

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 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person* CALFEE WILLIAM R			2. Issuer Name and Ticker or Trading Symbol CLIFFS NATURAL RESOURCES INC. [CLF]			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) ____ Director _____ 10% Owner <input checked="" type="checkbox"/> Officer (give title below) _____ Other (specify below) Exec. V.P. Comm. N.Amer. Iron		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 03/05/2009					
1100 SUPERIOR AVENUE, 15TH FLOOR								
(Street)			4. If Amendment, Date Original Filed(Month/Day/Year)			6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person ____ Form filed by More than One Reporting Person		
CLEVELAND, OH 44114								
(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 Indirect Beneficial Ownership (Instr. 4)	
			Code	V	Amount	(A) or (D)				Price
Common Stock	03/05/2009		A ⁽¹⁾		19,890	A	\$ 15.43	52,612	D	
Common Stock	03/05/2009		F ⁽²⁾		6,354	D	\$ 15.43	46,258	D	
Common Stock								39,864	I	By VNQDC ⁽³⁾

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. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Retention Units 2006-2008	⁽⁴⁾	03/05/2009		D		2,340	⁽⁵⁾	⁽⁵⁾	Common Shares	2,340	\$ 25.61	0	D	

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
CALFEE WILLIAM R 1100 SUPERIOR AVENUE 15TH FLOOR CLEVELAND, OH 44114			Exec. V.P. Comm. N.Amer. Iron	

Signatures

George W. Hawk, Jr. by Power of Attorney

03/06/2009

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).

(1) Reflects payout in Common Stock of Performance Shares earned under the Cleveland-Cliffs Inc 1992 Equity Plan (as Amended and Restated as of May 13, 1997) as amended ("Plan"), for the 2006-2008 Performance Period.

(2) Surrender of Performance Shares represented in footnote (1) in payment of the related tax liability incurred by the reporting person.

(3) Held for the benefit of the Reporting Person by the Cliffs Natural Resources Inc. 2005 Voluntary Non-Qualified Deferred Compensation Plan (VNQDC).

(4) Convertible into Common Shares on a 1-for-1 basis.

(5) Represents a payout of Retention Units to the Reporting Person under the Cleveland-Cliffs Inc Long-Term Incentive Program of the Plan covering the period January 1, 2006 through December 31, 2008 (Incentive Period). Payment of the Retention Units was made in cash after the completion of the Incentive Period based upon the employment by the Company of the Reporting Person and the market value of a Common Share of the Company on December 31, 2008 pursuant to the Plan.

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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