

# FORM 5

**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).
- Form 3 Holdings Reported
- Form 4 Transactions Reported

## 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

1. Name and Address of Reporting Person* <b>IRELAND JAMES D III</b>			2. Issuer Name and Ticker or Trading Symbol <b>CLIFFS NATURAL RESOURCES INC. [CLF]</b>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)																																
(Last)	(First)	(Middle)	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 <input type="checkbox"/> Form Filed by More than One Reporting Person																																
1801 EAST 9TH STREET, SUITE 1700			4. If Amendment, Date Original Filed(Month/Day/Year)																																			
(Street)			<p align="center"><b>Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned</b></p> <table border="1"> <thead> <tr> <th rowspan="2">1. Title of Security (Instr. 3)</th> <th rowspan="2">2. Transaction Date (Month/Day/Year)</th> <th rowspan="2">2A. Deemed Execution Date, if any (Month/Day/Year)</th> <th rowspan="2">3. Transaction Code (Instr. 8)</th> <th colspan="3">4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)</th> <th rowspan="2">5. Amount of Securities Beneficially Owned at end of Issuer's Fiscal Year (Instr. 3 and 4)</th> <th rowspan="2">6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)</th> <th rowspan="2">7. Nature of Indirect Beneficial Ownership (Instr. 4)</th> </tr> <tr> <th>Amount</th> <th>(A) or (D)</th> <th>Price</th> </tr> </thead> <tbody> <tr> <td>Common Stock</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>25,690</td> <td>D</td> <td></td> </tr> <tr> <td>Common Stock</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>349,592</td> <td>I</td> <td>Co-Trustee (1)</td> </tr> </tbody> </table>			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							25,690	D		Common Stock							349,592	I	Co-Trustee (1)
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(City)			(State)			(Zip)																																

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.** SEC 2270 (9-02)

**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)
						(A)	(D)	Date Exercisable	Expiration Date				
Stock Units							(3)	(3)	Common Shares	23,261.2502 (4)	23,261.2511	D	

### Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
IRELAND JAMES D III 1801 EAST 9TH STREET SUITE 1700 CLEVELAND, OH 44114	X			

### Signatures

Traci L. Forrester by Power of Attorney		01/05/2010
<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) The shares represented are held in five trusts for the benefit of siblings and the Reporting Person who is a co-trustee of the trusts. The Reporting Person disclaims beneficial ownership of 255,894 of these shares. The Reporting Person has an interest in the income or corpus with respect to 93,698 shares.
- (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 Cliffs Natural Resources Inc. Nonemployee Directors' Compensation Plan ("Plan"). Each Stock Unit is generally distributable following termination of service as a Director.
- (4) Balance shown reflects 37.8433, 28.663, and 44.0768 shares acquired June 30, September 30, and December 31, 2009, respectively, 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 as of June 1, September 1, and December 1, 2009.

Note: File three copies of this Form, one of which must be manually signed. If space provided 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.