



**Fourteenth Annual**

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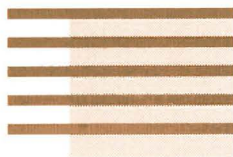
**American  
Mining Hall of Fame  
Awards Presentation  
and Banquet**

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**December 7, 1996  
Loews Ventana Canyon Resort, Tucson, Arizona**

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**Sponsored by  
Mining Foundation of the Southwest**



# PROGRAM

Reception ..... 6:30 p.m.

Banquet Dinner..... 7:30 p.m.

Ceremony ..... 9:00 p.m.

Welcoming Remarks: *John C. Lacy*

Introduction of Head Table  
and Other Honored Guests: *John C. Lacy*

Awards Presentation: *William H. Wilkinson*

Presentation of 1996 Inductees: *Louis S. Cates*  
*Presented by David M. Spatz*

*Donald H. McLaughlin*  
*Presented by Walter E. Heinrichs, Jr.*

Presentation of 1996 Medals of Merit: *Richard W. Hutchinson*  
*Presented by William H. Wilkinson*

*Charles L. Pillar*  
*Presented by Milton H. Ward*

Presentation of 1996 Industry  
Partnership Award: *AMIGOS*  
*(AZ Mining and Industry Gets Our Support)*  
*Presented by Herbert H. Welhener*

Presentation of 1996 Recipient: *Richard de J. Osborne*  
*Presented by John C. Lacy*

Featured Address: *Richard de J. Osborne*

Adjournment: *John C. Lacy*



## RECEPTION HOSTED BY

### AIME

Ames Construction

ASARCO Incorporated

Bank One

Bateman Engineering

Bechtel

BHP Mineral Exploration

Boart Longyear Company

Cominco American Inc.

Cutler-Hammer/Westinghouse

Cyprus Climax Metals Co.

Dames & Moore

Empire Machinery

Frontier-Kemper Constructors, Inc.

Henkel Corporation

Homestake

Independent Mining Consultants

Industrial Motor & Control, Inc.

Kennecott

Lang Exploratory Drilling

M3 Engineering & Technology, Inc.

Mintec

Modular Mining Systems

P & H Harnischfeger

Park Company

Phelps Dodge Exploration

Pioneer Equipment, Inc.

Purcell's Western Tire

Southwest Energy

Sundt Corporation

The Winters Company

TIC

US Electrical Motors

Wells Fargo

Western States Engineering

William Detroit Diesel



## **MINING FOUNDATION OF THE SOUTHWEST**

The goal and purpose of the Mining Foundation of the Southwest is to promote public understanding of and education related to the mining industry. Toward this goal, the Foundation has funded a number of projects from donations and fund-raising activities.

The Hall of Fame Awards Banquet serves a dual purpose in educating people about prominent persons associated with the mining industry, both present and past, and raising funds to continue projects of the Foundation.

The Mining Foundation of the Southwest was incorporated in 1993 with the merger of the Mining Club of the Southwest and the Mining Club of the Southwest Foundation. The Mining Club was started in 1971 and the Club's Foundation began in 1983 with the first American Mining Hall of Fame Awards.

The Hall of Fame honorees, both living and deceased, now number 60. The plaques which commemorate their induction are on display at the Arizona Historical Society's Museum at 949 East Second Street in Tucson.

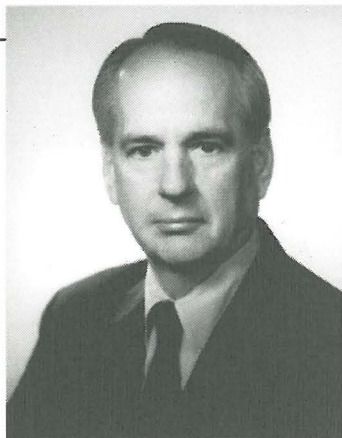


## AMERICAN MINING HALL OF FAME

### 1996 RECIPIENT

### **RICHARD DE J. OSBORNE**

**R**ichard de J. Osborne was born in Bronxville, New York, in 1934. He graduated from Milton Academy in 1952 and from Princeton University with an A.B. degree in economics in 1956. He joined ASARCO in 1975 as Vice President-Finance and Chief Financial Officer. He was elected a director in 1976, was named Executive Vice President in 1977 and President in 1982, and in 1985 was elected its Chairman and CEO.



Mr. Osborne is the former chairman and a current director of the National Mining Association, the former chairman and a current director of the International Copper Association, and the chairman and a director of the Copper Development Association. He is non-executive chairman and a director of the Southern Peru Copper Corporation and a director of Grupo Mexico, S.A. de C.V., the Schering-Plough Corporation, the B.F. Goodrich Company, and the Tinker Foundation.

Mr. Osborne's associations also include service as a director of the American Australian Association, the Americas Society and the Council of the Americas.





# AMERICAN MINING HALL OF FAME

## 1996 INDUCTEE

### LOUIS S. CATES

1881 - 1959

**L**ouis S. Cates was born in Boston, Massachusetts in 1881. He received a mining engineering degree from the Massachusetts Institute of Technology in 1902 and began his career in the mining fields of Parral, Chihuahua, Mexico. He later moved to Bingham Canyon, Utah with the Boston Consolidated Mining Company, was made manager in 1910, and played a major role in development of the huge Bingham open pit mine. When Utah Copper Company purchased Boston Consolidated, Cates was put in charge of the Ray Consolidated Copper Company at Ray, Arizona. He became General Manager at Ray in 1913, and in 1923, he went to Salt Lake City as Vice President and General Manager of Utah Copper Company.



In 1930, he resigned to become President of Phelps Dodge Corporation. He retired as President and became Chairman of the Board in 1947. Under Cates' leadership, Phelps Dodge became one of the big three copper producers in the world. It was during his tenure that Phelps Dodge acquired the Calumet and Arizona Mining Company and the United Verde Copper Company. However, his major achievement at Phelps Dodge was the development of the Morenci open pit mine.



## AMERICAN MINING HALL OF FAME

### 1996 INDUCTEE

### **DONALD H. MCLAUGHLIN**

**1891 - 1959**

**D**onald McLaughlin was born in San Francisco in 1891. His father, a gold rush miner, died while McLaughlin was a child and his education was overseen by his mother's employer, Phoebe Apperson Hearst. He studied mining engineering at the University of California and obtained his Ph.D. from Harvard University with academic honors. After returning from military service in 1919, his association with the Hearst family provided his first job working for Cerro de Pasco Corporation in Peru where he served as chief geologist between 1919 and 1925. In 1925 he returned to Harvard as its youngest full professor and eventually became chairman of the Division of Geological Sciences.



During World War II, McLaughlin returned to the University of California as Dean of its College of Mines before returning to Cerro de Pasco in 1943 as its Vice President and then General Manager. In 1946 he joined Homestake Mining Company, as its President and Chief Executive and served as its Chairman of the Board until 1970. McLaughlin's careers in teaching and industry also included significant service to government as he served as a member of the first National Science Board of the National Science Foundation, the Hoover Commission, and the advisory committee with the United States Geological Survey.

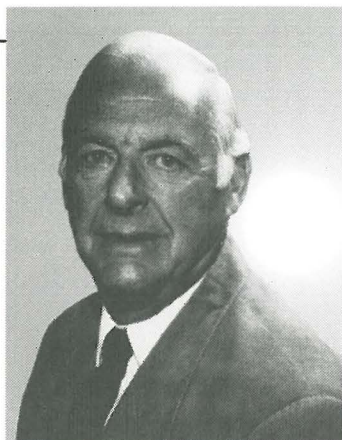


# AMERICAN MINING HALL OF FAME

## 1996 MEDAL OF MERIT RECIPIENT

### RICHARD W. HUTCHINSON

**R**ichard W. Hutchinson was born in London, Ontario, Canada, in 1928. He received his B.Sc. in geology in 1950 from the University of Western Ontario and his M.Sc. and Ph.D. degrees from the University of Wisconsin in 1951 and 1954. As a graduate student, Dr. Hutchinson worked for the Geological Survey of Canada and then went to work for the American Metal Company for ten years.



He left industry in 1964 and began a 19-year career on the faculty of the University of Western Ontario. In 1983, he moved to the Colorado School of Mines as the Charles F. Fogarty Professor of Economic Geology Chair and retired in 1994.

Hutchinson's major contributions include his documentation and interpretation that base metal massive sulfide deposits are essentially syngenetic and formed as exhalations on the sea floor; and his development of a coherent scheme of crustal change through space and time for the base metal family of deposits. He has placed hundreds of students into successful exploration worldwide through his teaching and research.



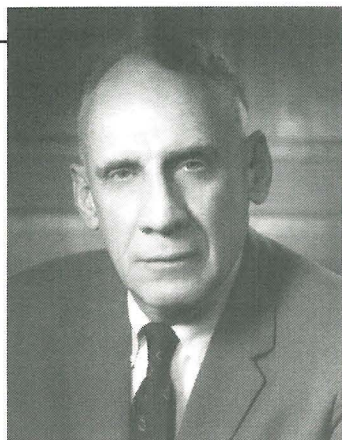


## AMERICAN MINING HALL OF FAME

### 1996 MEDAL OF MERIT RECIPIENT

#### CHARLES L. PILLAR

**C**harles "Chuck" Pillar was born in Denver, Colorado, earned his Colorado Mines E.M. degree in 1935 and joined Park City Consolidated Mines in Utah. He progressed from mucker to shift boss before joining St. Joe Minerals in 1937, where he became assistant mine supervisor in 1942 when he joined the Army Air Corps. He rejoined St. Joe in 1945.



In 1947, Pillar became planning engineer in charge at Magma Copper's new San Manuel, Arizona mine. By 1963, he was Mine Superintendent of the 50,000-tons-per-day operation. Pillar then joined Placer Development Ltd. as assistant vice president of operations and was responsible for all Placer's mining operation when he retired in 1975. That year, he co-founded Pillar, Lowell and Associates and consulted on a worldwide basis for more than 25 companies before he again retired in 1987.

Pillar received AIME's Wm. L. Saunders Gold Medal in 1987 for his contributions to the theory and practice of block caving and, in 1988, received AIME's Distinguished Member Award. He established the Pillar E.M. Endowed Scholarship at the Colorado School of Mines, is a member of the President's Council, and in 1995, received the school's Distinguished Achievement Medal.



# AMERICAN MINING HALL OF FAME

## 1996 INDUSTRY PARTNERSHIP AWARD

### AMIGOS

(ARIZONA MINING & INDUSTRY GETS OUR SUPPORT)

**A**rizona Mining and Industry Gets Our Support (AMIGOS) was founded in 1974 with twenty-six charter members. Its mission was then and still is today to promote the well-being of Arizona's mining industry. For 22 years AMIGOS has been among mining's best friends. The association has grown in numbers and in influence over the years. Now, well over 200 members strong, AMIGOS accomplishes its mission by identifying business, legislative and regulatory issues of concern and taking action. This action may be taken in the form of testifying at the legislature, letter writing campaigns to regulators, support of political candidates through the AMIGOS PAC or press conferences to educate and inform the public.



As the premier mining industry association, AMIGOS hosts events where miners and suppliers meet and is the publisher of the only mining Buyer's Guide in the Southwest. The AMIGOS logo is used extensively in mining publications because it identifies the members of AMIGOS as those who give something back to the industry. AMIGOS is striving to grow in numbers, in effectiveness and in influence to continue to be mining's best friends.



# MINING FOUNDATION OF THE SOUTHWEST

## Board of Governors

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John C. Lacy - *President*  
Milton M. Evans - *Vice President*  
Susan Armijo Wick - *Secretary/Treasurer*  
Nick Balich  
R. W. Ballmer  
A. Frederick Banfield  
Roshan Bhappu  
Wayne H. Burt  
David Dehlin  
Richard D. Ellet  
Larry D. Fellows  
Walter E. Heinrichs, Jr.  
Marvin A. Hustad  
Martin C. Kuhn  
James D. Loghry  
Robert A. Metz  
William C. Peters  
Charles R. Sewell  
David M. Spatz  
Lyle Taylor  
Jack E. Thompson  
Herbert E. Welhener  
Gordon W. Wieduwilt  
William H. Wilkinson

## Hall of Fame Committee

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William H. Wilkinson - *Chairman*  
David Dehlin  
Milton M. Evans  
Martin C. Kuhn  
Walter E. Heinrichs, Jr.  
John C. Lacy  
David M. Spatz  
W. Brantley Sudderth  
Herbert E. Welhener

## Sustaining Member

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Geotemps

## Gold Members

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A. Frederick Banfield  
Jack E. Thompson  
Milton H. Ward  
William H. Wilkinson

## Silver Members

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George J. Allen  
Richard Ellet  
Milton M. Evans  
Larry A. Flynn  
John C. Lacy  
Jack E. Thompson, Jr.  
Susan Armijo Wick



# AMERICAN MINING HALL OF FAME

**1983 Recipient**  
George E. Atwood

**1984 Recipient**  
Charles F. Barber

**1985 Recipient**  
George B. Munroe

**1986 Recipient**  
John C. Duncan

**1987 Recipient**  
Plato Malozemoff

**1988 Recipient**  
Simon D. Strauss

**1989 Recipient**  
G. Robert Durham

**1990 Recipient**  
Harry M. Conger

**1991 Recipient**  
Kennth J. Barr

**1992 Recipient**  
T. S. Ary

**1993 Recipient**  
Milton H. Ward

**1994 Recipient**  
J. Burgess Winter

**1995 Recipient**  
Douglas C. Yearley

## Medal of Merit Recipients

Ralph J. Roberts, 1989

Victor H. Verity, 1989

John S. Livermore, 1990

George D. Argall, Jr., 1991

Arthur A. Brant, 1992

William C. Epler, 1992

Walter E. Heinrichs, Jr., 1993

Willard C. Lacy, 1993

Donnell W. Agers, 1994

J. David Lowell, 1994

Ronald R. Swanson, 1994

Warren Kay Pincock, 1995

## Industry Partnership Award

Caterpillar, Inc. - Glen A. Barton, 1995



# AMERICAN MINING HALL OF FAME

## 1983-1995 Inductees

Maxie L. Anderson  
1934-1983

Meyer Guggenheim  
1825-1905

Seeley W. Mudd  
1861-1926

Bert S. Butler  
1877-1960

Hal W. Hardinge  
1855-1943

Charles Debrille Poston  
1825-1902

Nellie Cashman  
1849-1925

George Hearst  
1820-1891

Rossiter W. Raymond  
1840-1918

William Andrews Clark  
1839-1925

Joseph Austin Holmes  
1859-1915

Robert H. Richards  
1844-1945

James Douglas  
1837-1918

Herbert C. Hoover  
1874-1964

Thomas A. Rickard  
1864-1953

James Stewart Douglas  
1868-1949

Daniel C. Jackling  
1869-1956

Louis D. Ricketts  
1859-1940

Charles F. Fogerty  
1921-1981

Ira B. Joralemon  
1884-1975

Reno H. Sales  
1876-1969

Antoine M. Gaudin  
1896-1974

Henry Krumb  
1875-1958

Fred Searls, Jr.  
1888-1968

Wesley P. Goss  
1899-1985

Waldemar Lindgren  
1860-1939

Antonio Siraumea  
1710-1760

William C. Greene  
1853-1913

Curtis H. Lindley  
1850-1920

Arthur F. Taggart  
1884-1959

John C. Greenway  
1872-1926

John William Mackay  
1831-1901

William Boyce Thompson  
1869-1930

Arthur Redman Wilfley  
1860-1927





# MINING FOUNDATION OF THE SOUTHWEST





# **MINING FOUNDATION OF THE SOUTHWEST**

Mining Foundation of the Southwest

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