

DOCUMENT TYPE SC 13G
TEXT

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 13G
Under the Securities Exchange Act of 1934

Name of Issuer: Rosetta Resources Inc.

Title of Class
of Securities: Common Stock

CUSIP Number: 777779307

1) NAME AND I.R.S. IDENTIFICATION NO. OF REPORTING PERSON

Prudential Financial, Inc. 22-3703799

2.) MEMBER OF A GROUP: (a) N/A
(b) N/A

3) SEC USE ONLY:

4) PLACE OF ORGANIZATION: New Jersey

NUMBER OF SHARES BENEFICIALLY OWNED BY REPORTING PERSON WITH:

5) Sole Voting Power: 141,664 See Exhibit A
6) Shared Voting Power: 2,004,855 See Exhibit A
7) Sole Dispositive Power: 141,664 See Exhibit A
8) Shared Dispositive Power: 2,927,122 See Exhibit A

9) AGGREGATE AMOUNT BENEFICIALLY OWNED:
3,068,786 See Exhibit A

10) AGGREGATE AMOUNT IN ROW (9) EXCLUDES SHARES: Not Applicable

11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):
5.8 See Exhibit A

12) TYPE OF REPORTING PERSON: HC

ITEM 1(a). NAME OF ISSUER:

Rosetta Resources Inc.

ITEM 1(b). ADDRESS OF ISSUER'S EXECUTIVE OFFICES:

Rosetta Resources Inc. 717 TEXAS SUITE 2800 HOUSTON , TX 77002

ITEM 2(a). NAME OF PERSON FILING:

Prudential Financial, Inc.

ITEM 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE:

751 Broad Street
Newark, New Jersey 07102-3777

ITEM 2(c). CITIZENSHIP:

New Jersey

ITEM 2(d). TITLE OF CLASS OF SECURITIES:

Common Stock

ITEM 2(e). CUSIP NUMBER:

777779307

ITEM 3. The Person filing this statement is a Parent Holding Company as defined in Section 240.13d-1(b)(1)(ii)(G) of the Securities Exchange Act of 1934.

ITEM 4. OWNERSHIP:

(a) Number of Shares
Beneficially Owned: 3,068,786 See Exhibit A

(b) Percent of Class: 5.8

(c) Powers
No. Of Shares

Sole power to vote or 141,664 See Exhibit A
to direct the vote

Shared power to vote or 2,004,855 See Exhibit A
to direct the vote

Sole power to dispose or 141,664 See Exhibit A
to direct disposition

Shared power to dispose 2,927,122 See Exhibit A
or to direct disposition

ITEM 5. OWNERSHIP OF 5% OR LESS OF A CLASS:

Not Applicable

ITEM 6. OWNERSHIP OF MORE THAN 5% ON BEHALF OF
ANOTHER PERSON:

See Exhibit A

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE
SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING
REPORTED ON BY THE ULTIMATE PARENT COMPANY:

See Exhibit A

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF
MEMBERS OF THE GROUP:

Not Applicable

ITEM 9. NOTICE OF DISSOLUTION OF GROUP:

Not Applicable

ITEM 10. CERTIFICATION:

By signing below, Prudential Financial, Inc. certifies that, to the best of its knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

The filing of this statement should not be construed as an admission that Prudential Financial, Inc. is, for purposes of Sections 13 or 16 of the Securities Exchange Act of 1934, the beneficial owner of such shares.

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, Prudential Financial, Inc. certifies that the information set forth in this statement is true, complete and correct.

PRUDENTIAL FINANCIAL, INC.

By: Richard Baker
Second Vice President

Date: 02/13/2012
As of: 12/31/2011

Exhibit A

ITEM 6. OWNERSHIP:

Prudential Financial, Inc. may be deemed the beneficial owner of securities beneficially owned by the Item 7 listed entities and may have direct or indirect voting and/or investment discretion over 3,068,786 shares which are held for its own benefit or for the benefit of its clients by its separate accounts, externally managed accounts, registered investment companies, subsidiaries and/or other affiliates. Prudential Financial, Inc. is reporting the combined holdings of these entities for the purpose of administrative convenience.

These shares were acquired in the ordinary course of business, and not with the purpose or effect of changing or influencing control of the Issuer. The filing of this statement should not be construed as an admission that Prudential Financial, Inc. is, for the purposes of Sections 13 or 16 of the Securities Exchange Act of 1934, the beneficial owner of these shares.

ITEM 7. IDENTIFICATION/CLASSIFICATION:

Prudential Financial, Inc. is a Parent Holding Company and the indirect parent of the following Registered Investment Advisers:

The Prudential Insurance Company of America IC,IA

Jennison Associates LLC IA

Prudential Investment Management, Inc. IA

Quantitative Management Associates LLC IA

Jennison Associates LLC may be deemed to be the beneficial owner of 5% or greater of the outstanding shares of the security class being reported on this Schedule 13G.