BHP BILLITON LTD Form 6-K January 18, 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

January 17, 2007

BHP BILLITON LIMITED

BHP BILLITON PLC

(ABN 49 004 028 077)

(REG. NO. 3196209)

(Exact name of Registrant as specified in its charter)

(Exact name of Registrant as specified in its charter)

VICTORIA, AUSTRALIA

ENGLAND AND WALES

(Jurisdiction of incorporation or organisation)

(Jurisdiction of incorporation or organisation)

180 LONSDALE STREET, MELBOURNE, VICTORIA

NEATHOUSE PLACE, VICTORIA, LONDON,

3000 AUSTRALIA

UNITED KINGDOM

(Address of principal executive offices)

(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_

Issued by: BHP Billiton Plc

BHP Billiton Limited

To:

London Stock Exchange Australian Stock Exchange

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

Date: 17 January 2007

For Release: Immediately

BHP BILLITON PLC - TRANSACTION IN SHARES

BHP Billiton Limited announces that on 17 January 2007 it purchased 1,000,000 ordinary shares of BHP Billiton Plc at an average price of 888.8125 pence per ordinary share.

Following the above purchase, BHP Billiton Plc holds 25,420,000 of its ordinary shares as treasury shares and BHP Billiton Limited holds 76,485,000 of the ordinary shares in BHP Billiton Plc, for a total of 101,905,000 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 2,366,242,002.

For further information, please contact:

Investor Relations Mark Lidiard Office: +44 (0) 20 7802 4156

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Company Secretary **BHP** Billiton Plc Robert Franklin

Company Secretary **BHP** Billiton Limited Jane McAloon

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

Australia

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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: 17 January 2007 By: Karen Wood

Name: Karen Wood

Title: Group Company Secretary