

Antholzner Gregory P
Form 4
August 31, 2006

FORM 4

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

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

OMB APPROVAL

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(Print or Type Responses)

1. Name and Address of Reporting Person *
Antholzner Gregory P

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

5. Relationship of Reporting Person(s) to
Issuer

(Check all applicable)

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

3. Date of Earliest Transaction
(Month/Day/Year)
08/31/2006

____ Director ____ 10% Owner
____ Officer (give title ____ Other (specify
below) below)
VP of Finance and Control

(Street)
SOUTH SAN
FRANCISCO, CA 94080

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

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

(City) (State) (Zip)

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	08/31/2006		M		5,000	A	\$ 15.5	5,000 D
Coremark Common Stock	08/31/2006		S ⁽¹⁾		5,000	D	\$ 31.4359	0 D

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

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SEC 1474
(9-02)

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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 (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
04LTIP plan grtd 8-23-2004 NQ	\$ 15.5	08/31/2006		M	5,000	08/23/2005 08/23/2011	Coremark Common Stock 5,000

Reporting Owners

Reporting Owner Name / Address	Relationships
	Director 10% Owner Officer Other
Antholzner Gregory P 395 OYSTER POINT BLVD., SUITE 415 SOUTH SAN FRANCISCO, CA 94080	VP of Finance and Control

Signatures

James Wall,
POA 08/31/2006

__Signature of Date
Reporting Person

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) Sold per Sec. 10b5-1 program

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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