



COVER: Purple fluorite cubes on sphalerite and pyrite from Kentucky, backed by pale green fluorite from Hunan, China, are in the collection of Earl Lewis, Hollywood, California. (Earl Lewis photo)

REGULAR FEATURES

Craftsman of the Month	6
Show Dates	8
Shop Talk	18
Lapidary Lore and More	26
Off the Dop	38
How to Subscribe	57
John Sinkankas Memorial Editorial Award	67
Picks & Pans	68
Rock Science	76
Many Facets	78
On the Rocks	88

Rock & Gem (ISSN 0048-8453, USPS 486-290) is published monthly by Miller Magazines, Inc., 4880 Market St., Ventura, California 93003-7783, telephone (805) 644-3824. Periodicals postage paid at Ventura, CA 93006, and additional mailing offices. Single-copy price \$3.99. Subscription in U.S.A. and possessions: 1 year (12 issues) for \$24.00; 2 years for \$42.00; 3 years for \$54.00. Add \$9.00 per year postage for Canada and all other foreign countries. Submission of articles and photos by our readers is welcome, but we can accept no responsibility for loss or damage to unsolicited editorial contributions. Copyright 2004 by Miller Magazines, Inc.

Printed in U.S.A.

Notice: On rare occasions, typographical errors occur in prices listed in magazine advertisements. For this reason, advertisements appearing in *Rock & Gem* should be considered as requests to inquire, rather than as unconditional offers to sell. All prices are subject to change without notice.

POSTMASTER: Send address changes to
Rock & Gem,
P.O. Box 469113, Escondido, CA 92046-9113
or RockAndGem@pcspublink.com

Rock&Gem

Volume 34, Number 4

April 2004

The Frugal Collector: Fluorite	12
A lethal gas forms a lovely mineral; by Bob Jones	
Field Trip	
Agates of the Red Drift	20
Minnesota boasts many collecting sites; by Kenneth H. Rohn	
Build a Sphere Machine	28
Turn lovely gemstone spheres in your spare time; by Jim Perkins	
Panning Sites along U.S. Highway 50	34
Twelve stops in scenic Colorado; by David and Clois Walker	
Rock & Gem Kids	40
Optical properties help identify minerals; by Steve Decker	
Project:	
Make Scrollwork Jewelry	44
Silver wire and solder make delicate patterns; by Nova Wells	
The Eastern Art of Enameling	52
Traditional techniques get a modern twist; by Brinda Gill	
2004 Rock & Gem Club Listing	58
Find one in your area	
Benitoite	64
These "blue diamonds" are unique to California; by Bob Jones	
Diamond Sawing Basics	72
A refresher course for lapidaries of all skill levels; by Brian Farberov	
Field Trip	
Missouri's Metallic Minerals	80
Family-style collecting in the Silvermines District; by Steve Voynick	

BOB JONES Senior Consulting Editor; **LYNN VARON** Managing Editor; **CARRIE MEADOWS-HARTMANN** Art Director; **MARY ROBERTSON** Graphic Designer; **JOE HOWARD** Graphic Artist; **DANA GURNEE** Production Assistant; **GAIL BUTLER, STEVE DECKER, WILLIAM A. KAPPELE, ROGER McPHERSON, JIM PERKINS, DIANE PROKOP, STEVE VOYNICK** Contributing Editors; **BRIAN ROBERTS** Advertising Director; **MARLENA COLLIER-MIGACZ** Classified Advertising Manager; **LEE MARTIN** Advertising Advisor; **CELESTE WEINGART** Advertising Production Manager; **DRAY BANKS** Advertising Production; **LYNN THOMPSON** Classified Advertising Production; **RAMONA HARVEY** Circulation Manager; **JEFF SHOOP** Publisher

SEND ALL ADVERTISING INQUIRIES TO: Brian Roberts / *Rock & Gem*
4880 Market St., Ventura, CA 93003, (805) 644-3824 x13, fax (805) 644-3875
e-mail: brian@millermags.com

Miller
Magazines, Inc.