

FRALEY ROBERT T  
 Form 5  
 May 06, 2009

**FORM 5**

**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).  
 Form 3 Holdings Reported Form 4 Transactions Reported

**ANNUAL 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

1. Name and Address of Reporting Person \*  
**FRALEY ROBERT T**  
 (Last) (First) (Middle)

2. Issuer Name and Ticker or Trading Symbol  
**MONSANTO CO /NEW/ [MON]**  
 3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year)  
**08/31/2007**

5. Relationship of Reporting Person(s) to Issuer  
 (Check all applicable)  
 \_\_\_ Director \_\_\_ 10% Owner  
 Officer (give title below) \_\_\_ Other (specify below)  
 EVP, Chief Technology Officer

**800 N. LINDBERGH BLVD.**  
 (Street)

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

6. Individual or Joint/Group Reporting  
 (check applicable line)

**ST. LOUIS, MO 63167**

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)	(A) or (D)	Price	5. Amount of Securities Beneficially Owned at end of Issuer's Fiscal Year (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
Common Stock	09/27/2006	^	G	310	D	\$ 0	55,390	D	^
Common Stock	12/15/2006	^	G	1,200	D	\$ 0	54,190	D	^
Common Stock	^	^	^	^	^	^	8,981	I	By 401(k) Plan
Common Stock	^	^	^	^	^	^	32,127	I	By Grantor Retained Annuity

Common Stock                                   960          Trust  
 By Children

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

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(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 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. Price of Derivative Security (Instr. 5)	9. of D S B O E I S F I
						Date Exercisable	Expiration Date	Title	Amount or Number of Shares
						(A) (D)			

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
FRALEY ROBERT T 800 N. LINDBERGH BLVD. ST. LOUIS, MO 63167	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EVP, Chief Technology Officer <input type="checkbox"/>

## Signatures

By: Jennifer L. Woods,  
Attorney-in-Fact     05/06/2009

\*\*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).

Note: File three copies of this Form, one of which must be manually signed. If space provided 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.