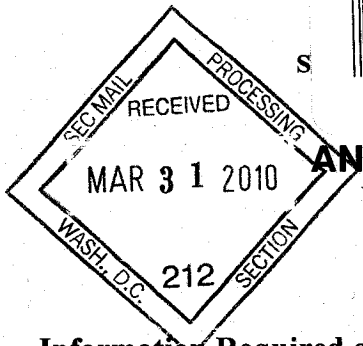


Amendment



10030675

MISSION

OMB APPROVAL
OMB Number: 3235-0123
Expires: February 28, 2010
Estimated average burden hours per response..... 12.00

**ANNUAL AUDITED REPORT
FORM X-17A-5
PART III**

4

SEC FILE NUMBER
8-66308

**FACING PAGE
Information Required of Brokers and Dealers Pursuant to Section 17 of the
Securities Exchange Act of 1934 and Rule 17a-5 Thereunder**

REPORT FOR THE PERIOD BEGINNING 01/01/09 AND ENDING 12/31/09
MM/DD/YY MM/DD/YY

A. REGISTRANT IDENTIFICATION

NAME OF BROKER-DEALER: RADNOR RESEARCH & TRADING COMPANY, LLC

OFFICIAL USE ONLY

ADDRESS OF PRINCIPAL PLACE OF BUSINESS: (Do not use P.O. Box No.)

FIRM I.D. NO.

290 KING OF PRUSSIA ROAD

(No. and Street)

RADNOR

PA

19087

(City)

(State)

(Zip Code)

NAME AND TELEPHONE NUMBER OF PERSON TO CONTACT IN REGARD TO THIS REPORT

WILLIAM R. JAMES

610-293-2000

(Area Code - Telephone Number)

B. ACCOUNTANT IDENTIFICATION

INDEPENDENT PUBLIC ACCOUNTANT whose opinion is contained in this Report*

STEPHANO SLACK LLC

(Name - if individual, state last, first, middle name)

125 STRAFFORD AVENUE

WAYNE

PA

19087

(Address)

(City)

(State)

(Zip Code)

CHECK ONE:

- Certified Public Accountant
- Public Accountant
- Accountant not resident in United States or any of its possessions.

FOR OFFICIAL USE ONLY

*Claims for exemption from the requirement that the annual report be covered by the opinion of an independent public accountant must be supported by a statement of facts and circumstances relied on as the basis for the exemption. See Section 240.17a-5(e)(2)

STEPHANO SLACK LLC

ACCOUNTANTS AND TAX ADVISORS

Independent Accountants' Report on Applying Agreed-Upon Procedures Related to an Entity's SIPC Assessment Reconciliation

To the Members
Radnor Research & Trading Company, LLC
Radnor, Pennsylvania

In accordance with Rule 17a-5(e)(4) under the Securities Exchange Act of 1934, we have performed the procedures enumerated below with respect to the accompanying Schedule of Assessment and Payments, Transitional Assessment Reconciliation (Form SIPC-7T), to the Securities Investor Protection Corporation (SIPC) for the period from April 1, 2009 to December 31, 2009, which were agreed to by Radnor Research & Trading Company, LLC and the Securities and Exchange Commission, Financial Industry Regulatory Authority, Inc., SIPC and the New York Stock Exchange, solely to assist you and the other specified parties in evaluating Radnor Research & Trading Company, LLC's compliance with the applicable instructions of the Transitional Assessment Reconciliation (Form SIPC-7T). Radnor Research & Trading Company, LLC's management is responsible for the Radnor Research & Trading Company, LLC's compliance with those requirements. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose. The procedures were performed and our findings are as follows:

1. Compared the listed assessment payments in Form SIPC-7T with respective cash disbursement records entries noting no payments made;
2. Compared the Total Revenue amounts of the audited Form X-17A-5 for the year ended December 31, 2009 less revenues reported on the FOCUS reports for the period from January 1, 2009 to March 31, 2009, as applicable, with the amounts reported in Form SIPC-7T for the period from April 1, 2009 to December 31, 2009 noting a difference of \$9,016 for gains from securities in investment accounts which would have been added to line 2a, total revenue, and deducted on line 2c(5), net gain from securities in investment accounts. Noting no change in SIPC net operating revenues or general assessment;
3. Compared any adjustments reported in Form SIPC-7T with supporting schedules and working papers noting no differences;

+ www.stephanoslack.com

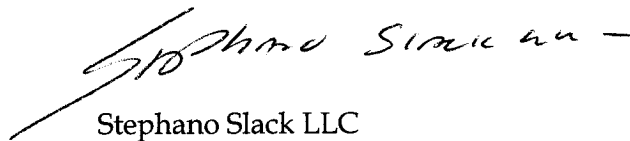
+ WAYNE OFFICE
125 Strafford Avenue, Suite 200
Wayne, PA 19087
tel 610-687-1600 + fax 610-687-0016

+ WEST CHESTER OFFICE
Goshen Executive Center, Suite 500B
1450 East Boot Road, West Chester, PA 19380
tel 610-696-4400 + fax 610-696-5648

4. Proved the arithmetical accuracy of the calculations reflected in Form SIPC-7T and in the related schedules and working papers supporting the adjustments noting no differences.

We were not engaged to, and did not conduct an examination, the objective of which would be the expression of an opinion on compliance. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the specified parties listed above and is not intended to be and should not be used by anyone other than these specified parties.



Stephano Slack LLC

March 29, 2010
Wayne, Pennsylvania

**RADNOR RESEARCH & TRADING
COMPANY, LLC**

SIPC Assessment Reconciliation

December 31, 2009