



DIVISION OF
CORPORATION FINANCE

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

October 5, 2011

Via E-mail

Mr. Nathan Ticatch
President and Chief Executive Officer and Director
PetroLogistics LP
909 Fannin Street, Suite 2630
Houston, TX 77010

**Re: PetroLogistics LP
Amendment No.2 to Registration Statement on Form S-1
Filed: September 29, 2011
File No.: 333-175035**

Dear Mr. Ticatch:

We have reviewed your registration statement and have the following comments.

Compensation Discussion and Analysis, page 102

Executive Compensation, page 107

1. Refer to comment 12 in our letter dated August 15, 2011. It appears that instead of removing the disclosure here as no longer applicable, you have removed the first half of the "Employment Agreements" disclosure on page 107. Please revise accordingly.

Certain Relationships and Related Party Transactions, page 116

Brock Maintenance Contracts, page 118

2. We note your response to comment 14 in our letter dated August 15, 2011. Please file any agreements with Brock Maintenance, Inc. as exhibits to the registration statement.

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You may contact Kevin Stertz, Staff Accountant, at (202) 551-3723 or John Cash, Accounting Branch Chief, at (202) 551-3768 if you have questions regarding comments on the financial statements and related matters. Please contact Era Anagnosti, Staff Attorney, at (202) 551-3369 or me at (202) 551-3760 with any other questions.

Sincerely,

/s/ Pamela A. Long

Pamela A. Long
Assistant Director

cc: Via E-mail
Mike Rosenwasser, Esq.
James J. Fox, Esq.
Vinson & Elkins L.L.P.