

BHP BILLITON LTD
Form 6-K
September 13, 2006

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

September 8, 2006

BHP Billiton

Limited

----- (Translation of registrant's name into English) 180 Lonsdale Street Melbourne VIC 3000 Australia

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of 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 the registrant by furnishing the information contained in this Form 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): n/a

Issued by: BHP Billiton Plc

To:
London Stock Exchange
Australian Stock Exchange

Cc:

New York Stock Exchange
JSE Limited
Swiss Stock Exchange
Deutsche Bank
UBS Zurich

Date: 8 September 2006

For Release: Immediately

Contact: Robert Franklin, Company Secretary
Tel: +44 (0) 20 7802 4116

BHP BILLITON PLC - TRANSACTION IN OWN SHARES

BHP Billiton Plc announces that on 8 September 2006 it purchased 1,000,000 of its ordinary shares at an average price of 977.1098 pence per ordinary share. It is intended that all of the purchased shares will be held as treasury shares.

Following the above purchase, BHP Billiton Plc holds 21,320,000 of its ordinary shares as treasury shares. The total number of ordinary shares in issue (excluding shares held as treasury shares) is 2,446,827,002.

For further information, please contact:

Investor Relations
Mark Lidiard
Office: +44 (0) 20 7802 4156
Mobile: +44 (0) 77 6993 4942

Company Secretariat
Robert Franklin

Office: +44 (0) 20 7802 4116
Mobile: +44 (0) 7824 302684

BHP Billiton Limited ABN 49 004 028 077
Registered in Australia
Registered Office: Level 27, 180 Lonsdale Street Melbourne
Victoria 3000
Telephone +61 1300 554 757 Facsimile +61 3 9609 3015

BHP Billiton Plc Registration number 3196209
Registered in England and Wales
Registered Office: Neathouse Place London SW1V 1BH United
Kingdom
Telephone +44 20 7802 4000 Facsimile +44 20 7802 4111

The BHP Billiton Group is headquartered in Australia

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.

BHP Billiton Limited

Date: 8 September 2006

By: Karen Wood

Name: Karen Wood

Title: Group Company Secretary