



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

November 5, 2008

Mr. Fernando Ramirez Mazarredo
Chief Financial Officer
Repsol YPF, S.A.
Paseo de la Castellana, 278
28046 Madrid, Spain

**Re: Repsol YPF, S.A.
Form 20-F for Fiscal Year Ended December 31, 2007
Filed May 30, 2008
Response Letter Dated September 30, 2008
File No. 1-10220**

Dear Mr. Mazarredo:

We reviewed your responses to our prior comments on the above referenced filing as set forth in your letter dated September 30, 2008 and have the following additional comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Form 20-F for the Fiscal Year Ended December 31, 2007

Engineering Comments

Information on Repsol YPF, page 10

Oil and Gas Reserves, page 17

1. We note your proved reserves here as well as your statement on page 26, "The reserves estimated are typically expressed as gross and net reserves. Gross reserves are defined as the total estimated petroleum to be produced from the properties at the year end. Net reserves are defined as that portion of the gross reserves attributable to the interest of Repsol YPF after deducting interests owned by third parties." Please advise us whether your net proved reserve volumes presented here do include the royalty interests due to the host government or

others. If they do, advise of the amounts and why you believe that it is appropriate to include those amounts in your reserve volumes. Please refer to the last sentence in paragraph 10 of FAS 69.

Gross/ Net Exploratory Wells as of December 31, 2007, page 31

2. We note the absence of your development drilling activities for each of the prior three years as prescribed by SEC Industry Guide 2, paragraph 6A.(ii). However, we note that these information is provided in the Form 20-F of YPF Sociedad Anonima, your subsidiary. Please explain this discrepancy to us.

Algeria, page 36

3. We note that the Gassi Touil project was terminated by the Algerian national oil company. Please explain to us if you had booked proved reserves attributable to this project and, if so, the amount that were removed as a result of the termination of the project.

Brazil, page 39

4. We note your statement here, "Total proved and probable oil reserves at 2007 year-end were estimated at 464 million barrels." as well as those on page 41: "These activities will permit a more precise evaluation of the resources discovered, determined by a preliminary estimate to be approximately 2 trillion cubic feet (56 billion cubic meters)." and "In December 2007, West Siberian Resources (WSR), a company in which Repsol YPF holds a 10% stake...whose principal assets... two production licenses in Kazakhstan and Tarstan, which have 100 million barrels of oil in proved and probable reserves." Disclosure of reserves other than proved is not permitted in filings with the Commission. Please refer to paragraphs 1(b)(ii) and (iii) of the Instructions to Item 4.D. of Form 20-F. Please affirm to us that you will comply with the requirements of Form 20-F.

Mr. Fernando Ramirez Mazarredo
Repsol YPF, S.A.
November 5, 2008
Page 3

Ronald Winfrey, Petroleum Engineer, at (202) 551-3704 with questions about engineering comments. With respect to all legal comments, you may contact Carmen Moncada-Terry at (202) 551-3687 or, in his absence, Michael E. Karney at (202) 551-3847. You may contact me at (202) 551-3745 with any other questions. Direct all correspondence to the following ZIP code: 20549-7010.

Sincerely,

H. Roger Schwall
Assistant Director