FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Check this box if no longer subject to	
Section 16. Form 4 or Form 5	
obligations may continue. See	

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL									
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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* <u>JONES ROBERT G</u>						2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner						
(Last) ONE CIT	(F	,	(Middle)		3. Date of Earliest Transaction (Month/Day/Year) 02/19/2009 X Officer (give title below) Sr. VP-Law, Gen Co								ı Coı	Other (specify below)						
(Street) ST. LOU			63141		4. 1	4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Indi ine) X	Form fi	ual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City)	(5	,	(Zip)		<u></u>	_							<u>.</u>							
		Tab	le I - Non	1-Deriv	ative	e Se	curities	S AC	quired,	Dis	posed o	t, or Be	netici	ally	Owned					
Date				2. Trans Date (Month/		ear)	2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction Disposed Code (Instr. 5)		ties Acquire I Of (D) (Ins		4 and Securiti		es Following (I)		: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
										v	Amount	(A) oi (D)	Pric	Troposo		tion(s)			(111501.4)	
	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 E if any (Month/Day	Date,		saction of E		6. Date Exercisable and Expiration Date (Month/Day/Year) 7. Title and of Securitic Underlying Derivative (Instr. 3 and				ies g Securi		B. Price of Derivative Security Instr. 5)	9. Numbe derivative Securities Beneficial Owned Following Reported Transacti (Instr. 4)	e s ally g	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)		
					Code	v	(A)	(D)	Date Exercisab		Expiration Date	Title	Amou or Numb of Share	er						
Employee Stock Options	\$14.05	02/19/2009			A		55,450		(1)	C	02/19/2019	Common Stock	55,45	50	\$0.00	55,450		D		

Explanation of Responses:

1. The options vest ratably over 4 years as follows: 13,863 shares vest on February 19, 2010; 13,863 shares vest on February 19, 2011; 13,862 shares vest on February 19, 2012; 13,862 shares vest on February 19, 2013.

Remarks:

/s/ Gregory A. Billhartz, 02/23/2009 Attorney-in-Fact

** 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.

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