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

1 Name ar				1										
(Print or Type Responses) 1. Name and Address of Reporting Person * Boor William C				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 X Officer (give title below) Other (specify below) Sr. Vice Pres., Bus. Devel.				
(Last) (First) (Middle) 200 PUBLIC SQUARE, SUITE 3300				3. Date of Earliest Transaction (Month/Day/Year) 05/21/2009							Sr. Vı	ce Pres., Bus	. Devel.	
(Street) CLEVELAND, OH 44114-2315				4. If Amendment, Date Original Filed(Month/Day/Year)					6. Individual or Joint/Group Filing(Check Applicable Line) Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City	· · · · · ·	(State)	(Zip)	Ta	able I - No	n-Der	ivative S	Securitie	s Acqui	ired, Dispo	sed of, or I	Beneficially	Owned	
1.Title of S (Instr. 3)	Title of Security 2. Transaction Date (Month/Day/Year)		2A. Deemed Execution Date, if any	3. Transaction Code (Instr. 8)		•			5. Amount of Securities Beneficially Owned Following Reported Transaction(s)			6. Ownership Form:	Beneficial	
				(Month/Day/Year)	Code	V	Amount	(A) or (D)	Price	(Instr. 3 a	nd 4)			Ownership (Instr. 4)
Common Stock		05/21/2009		F ⁽¹⁾		1,064	D	\$ 23.51	14,570.054 (2)		D			
Common Stock									15,486			I	VNQDC	
					1									
Reminder:	Report on a s	separate line fo		Derivative Securit	ies Acquir	Pers cont the f	ons wh ained ir orm dis	o responding this for splays a	orm are curre	not requ		ormation spond unle rol numbe	ss	1474 (9-02)
1. Title of Derivative Security	•	3. Transactio Date (Month/Day/	Table II - n 3A. Deemed Execution Da Year)	Derivative Securit (e.g., puts, calls, wa 4. Transaction Code Year) (Instr. 8)	ies Acquir arrants, op 5.	Pers cont the f	ons which ained in ained in ained in ained in ained in ained in ained ai	o responding this for splays a pof, or Bentible securing the bentiple on Date	neficial urities) 7. T. Amo Und Secu (Inst	not requ	OMB conf	pond unle	of 10. Owners Form of Security Direct (or Indire	11. Natu of Indire Benefici Ownersh (Instr. 4)

Reporting Owners

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

Signatures

Traci L. Forrester by Power of Attorney	05/26/2009
**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) Surrender of shares in payment of tax liability incurred on May 21, 2009, the date of restricted stock vesting for the Reporting Person.
- An amended Form 4 was reported on March 18, 2009 to reflect the correct number of Restricted Stock Units granted to the Reporting Person on March 9, 2009, and the correct number of directly held shares (15,610 shares). On March 17, 2009, a Form 4 incorrectly reported a direct ownership holding of 15,659.054 shares. The correct number of directly held shares as of that date was 15,634.054. This May 26, 2009 filing reflects the trade-in of 1,064 shares for tax liability making the Reporting Person's directly held shares a total of 14,570.054 shares.
- (3) Held for the benefit of the Reporting Person by the Cliffs Natural Resources Inc. 2005 Voluntary Non-Qualified Deferred Compensation Plan (VNQDC).

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.