

CLIFFS NATURAL RESOURCES INC.

Reported by RIEDERER RICHARD K

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 04/05/10 for the Period Ending 04/01/10

Address 200 PUBLIC SQUARE

STE. 3300

CLEVELAND, OH 44114-2315

Telephone 216-694-5700

CIK 0000764065

Symbol CLF

SIC Code 1000 - Metal Mining

Industry Metal Mining
Sector Basic Materials

Sector Dasic Materials

Fiscal Year 12/31



Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE **COMMISSION**

Washington, D.C. 20549

OMB APPROVAL OMB Number: 3235-0287 Expires: February 28, 2011 Estimated average burden hours per response... 0.5

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(f) of the Investment Company Act of 1940

1. Name and Address of Reporting Person *				2.	2. Issuer Name and Ticker or Trading Symbol							g Symb		5. Relationship of Reporting Person(s) to Issuer (Check all applicable)				
RIEDERER RICHARD K					CLIFFS NATURAL RESOURCES INC. [CLF]							RCES		X Director 10% Owner				
(Last)	(First)	(Mi	ddle)	3.	3. Date of Earliest Transaction (MM/DD/YYYY)					Office below)	Officer (give title below) Other (s			specify				
S25 W35020 MANOR HOUSE RD.).	4/1/2010													
(Street)					4. If Amendment, Date Original Filed (MM/DD/YYYY)						d		6. Individual or Joint/Group Filing (Check Applicable Line)					
OCONOMOV (City)	VAC, W (State)	/I 530													Reporting Pe han One Rep		n	
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1			2. Tra Date	ans.	2A. Deemed Execution Date, if	3. Trans Code (Instr. 8		Acquired (A)		or Follo (Inst		unt of Securities Beneficially Owned ing Reported Transaction(s) and 4)		6. Ownership Form: Direct (D) or Indirect	Beneficial Ownership			
						any	С	ode	V An	nount	(A) or (D)	Price				(I) (Instr. 4)	(IIISII. 4)	
Common Stock												2292.	2292.6183 (1)					
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																		
		Code	8) S	5. Number of Derivative Securities Acquired (A) of Disposed of (I Instr. 3, 4 and	and Expiration Date (A) or of (D)					Securitie	nd Amount of 3 Underlying e Security nd 4)	8. Price of Derivative Security (Instr. 5)		Ownership Form of Derivative	Beneficial			
				Code	v	(A)	(D)	Date Exer	cisable		iration	Title	Amount or Number of Shares		Reported Transaction (s) (Instr. 4)	(I) (Instr.		
Stock Units	(2)	4/1/2010		A		69.1085			(3)		(3)	Common Shares	69.1085	\$72.35	14407.3149	D		

Explanation of Responses:

- (1) The Board of Directors of Cliffs Natural Resources Inc. (the "Company") declared a dividend of \$.0875 per share, payable to all holders of record as of February 14, 2010 of common stock payable on March 1, 2010. The amount shown reflects 3.5038 shares credited to the Reporting Person pursuant to the Company's Dividend Reinvestment and Stock Purchase Plan.
- (2) Convertible into Common Shares on a 1-for-1 basis.
- (3) Reflects number of Common Shares of underlying deferred compensation credited to the account of the Reporting Person pursuant to the Company's Nonemployee Directors' Compensation Plan ("Plan"). Each Stock Unit is generally distributable following termination of service as a Director.
- (4) Balance shown reflects 17.5274 shares acquired March 31, 2010 pursuant to the dividend reinvestment feature of the Plan. The number of deferred dividend reinvestment equivalent shares earned in the Plan is calculated using the closing market price at the end of each quarter for shares held in the Plan as of the record date with dividends earned on March 1, 2010.

Reporting Owners

Reporting Owner Name / Address	Relationships					
Reporting Owner Name / Address						

	Director	10% Ov	vner	Officer	Other
RIEDERER RICHARD K S25 W35020 MANOR HOUSE RD.	X				
OCONOMOWAC, WI 53066					

Signatures

Traci L. Forrester by Power of Attorney 4/5/2010

** Signature of Reporting Person

Date

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

- 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 is insufficient, see Instruction 6 for procedure.

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.