

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. 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								135000	I	2001 (1)
Common Stock								1326320	I	by NRM IV (1)
Common Stock								6328853	I	by NRM V (1)
Common Stock								3430000	D	

Table II - Derivative Securities Beneficially Owned (e.g. , puts, calls, warrants, options, convertible securities)

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. 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		7. Title and Amount of Securities Underlying Derivative Security (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		(A)	(D)	Date Exercisable	Expiration Date				

Explanation of Responses:

(1) Randal J. Kirk controls each of Kapital Joe, LLC ("Kapital Joe"), R.J. Kirk Declaration of Trust ("R.J. Kirk DOT"), JPK 2009, LLC ("JPK 2009"), MGK 2009, LLC ("MGK 2009"), JPK 2008, LLC ("JPK 2008"), MGK 2008, LLC ("MGK 2008"), ZSK 2008, LLC ("ZSK 2008"), Lotus Capital (2000) Company, Inc. ("Lotus Capital"), Kirkfield, L.L.C. ("Kirkfield"), Third Security Staff 2001 LLC ("Staff 2001"), New River Management IV, LP ("NRM IV") and New River Management V, LP ("NRM V"). Shares held by these entities may be deemed to be indirectly beneficially owned (as defined under Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended) by Mr. Kirk.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
KIRK RANDAL J C/O THIRD SECURITY, LLC 1881 GROVE AVENUE RADFORD, VA 24141	X	X		

Signatures

/s/ Randal J. Kirk

11/16/2011

** 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.