	Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares					
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Reporting Owners

	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
GAMCO INVESTORS, INC. ET AL ONE CORPORATE CENTER RYE, NY 10580		X					
GGCP, INC. 189 MASON STREET GREENWICH, CT 06830		X					
Associated Capital Group, Inc. 191 MASON STREET GREENWICH, CT 06830		X					
GABELLI MARIO J C/O GAMCO INVESTORS, INC ONE CORPORATE CENTER RYE, NY 10580		X					

Signatures

/s/ Douglas R. Jamieson, Attorney-In-Fact for MARIO J. GABELLI, GGCP, INC., and ASSOCIATED CAPITAL GROUP, INC	12/27/2021
**Signature of Reporting Person	Datetsec ing
/s/ Peter D. Goldstein, General Counsel for GAMCO INVESTORS, INC	12/27/2021
Signature of Reporting Person	Date

Explanation of Responses:

- * If the form is filled by none from the ground that 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).
- GAMCO Investors, Inc. and Associated Capital Group, Inc. have less than a 100% interest in this entity; GGCP, Inc. has less than a 100% interest in GAMCO Investors, Inc. (1) and Associated Capital Group, Inc.; and Mario J. Gabelli has less than a 100% interest in GGCP, Inc. The amount of securities reported as beneficially owned reflects the total amount of securities held by this entity which is greater that the Reporting Persons' indirect pecuniary interests. The Reporting Persons he t