GASTAR EXPLORATION LTD Form 8-K January 22, 2010

### 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): January 22, 2010 (January 21, 2010)

#### GASTAR EXPLORATION LTD.

(Exact Name of Registrant as Specified in its Charter)

ALBERTA, CANADA 001-32714 38-3324634 (State or other jurisdiction (Commission (IRS Employer of incorporation) File Number) Identification No.)

1331 LAMAR STREET, SUITE 1080 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):

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o 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))

#### SECTION 7 - REGULATION FD

Item Regulation FD Disclosure

7.01

On January 21, 2010, Gastar Exploration Ltd. announced that it had completed the James Yoho #1, a vertical Marcellus well located in West Virginia, which tested at a stabilized gross rate of 1.5 million cubic feet of natural gas per day and 120 barrels of condensate per day, with no water production and approximately 1,000 pounds of flowing tubing pressure.

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 Exhibit 99.1 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, 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 or the Securities Exchange Act of 1934, each as amended.

#### SECTION 9 – FINANCIAL STATEMENTS AND EXHIBITS

Item Financial Statements and Exhibits

9.01

(d) Exhibits

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

Exhibit Description of Document

No.

99.1 Press release dated January 21, 2010.

#### **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.

GASTAR EXPLORATION LTD.

Date: January 22, 2010 By: /s/ J. RUSSELL

PORTER

J. Russell Porter

President and Chief Executive Officer

## EXHIBIT INDEX

Exhibit Description of Document

No.

99.1 Press release dated January 21, 2010.

-3-