

State of Idaho

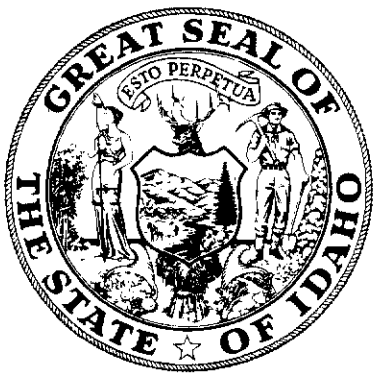
Department of State

CERTIFICATE OF AUTHORITY OF PLIBRICO SALES AND SERVICE INC.

I, PETE T. CENARRUSA, Secretary of State of the State of Idaho, hereby certify that
duplicate originals of an Application of _____
_____ for a Certificate of Authority to transact business in this State,
duly signed and verified pursuant to the provisions of the Idaho Business Corporation Act, have
been received in this office and are found to conform to law.

ACCORDINGLY and by virtue of the authority vested in me by law, I issue this Certificate of
Authority to _____
_____ PLIBRICO SALES AND SERVICE INC.
to transact business in this State under the name _____
_____ and attach hereto a duplicate original of the Application
for such Certificate.

Dated July 27, 1987



Pete T. Cenarrusa
SECRETARY OF STATE

Judith Matthews
Corporation Clerk

APPLICATION FOR CERTIFICATE OF AUTHORITY

(Profit Corporation)

To the Secretary of State of Idaho

Pursuant to Section 30-1-110, Idaho Code, the undersigned Corporation hereby applies for a Certificate of Authority to transact business in your State, and for that purpose submits the following statement:

RECEIVED
JUL 27 AM 10 07

1. The name of the corporation is Plibrico Sales and Service Inc.
2. The name which it shall use in Idaho is Plibrico Sales and Service Inc.

(To be used only when required to avoid a conflict with a name already on file. Must be accompanied by a Board of Directors resolution adopting assumed name in Idaho.)

3. It is incorporated under the laws of Delaware
4. The date of its incorporation is 12/31/1985 and the period of its duration is Perpetual
5. The address of its principal office in the state or country under the laws of which it is incorporated is 229 S. State St., Dover, Del. 19901
6. The address to which correspondence should be addressed, if different from that in item 5. 1800 N. Kingsbury, Chicago, Ill. 60614
7. The street address of its proposed registered office in Idaho is First Interstate Bank Bldg. 700 W. Idaho, Boise, ID. 83701, and the name of its proposed registered agent in Idaho at that address is United States Corporation Company
8. The purpose or purposes which it proposes to pursue in the transaction of business in Idaho are: Sales and Service of Refractory Material.

9. The names and respective addresses of its directors and officers are:

Name	Office	Address
<u>W.A. Schaefer</u>	<u>Dir/Chairman Board</u>	<u>1800 N. Kingsbury, Chgo., Ill. 60614</u>
<u>R.W. Schaefer</u>	<u>Dir/President</u>	<u>" " " " "</u>
<u>R.E. Fisher</u>	<u>Dir/Vice President</u>	<u>" " " " "</u>
<u>B.A. Pieters</u>	<u>Director</u>	<u>" " " " "</u>
<u>J. Milas</u>	<u>Dir/Treasurer</u>	<u>" " " " "</u>
<u>R. G. Schultz</u>	<u>Secretary</u>	<u>" " " " "</u>

(continued on reverse)



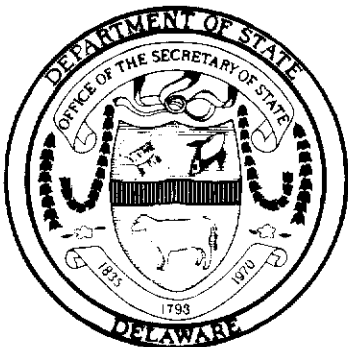
RECEIVED
SEC. OF STATE

87 JUL 27 AM 10 07

Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY PLIBRICO SALES AND SERVICE INC, IS DULY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL CORPORATE EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE DATE SHOWN BELOW.

| | | | | | | | | |



757 195 116

Michael Harkins
Michael Harkins, Secretary of State

AUTHENTICATION: 11314357

DATE: 07/14/1987