

ENERPLUS RESOURCES FUND

Form 6-K

March 31, 2010

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Issuer pursuant to Rule 13-a-16 or 15d-16
of the Securities Exchange Act of 1934

FOR THE MONTH OF March, 2010

COMMISSION FILE NUMBER 1-15150

The Dome Tower
Suite 3000, 333 – 7th Avenue S.W.
Calgary, Alberta
Canada T2P 2Z1

(403) 298-2200

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)

Yes No

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)

Yes No

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

EXHIBIT INDEX

EXHIBIT

99.1 News Release dated March 31, 2010 - Enerplus announces cash distribution for April 2010

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, thereunto duly authorized.

ENERPLUS RESOURCES FUND

By EnerMark Inc.

BY: /s/

David A. McCoy

David A. McCoy
Vice President, General Counsel & Corporate Secretary

DATE: March 31, 2010