

BAYTEX ENERGY CORP.  
Form 6-K  
May 31, 2011

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 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 May 2011

Commission File Number: 1-32754

BAYTEX ENERGY CORP.  
(Exact name of registrant as specified in its charter)

2800, 520 – 3RD AVENUE S.W.  
CALGARY, ALBERTA, CANADA  
T2P 0R3  
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-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 if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): "

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):

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The document attached as an exhibit hereto is incorporated by reference herein.

Exhibit No.	Document
99.1	BAYTEX TO PRESENT AT THE RBC CAPITAL MARKETS' GLOBAL ENERGY AND POWER CONFERENCE

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, thereunto duly authorized.

BAYTEX ENERGY CORP.

Dated: May 31, 2011

/s/ W. Derek Aylesworth  
Name: W. Derek Aylesworth  
Title: Chief Financial Officer