Rolheiser Eric
Form 4
April 03, 2009

FORM 4

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

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

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).

(Print or Type Responses)

1. Name and Address of Reporting Person *
Rolheiser Eric

(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)
03/31/2009

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)
President - Canada Operations

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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Coremark Common Stock	04/03/2009		M		149	A	$ 0.01	1,058	D	
Coremark Common Stock	04/03/2009		M		208	A	$ 0.01	1,266	D	
Coremark Common Stock	04/03/2009		M		67	A	$ 0.01	1,333	D	
	04/03/2009		F		67 (1)	D		1,266	D	

Coremark Common Stock						$ 18.22		
Coremark Common Stock	04/03/2009		F	93 (2)	D	$ 18.22	1,173	D
Coremark Common Stock	04/03/2009		F	31 (3)	D	$ 18.22	1,142	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)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Restricted Stock Units 07LTIP	$ 0	03/31/2009		M			149	07/02/2008	06/30/2017	Coremark Common Stock	149
Restricted Stock Units 07LTIP	$ 0	03/31/2009		M			208	01/01/2009	06/30/2017	Coremark Common Stock	208
07 LTIP Performance Share	$ 0	03/31/2009		M			67	01/21/2009	06/30/2017	Coremark Common Stock	67

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other

Rolheiser Eric
395 OYSTER POINT BLVD., SUITE 415
SOUTH SAN FRANCISCO, CA 94080

President - Canada Operations

Signatures

Vicky Fong, POA — 04/03/2009

**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).

(1) Shares withheld for taxes.

(2) Shares withheld for taxes.

(3) Shares withheld for taxes.

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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