for the quarter, based on the book value of \$12.84 per Class A Common Share outstanding at March 31, 2005, and incorporating the \$0.53 dividend, was 16.5%.

Commenting on the results, Jeffrey J. Zimmer, president and chief executive officer, said, "As a result of our public secondary offering in December 2004, our assets increased substantially in the first quarter of 2005 compared with the first and fourth quarters of 2004. All proceeds from that secondary offering were deployed by the end of January 2005. As of March 31, 2005, we held \$3.3 billion of mortgage-backed securities at fair value. Interest income was \$31.1 million and interest expense was \$19.8 million for the first quarter of 2005. At quarter's end, we had a weighted average yield on assets of 3.63% and a weighted average borrowing cost of 2.78%. The weighted average constant prepayment rate for the portfolio was 23.5% for March 2005. The effective duration of the portfolio at the end of the first quarter was 1.23 and the debt-to-equity ratio was 12.2x.

"As of March 31, 2005, we had 18 master repurchase agreements with various investment banking firms and other lenders and outstanding balances of \$3.2 billion under 15 of these agreements," Zimmer added. "At the end of the first quarter of 2005, the repurchase agreements were secured by mortgage-related securities with an estimated fair value of \$3.3 billion and a weighted average maturity of 317 months. For more details about our assets and liabilities, please see our 10-Q for the quarter ended March 31, 2005, which we released today."

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Bimini Mortgage Management will hold a conference call to discuss this press release tomorrow, April 26, 2005, at 10:00 a.m. Eastern time. Investors will have the opportunity to listen to a live Internet broadcast of the conference call through the Company's Web site at www.biminireit.com or through www.earnings.com. To listen to the live call, please go to the Web site at least 15 minutes early to register, download, and install any necessary audio software. For those who cannot listen to the live broadcast, an Internet replay will be available shortly after the call and continue through May 26, 2005.

Bimini Mortgage Management, Inc., a real estate investment trust, invests primarily in residential mortgage-related securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). It earns returns on the spread between the yield on its assets and its costs, including the interest expense on the funds it borrows.

This news release contains forward-looking statements made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. The reader is cautioned that such forward-looking statements are based on information available at the time and on management's good faith belief with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statements. Important factors that could cause such differences are described in the Company's periodic filings with the Securities and Exchange Commission, including the Company's Registration Statement on Form S-11. The Company assumes no obligation to update forward-looking information to reflect subsequent results, changes in assumptions or changes in other factors affecting forward-looking information.

Contact: Robert E. Cauley
Chief Financial Officer
(772) 231-1400
www.biminireit.com

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