

SUNOCO INC  
 Form 4  
 September 12, 2006

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
 Expires: January 31, 2005  
 Estimated average burden hours per response... 0.5

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 \*  
**WULFF JOHN K**

(Last) (First) (Middle)  
 1735 MARKET STREET  
 (Street)

PHILADELPHIA, PA 19103-7583  
 (City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
**SUNOCO INC [SUN]**

3. Date of Earliest Transaction  
 (Month/Day/Year)  
**09/08/2006**

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)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 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 Indirect Beneficial Ownership (Instr. 4)
				(A) or (D)	Code V Amount (D) Price		

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

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.**

SEC 1474 (9-02)

**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	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)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Pr Deri Secu (Instr. 3 and 4)
--	------------------------------------	--------------------------------------	--	--------------------------------	---	--	---	----------------------------------

Derivative Security			Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Deferred Share Units	(1)	09/08/2006	A		8.319		(2)	(2)	Common Stock	8.319 \$ 7
Phantom Stock Units	(1)	09/08/2006	A		23.477		(2)	(2)	Common Stock	23.477 \$ 7

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
WULFF JOHN K 1735 MARKET STREET PHILADELPHIA, PA 19103-7583			X	

## Signatures

John J. DiRocco, Jr., Attorney-in-fact for John K. Wulff 09/12/2006

\_\_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).
- (2) Not Applicable
- (1) Conversion rate is 1 for 1.
- (5) Total of 6,868.027 Phantom Stock Units beneficially owned following reported transaction. (11,547 Phantom Stock Units under Sunoco, Inc.'s Directors Deferred Compensation Plan I and 11,930 Phantom Stock Units under Sunoco, Inc.'s Directors Deferred Compensation Plan II.)
- (3) Includes a balance adjustment of 1.772 Restricted Share Units.
- (4) Total of 2,433.901 Restricted Share Units beneficially owned following reported transaction. (3,130 Restricted Share Units under Sunoco, Inc.'s Directors' Deferred Compensation Plan I and 5,189 Restricted Share Units under Sunoco, Inc.'s Directors' Deferred Compensation Plan II.)
- (6) Includes a balance adjustment of 4,794 Phantom Stock Units.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.