

FORM 5

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

OMB APPROVAL	
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ANNUAL 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

- 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

1. Name and Address of Reporting Person* Boor William C (Last) (First) (Middle) 200 PUBLIC SQUARE, SUITE 3300 (Street) CLEVELAND, OH 44114-2315 (City) (State) (Zip)	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) Sr. Vice Pres., Bus. Devel.
3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) 12/31/2009		6. Individual or Joint/Group Reporting (check applicable line) <input checked="" type="checkbox"/> Form Filed by One Reporting Person ___ Form Filed by More than One Reporting Person
4. If Amendment, Date Original Filed (Month/Day/Year)		

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 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)
				Amount	(A) or (D)	Price			
Common Stock							15,562 (1)	I	VNQDC
Common Stock							14,592.2609 (2)	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)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned at End of Issuer's Fiscal Year (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
						Date Exercisable	Expiration Date					
					(A) (D)							

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Boor William C 200 PUBLIC SQUARE SUITE 3300 CLEVELAND, OH 44114-2315			Sr. Vice Pres., Bus. Devel.	

Signatures

George W. Hawk, Jr. by Power of Attorney	01/07/2010
<small>**Signature of Reporting Person</small>	<small>Date</small>



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) Balance shown reflects 21, 25 and 30 dividend reinvestment shares acquired June 1, September 1, and December 1, 2009, respectively, pursuant to the dividend reinvestment feature of the Cliffs Natural Resources Inc. 2005 Voluntary Non-Qualified Deferred Compensation Plan ("VNQDC").
The balance includes dividend reinvestment from dividends of \$.04 per share payable to all holders of record on June 1 and September 1, 2009 and \$.0875 per share
- (2) payable on December 1, 2009. The amount shown reflects 6.2408, 7.0603, and 8.9058 dividend reinvestment shares acquired pursuant to a Dividend Reinvestment and Stock Purchase Plan for Cliffs Natural Resources Inc. Common Stock on June 1, September 1, and December 1, 2009, respectively.

Note: File three copies of this Form, one of which must be manually signed. If space provided is insufficient, *see* Instruction 6 for procedure.

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