

Core-Mark Holding Company, Inc.
 Form 4
 October 09, 2008

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
MILLER CHRISTOPHER M

(Last) (First) (Middle)
 395 OYSTER POINT BLVD.,
 SUITE 415
 (Street)

SOUTH SAN
 FRANCISCO, CA 94080

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 Core-Mark Holding Company, Inc.
 [CORE]

3. Date of Earliest Transaction
 (Month/Day/Year)
 10/08/2008

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)
 ___ Director ___ 10% Owner
 ___ Officer (give title below) ___ Other (specify below)
 VP & Chief Accounting Officer

6. Individual or Joint/Group Filing(Check Applicable Line)
 X Form filed by One Reporting Person
 ___ Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
			Code	V Amount (A) or (D) Price			
Coremark Common Stock	10/08/2008		M	217 A \$ 0	217	D	
Coremark Common Stock	10/08/2008		S	217 D \$ 21.19	0	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Amount or Number of Shares
Restricted Stock Units 05 LTIP	\$ 0	10/08/2008		M	217	02/01/2006 02/08/2015	Coremark Common Stock	217

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
MILLER CHRISTOPHER M 395 OYSTER POINT BLVD., SUITE 415 SOUTH SAN FRANCISCO, CA 94080			VP & Chief Accounting Officer	

Signatures

Amy Morgan,
POA 10/09/2008

**Signature of Reporting Person Date

Explanation of Responses:

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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