

MAPCO OIL & GAS COMPANY OFFICERS AND DIRECTORS AS OF MAY 10, 1990

OFFICERS

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President
Vice President and Tax Counsel
Vice President and Treasurer
Secretary

Robert M. Howe Austin J. Greene James J. Davis James N. Cundiff

DIRECTORS

Robert M. Howe Austin J. Greene James N. Cundiff

The addresses of the above officers and directors are as follows:

1800 South Baltimore Avenue Tulsa, Oklahoma 74119 (918) 581-1800

(MAPCO Oil & Gas Company formerly MAPCO Production Company - name changed December 21, 1983, effective December 31, 1983).