

Carrabba Joseph A
 Form 4
 February 23, 2011

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, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 Carrabba Joseph A

2. Issuer Name and Ticker or Trading Symbol
 CLIFFS NATURAL RESOURCES INC. [CLF]

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)

(Last) (First) (Middle)
 200 PUBLIC SQUARE, SUITE 3300
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 02/23/2011

Director 10% Owner
 Officer (give title below) Other (specify below)
 Chairman, Pres. & CEO

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)

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) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|---|
| | | | | (A) or (D) | Price | | |
| Common Stock | 02/23/2011 | | A ⁽¹⁾ | 51,750 | A \$ 0 | 235,936 | D |
| Common Stock | 02/23/2011 | | F ⁽²⁾ | 25,457 | D \$ 92.67 | 210,479 | D |
| Common Stock | | | | | | 6,446 ⁽³⁾ | I VNQDC |

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

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SEC 1474 (9-02)

displays a currently valid OMB control number.

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 Owned Beneficially (Instr. 3 and 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--|--|
| | | | | Code | V (A) (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|-----------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Carrabba Joseph A 200 PUBLIC SQUARE SUITE 3300 CLEVELAND, OH 44114-2315 | X | | Chairman, Pres. & CEO | |

Signatures

/s/ Keirsten Riedel by Power of Attorney
Date: 02/23/2011

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 a payout of performance shares for the 2008-2010 performance period earned under Issuer's 2007 Incentive Equity Plan.
- (2) Reflects the surrender of 21,709 performance shares and 3,748 restricted share units from the 2008-2010 performance period in payment of the related tax liability incurred by the Reporting Person as a result of the award.
- (3) Balance shown reflects 11 common shares acquired December 1, 2010 pursuant to the dividend reinvestment feature of the Issuer's 2005 Voluntary Non-Qualified Deferred Compensation Plan (the VNQDC) to shareholders of record as of November 19, 2010.

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.