BHP BILLITON LTD
Form 6-K
October 10, 2007

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

October 5, 2007

BHP BILLITON LIMITED

(ABN 49 004 028 077)

(Exact name of Registrant as specified in its charter)

VICTORIA, AUSTRALIA

(Jurisdiction of incorporation or organisation)

180 LONSDALE STREET, MELBOURNE, VICTORIA

3000 AUSTRALIA

(Address of principal executive offices)

BHP BILLITON PLC

(REG. NO. 3196209)

(Exact name of Registrant as specified in its charter)

ENGLAND AND WALES

(Jurisdiction of incorporation or organisation)

NEATHOUSE PLACE, VICTORIA, LONDON,

UNITED KINGDOM

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F: [x] 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 [x] No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): n/a

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Issued by: BHP Billiton Plc

BHP Billiton Limited

To:
London Stock Exchange
Australian Securities Exchange

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

Date: 5 October 2007

For Release: Immediately

BHP BILLITON PLC - TRANSACTION IN SHARES

BHP Billiton Limited announces that on 5 October 2007 it purchased 750,000 ordinary shares of BHP Billiton Plc at an average price of 1729.19 pence per ordinary share.

Following the above transaction, BHP Billiton Plc holds 24,265,516 of its ordinary shares as treasury shares and BHP Billiton Limited holds 50,326,226 of the ordinary shares in BHP Billiton Plc, for a total of 74,591,742 shares. The total number of BHP Billiton Plc ordinary shares in issue (excluding shares held as treasury shares and shares held by BHP Billiton Limited) is 2,253,433,546.

For further information, please contact:

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Further information on BHP Billiton can be found on our Internet site: www.bhpbilliton.com

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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 and BHP Billiton Plc

Date: 5 October 2007

By: Jane McAloon

Name: Jane McAloon
Title: Group Company Secretary