Gastar Exploration Inc.
Form 8-K
April 23, 2014

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): April 22, 2014 (April 22, 2014)

GASTAR EXPLORATION INC.

(Exact Name of Registrant as Specified in its Charter)

DELAWARE 001-35211 38-3531640 (State or other jurisdiction (Commission File Number) (IRS Employer of incorporation) Identification No.)

1331 LAMAR STREET, SUITE 650 HOUSTON, TEXAS 77010 (Address of principal executive offices)

(713) 739-1800

(Registrant's telephone number, including area code)

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 (see General Instruction A.2. below):

the registrant under any of the following provisions (see General Instruction A.2. below).	
[]	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))	
[]P	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

SECTION 7 - REGULATION FD

Item 7.01 Regulation FD.

On April 22, 2014, Gastar Exploration Inc. (the "Company") announced that the Company will be hosting an investor day in New York City on May 14, 2014 for analysts and institutional investors. The presentation materials associated with the event will be accessible within the Investor Relations section of the Company's website at www.gastar.com at the time of the event on May 14, 2014. A copy of the Company's press release, dated April 22, 2014, is furnished herewith as Exhibit 99.1 and is incorporated herein by reference.

In accordance with General Instruction B.2 of Form 8-K, the information presented herein under Item 7.01 and set forth in the attached press release included as Exhibit 99.1 to this report is deemed to be "furnished" solely pursuant to Item 7.01 of this report and shall not be deemed "filed" for 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, nor shall such information or the exhibit be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act.

SECTION 9 - FINANCIAL STATEMENTS AND EXHIBITS

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following is a list of exhibits furnished as part of this Form 8-K:

Exhibit No. Description of Document

99.1 Press release dated April 22, 2014.

-2-

SIGNATURES

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

Date: April 22, 2014

GASTAR EXPLORATION INC.

By: /S/ J. RUSSELL PORTER
J. Russell Porter

President and Chief Executive Officer

-3-

EXHIBIT INDEX

Exhibit No. Description of Document

99.1 Press release dated April 22, 2014.

-4-