

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* BRAKE WILLIAM | | | 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) _____ EVP, Human & Tech. Resources | | |
| (Last) | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 03/03/2010 | | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person | | |
| 200 PUBLIC SQUARE, SUITE 3300 | | | 4. If Amendment, Date Original Filed (Month/Day/Year) | | | | | |
| (Street) CLEVELAND, OH 44114-2315 | | | | | | | | |
| (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 | 03/03/2010 | | A ⁽¹⁾ | | 25,500 | A | \$ 53.6 | 37,850 | D | |
| Common Stock | 03/03/2010 | | F ⁽²⁾ | | 9,871 | D | \$ 53.6 | 27,979 | D | |
| Common Stock | | | | | | | | 1 | I | VNQDC ⁽³⁾ |

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

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.

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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 2007-2009 | ⁽⁴⁾ | 03/03/2010 | | D | | 3,000 | ⁽⁵⁾ | ⁽⁵⁾ | Common Shares | 3,000 ⁽⁶⁾ | \$ 46.09 | 0 | D | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|------------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| BRAKE WILLIAM 200 PUBLIC SQUARE SUITE 3300 CLEVELAND, OH 44114-2315 | | | EVP, Human & Tech. Resources | |

Signatures

| | |
|---|------------|
| Traci L. Forrester by Power of Attorney | 03/03/2010 |
|---|------------|

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 a payout in Common Stock of Performance Shares earned under the 2007 Cleveland-Cliffs Inc. Incentive Equity Plan (as Amended December 31, 2008) (Equity Plan) for the 2007-2009 Performance Period.
- (2) Surrender of Performance Shares represented 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 2007 Equity Plan covering the period of January 1, 2007 to December 31, 2009 (Retention Period). Retention units are paid out to the Reporting Person in cash based on the market value price of the Common Shares of the Issuer on the last day of the Retention Period.
- (6) Since the date of grant, the common stock of the Company split 2-for-1 on May 15, 2008 resulting in the reporting person receiving an additional 1,500 Retention Units.

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.