



The 182st Meeting of the Mineralogical Society of Southern California

**Program: Collecting Minerals on Active Volcanoes in Japan
by Alfredo Petrov**

**November 11, 2011 7:30 pm
Geology Department, E-Building, Room 220
Pasadena City College
1570 E Colorado Blvd., Pasadena**

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Wulfenite



Program Collecting Minerals on Active Volcanoes in Japan by Alfredo Petrov

Wulfenite is almost always a secondary mineral in the oxide zone over metallic ore deposits, so it was a great surprise when wulfenite was first reported in 1994 as a primary phase deposited from volcanic fumarole gases in the crater of Iou-jima, Japan (see *Mineral News*, December 2005). Iwojima fumarole gases contain up to 1ppm of molybdenum, and plenty of lead vapor too. Other lead and molybdenum minerals, like anglesite and ilsemannite (“molybdenum blue”) had long been known from high-temperature fumaroles on other volcanoes. Unfortunately, no wulfenite has ever been available to collectors from Iou-jima. (See figure 1

Although low-temperature fumaroles (“solfataras”) are abundant in hundreds of volcanic regions, high-temperature fumaroles with heavy metal vapors are limited to only twenty or so volcanoes worldwide, and we must keep in mind that fumarole parageneses tend to be short-lived, what with rapid changes in volcanic activity and temperature, so although more fumarole wulfenite localities might be found in future, it is very unlikely to ever be abundant.

Alfredo Petrov is a geologist who spends his time hunting for mineral specimens, researching new mineral localities, publishing articles on mineral localities, translating mineralogical literature and guiding tours to collecting sites. He has hammered on rocks many places (see his web site <http://www.mineraltravel.com>) and looks forward to trying lots of other new sites. He also has an interest in cacti, fungi, other strange food plants, astronomy and lots more aspects of Nature. When he isn't working, he likes to sit in the shade with a glass of sangiovese and a good science fiction novel; and once in a while tries, yet again unsuccessfully, to get his partner Frank to try more exotic sushi...

MEANDERINGS FROM THE PRESIDENT by Ann Meister

Is it necessary to have a computer to enjoy our hobby? That is the question that arises as I talk with members who do not have computers or computer access which relates to receiving the bulletin electronically. But it's also a question about how a computer can enhance our enjoyment of the hobby, improve our knowledge, pique our curiosity and increase our participation. The Internet gives us easy access to websites about shows, conferences-symposia-meetings, club bulletins, dealers, museums, various databases, such as Mindat, and a whole lot more.

I think Mindat (www.mindat.org) alone is worth more than a whole library of “hard copy”. I can find anything and everything I want to know about a mineral or location. And if what I'm looking for is not there, I can ask questions and converse with those who do know on the message board or chat room. I can find out what's new. I can get information on specimen preparation and cleaning. If I have an un-identified specimen, there's a message board for that. I could spend days browsing this site and learning just about anything having to do with minerals and associated data.

Google searches are also fun and fascinating. I searched for “micromounting” and found “how to...”, “top ten reasons to get into...”, and “Why micromounting?” plus dealers who offer micro minerals and supplies. But what surprised me was that Wikipedia has an entry for micromount. In a search for “thumbnail minerals” I found dealers offerings for sale and an interesting page on www.minerals.net on “Organizing a Mineral Collection.” Minerals.net is less academic than Mindat and provides a more user friendly format for the hobbyist. And of course there is www.rockhounds.com sponsored by Bob's Rock Shop that has oodles of links to all kinds of stuff.

I also receive emails from various dealers about new acquisitions and sales, current eBay auctions, and some super newsletters such as Pala's Gem News and Mineral News. Since I can un-subscribe to these if I don't want to receive them, I don't consider them spam.

So, my opinion is that you don't have to have a computer to enjoy our hobby, but you are missing out on a lot if you don't have one. That's my story and I'm sticking to it!

Minutes of the October 14, 2011 Meeting

The 881st meeting of The Mineralogical Society of Southern California was held on Friday, October 14, 2011, at Pasadena City College, Pasadena, CA. President Ann Meister brought the meeting to order at 7:45 p.m. The following items were presented:

- (1) Minutes of the last meeting were approved.
- (2) Marty Zinn's West Coast Mineral Show will be held November 11 – 13, 2011 at the new venue, the Holiday Inn on Grand Ave. in Santa Ana, CA.
- (3) The MSSC Banquet is scheduled for 7 p.m. on January 21, 2012 at the Oaks Tree Room, 1150 East Colorado Blvd, Pasadena. This year it will be held in conjunction with the Gem & Mineral Council of the Los Angeles County Museum of Natural History. We have a number of items for the silent auction, including books donated by Elizabeth Moller, and need donations of mineral specimens as well.
- (4) A motion was made and approved to print more of the business cards listing next year's calendar of events.
- (5) We received an email from Wendell Wilson asking for info on the earliest use of the term "Thumbnail," and Jo Anna offered to direct the request to the CFMS historian.
- (6) Alfredo Petrov will be next month's speaker.

Bruce Carter then introduced himself as the speaker of the evening, and gave a presentation titled: "Chasing Volcanoes in Manchuria." Dr. Carter is a retired professor in the Geology Dept of Pasadena City College, where he taught for the past 34 years, and served as Dean of Natural Sciences for the last 18 years. He earned his Ph.D. in Geology from Caltech.

Dr. Carter is involved in coordinating an exchange program with teachers in the USA and China, and as part of this program has the opportunity to visit China. During one of his visits he decided to investigate volcanoes in the Manchurian Province of China. Manchuria is in northeast portion of China, and is a historically important region. The last dynasty of imperial China (Qing Dynasty) was from this region.

Manchuria also produced 30 – 40% of the petroleum in China until recently, and is also rich in coal and metals. However, Manchuria is also known for having a fair number of active shield volcanoes, distributed as two parallel 30 km long chains, spaced approximately 15 km apart. Each volcano in these chains is broad, up to 2 to 3 km across, and capped by a cinder cone to 500 feet high. These are formed of mafic lavas.

Dr. Carter gave an interesting talk, and although there was a problem with the projection equipment and Dr. Carter had to use chalkboard diagrams, his vivid descriptions for what he encountered more than made up for the lack of pictures. Thirteen people attended the meeting. If you weren't at the meeting, you missed out on a discourse on this fascinating region of China.

The door prize was won by Jennifer Imai (a Wulfenite from La Paz, Arizona).

President Meister brought the meeting to a close at 8:58 p.m.

Respectfully submitted, Robert Griffis, Secretary

America's National Treasures

This came to me in e-mail form, which I passed on to those with e-mails. This event will take place on November 7 2011, so there is very little time.

Greetings, fellow VGMS and OGMS members! This email seeks your interest and your help with the most spectacular mineral, uncut gemstone, or fossil in your collection that was found in the U.S.A. Time is of the essence with this particular request. (Since this is being published here, he also means greeting to MSSC).

I and other officers within the California Federation of Mineralogical Societies have been contacted recently by the National Geographic Channel. They are in the midst of producing a new TV show entitled "America's National Treasures." It will be similar to "Antiques Roadshow." For each episode, they'll travel to a different city and will talk with people bringing in "American Treasures" for evaluation and discussion with experts.

They'll be coming to Los Angeles for a film shoot on Monday, November 7. In particular, they'll be filming at the Natural History Museum of Los Angeles County. They're asking for anyone interested to bring in minerals, uncut gemstones, or fossils from their collections—specimens specifically from the U.S. The more spectacular, the better. Also, a preference will be for specimens that were self-collected, but that's not an absolute requirement, so if you have a fantastic benitoite crystal, for instance, that you purchased at a gem show or inherited from your parents, that would be a great candidate to bring in. Also, any unique or unusual specimen that has an interesting story attached to it.

If you are interested in participating, you should fill in the attached form RIGHT AWAY and email it—along with a photo of your specimen/s—to Brittany Graham (Producer, "National Geographic: America's National Treasures," Brittany.g@cox.net, phone [818-295-6966](tel:818-295-6966), Ext. 111) and/or Belit Paulissian (Segment Producer, belitp@gmail.com, phone [818-295-6966](tel:818-295-6966), Ext. 345). You can send in a form for one specimen, or forms for up to three specimens. They will then pre-screen all the entries that they receive and will alert and invite between five and seven people to come to the LA Natural History Museum at a time to be determined on November 7th to meet with museum curators for a discussion that will be filmed for potential airing on the new TV program. Once they've selected the specimens they'd like to highlight, they'll be back in touch with full details on where and when to meet at the LA museum, but it will most likely be the morning of November 7.

If any of you have seen Antiques Roadshow, you know this should prove to be a lot of fun. But—again—you need to act right away, as within the next couple of days, to give them time for the pre-screening process. This will be a one-day shoot. You would bring your specimens to the museum and would take them back home with you. Should you have further questions, I encourage you to call or email Brittany and/or Belit directly. They've both been great in responding to my own queries and both are very excited about the possibilities for this new show. But the show can only happen with YOU and YOUR HELP and YOUR WONDERFUL COLLECTIONS!

Best regards,

Jim Brace-Thompson

2011 President, California Federation of Mineralogical Societies

[\(805\) 659-3577](tel:805-659-3577)

jbraceth@roadrunner.com

OBJECT QUESTIONNAIRE: *AMERICA'S NATIONAL TREASURES*

Do You Own The Object?

Note - You can submit an object owned by a relative or a friend for consideration but we require the full knowledge and approval by the legal owner.

Owner's Name:

Phone:

Address:

Email:

What is the object? Tell us about it:

Do you know the History of the object? (Who owned it before you? Who made it? Has it been examined by a museum or appraiser?)

Are there any inscriptions, marks, or symbols imprinted or stamped on the object (such as an artist's signature or maker's mark):

Does the object have a story behind it? Please tell us about it's historic associations (People/Places/Events)

San Gabriel National Park. Is it in YOUR Future?

More than 700,000 acres of the San Gabriel Mountains, River and Valley and Puente Hills were deemed nationally significant and therefore suitable for inclusion in the National Park system, according to a report released Monday by the U.S. Department of Interior.

The Draft San Gabriel Watershed and Mountains Special Resource Study concluded that the mountains and the Puente Hills met the criteria for a national designation and that all or portions could come under federal protection and management if approved by Congress.

<http://parkplanning.nps.gov/document.cfm?documentID=43639>

The draft stops short of recommending a traditional national park. Instead, it offers four strategies: do nothing, merge the San Gabriels into the Angeles National Forest, turn the San Gabriel River watershed into a National Recreation Area, or create a partnership for the region with several agencies.

A collaborative partnership-based park unit that respects the complex mix of land use, ownership, and regulatory authority in the study area would be a feasible addition to the National Park System. A large traditional national park unit, owned and operated solely by the NPS, would be infeasible.

Four alternatives, two with a role for the Park Service, are evaluated in the draft study and environmental assessment. Each of the alternatives seeks to protect significant resources, enhance habitat connectivity, and improve recreational opportunities for communities in the Los Angeles metropolitan region. In each of the alternatives, the U.S. Forest Service would continue to own and manage the Angeles National Forest.

* No Action Alternative: Continuation of Current Programs and Policies. This is the “no action” alternative for this study, and assumes that current programs, policies, conditions and trends would continue.

* Alternative A: San Gabriel Mountains National Recreation Area: A U.S. Forest Service Designation. Congress would designate the San Gabriel Mountains unit of the Angeles National Forest as a National Recreation Area that would continue to be managed solely by the U.S. Forest Service.

* **Alternative B: San Gabriel Parks and Open Space Network.** This alternative was dismissed from further consideration after public review of the preliminary alternatives in 2009. Some components of alternative B were incorporated into alternative D.

* **Alternative C: San Gabriel Watershed National Recreation Area.** Congress would designate a river-based NRA that would raise the visibility of the San Gabriel River watershed, offer new educational and interpretive opportunities along the river and throughout the watershed, and improve river-based recreation. This would be a new model for a national park unit. Partnership arrangements among federal and state agencies, local governments, non-profit organizations, and area landowners would achieve the conservation, recreational, and educational goals of the NRA.

* **Alternative D: San Gabriel Region National Recreation Area: A Partnership Linking Significant Resources and Recreation.** Congress would designate a larger scale NRA that would recognize and protect the significant resources associated with the San Gabriel Mountains and Puente Hills, explore opportunities to protect and enhance interconnected ecosystems, provide important open space connections for recreation and offer new educational and interpretive opportunities. The management approach of alternative D would be the same as alternative C, a new model of national park management whereby the NPS, U.S. Forest Service, and numerous other agencies and organizations with land and interests in the area would work collaboratively. The Wilderness Society is pushing this one.

Comments to the Special Resource Study may be made at the following website:
<http://parkplanning.nps.gov/commentForm.cfm?documentID=43639>

If it becomes a National Park, there goes collecting Actinolite in Pine Canyon Wash, Rhodonite near Wrightwood, Garnets along the Angeles Forest Hwy, GOLD Prospecting and free road trips over the Angeles Forest Hwy and between the Antelope Valley and Pasadena and trips to Mt. Wilson. The BIG PARK is coming through..... <http://www.landrights.org/VideoBigPark.htm> We need a strong community turnout at these meetings to help convince the Park Service that if a recreation area is created, the needs of the Rockhound Community must be considered in the planning process.

This is the notice I sent to all members by e-mail. It is important that all citizens make their voices heard-- especially in you have opinions re government plans. This time the meetings are close to most of us.

Please attend one of the following meetings to make your voice be heard. From the Sunday paper I read, people seem to like the National Park idea. Do you agree?

El Monte (Kick-Off Meeting) (You missed this one)
 Saturday, Oct. 29

Palmdale
 Monday, Nov. 14
 7pm - 9pm
 Larry Chimbole Cultural Center, Joshua Room
 38350 Sierra Highway Palmdale, CA 93550

Pomona
 Tuesday, Nov. 15
 7pm - 9pm
 Agriscapes Center, California Polytechnic
 Institute Campus
 4102 S. University Drive
 (South of Temple Avenue/ From Highway 57,
 exit Temple Avenue and go west towards Cal
 Poly Pomona. Turn left on South Campus Drive,
 Agriscapes is the building adjacent to the Farm
 Store.)
 Pomona, CA 91768

Santa Clarita

Wednesday, Nov. 16

7pm - 9pm

George A. Carvalho Activities Center

Santa Clarita Room A

20880 Centre Point Parkway

Santa Clarita, CA 91351

Tujunga

Thursday, Nov. 17

7pm - 9pm

Northeast Valley City Hall Auditorium

7747 Foothill Blvd

Tujunga, CA 91042

**WEST COAST - FALL
GEM & MINERAL SHOW**

Exciting Holiday Shopping!

NOV. 11 - 13, 2011

Holiday Inn - Orange County Airport
2726 S. Grand Ave., Santa Ana, CA 92705
(Take 55 Fwy exit 8 for Dyer Rd. to S. Grand Ave.)
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Martin Zinn Expositions, L.L.C., P.O. Box 665, Bernalillo, NM 87004
 Fax: (303) 223-3478, mzexpos@gmail.com, www.mzexpos.com

Will Mineral Collection Be Restricted More by BLM?

This information was also sent via e-mail from the BLM. It also included 2 maps which I am not including here (one I could read sort of and the other I could not-- as I forwarded the entire e-mail & attachments, maybe others could read the maps). The table below includes all the places and more that are on the map. Again, if you are interested or have opinions, you should write a letter (example below).

BAKERSFIELD FIELD OFFICE
 LAND USE PLAN
 QUESTIONS TO ASK BLM

1. Where will mineral collecting and mineral exploration/development will be prohibited or restricted? Please provide a map..
2. What are the known mineral collecting sites or mines in the Decision area? Please provide a map. Include location information (county, township, range, section, latitude, longitude, name of site)
3. What mineral collecting sites or mines will be removed from casual use, exploration or development? Please provide a map and a list of sites.
4. For mineral collecting sites or mines that are not closed to exploration or development, how will access be restricted or allowed to them?

5. For areas proposed for closure, why was closure chosen? What other alternatives to closure were considered? Was restricted access by permit considered as an alternative to total closure? Under what conditions can vehicles be used to access the site? Please provide a list of sites and summary of access restrictions to each one.
6. How did BLM calculate the economic impacts of mineral collecting and mineral exploration and development? Did BLM consider that mineral collectors contribute to local economies by their exploration activities?

For bulletins sent by e-mail the BAKERSFIELD FIELD OFFICE, CALIFORNIA: MINES AND MINERALS IN AREAS OF CRITICAL ENVIRONMENTAL CONCERN AND SPECIAL MANAGEMENT AREAS chart (7.5 pages) has been moved to the end. The idea is to permit those who print this bulletin to print or not print the chart.

Mindat.Org

I have just started exploring Mindat.org. There is so much information, I feel overwhelmed (and maybe a little late since most others seem to know all about it). Rock Currier told me that he is uploading pictures from all his trips. Mindat.org keeps statistics and thus far he has entered 4,806 mineral photos from 1,670 localities and 29 other, has 6,356 approved for the Mindat.org Gallery. Mindat now has this data base ranked by Photos (9th), Gallery (5th) and Score (4th). The Score is Mindat.org ranking using their own private calculation. Rock Currier has published 5 articles on mindat.org.

I read a collecting travel log from a mineral collecting couple that went to the Rogerley Mine in England. The fluorite is a stunning bright gem emerald green with a vivid blue reaction to daylight.



Pacific volcanoes share split personality **Dual chemistry of island chains reflects variations in their deep source**

By [Alexandra Witzke](#)

Kilauea pow Fireworks can ensue when lava meets ocean, seen here at Hawaii's Kilauea Volcano. Geochemical studies suggest that the molten rock forming Hawaii and other Pacific island chains may pull from two distinct sources. Michael Poland/USGS

Hawaii's scenic volcanoes come in two chemical flavors, and now scientists think the igneous peaks on several other Pacific island chains do, too.

Two parallel lines of volcanoes stretch from the Big Island of Hawaii in the southeast to Molokai in the northwest. Volcanoes on the Samoan and Marquesas islands are similarly paired. A new study finds that, as in Hawaii, one row is richer than the other in versions of elements such as lead and neodymium.

“This might be a common feature for all the Pacific hotspots,” says Shichun Huang, a geochemist at Harvard University and lead author of a paper appearing online September 18 in *Nature Geoscience*.

If so, these island chains may tap the same source deep in Earth’s mantle. Molten rock rises toward the surface in two chemically distinct streams, one stream feeding each row of volcanoes.

Geologists think Hawaii, Samoa, and the Marquesas each formed as a plate of Earth’s crust moved across a “hotspot,” the top of a plume carrying molten material from the planet’s deep interior. Like a welding torch passing across a piece of metal, the hotspot punched out island after island as the plate moved over it.

Recent studies have shown that the hotspots are more complex than once thought, says isotope geochemist Dominique Weis of the University of British Columbia. The mantle plume rising below Hawaii, for instance, feeds individual streams of chemically distinct magmas into Mauna Loa and Mauna Kea, both on the Big Island. Mauna Loa has a higher ratio of the most abundant form of lead on Earth, lead-208, compared with lead-206, which has two fewer neutrons in its nucleus.

By analyzing published data on lava samples, Huang and his colleagues have now shown that this chemical difference also exists in Samoa and the Marquesas.

The plumes feeding these island chains (as well as Hawaii’s) apparently tap a single massive reservoir that underlies much of the central and southern Pacific. This reservoir contains chemical signatures of ancient surface rock that plowed into the interior eons ago through plate tectonics. As a plume rises, it carries part of this material with it.

The new work shows how surface volcanoes can be linked to deep sources of magma, says geochemist Albrecht Hofmann of the Max Planck Institute for Chemistry in Mainz, Germany. A few other scientists have questioned the existence of mantle plumes, but the new work “strongly suggests that at least these particular hotspots are actually mantle plumes that ascend from the lowermost mantle,” Hofmann says.

Huang’s group is now checking other Pacific island chains to see if they too show this same two-faced nature.

Science News, [October 22nd, 2011; Vol.180 #9](#) (p. 8)

Wulfenite from Glendale
Community Wulfenite



Wulfenite from Roger Weller

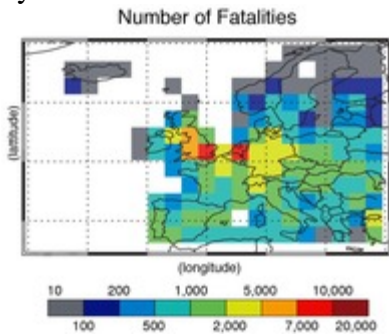


Wulfenite from John Betts



Return of a Killer Volcano

by Sid Perkins



The redder, the deader. An 8-month-long eruption of an Icelandic volcano could send emissions of noxious sulfur dioxide over Europe, significantly boosting cardiopulmonary death rates during the following year in southeastern England, France, the Netherlands, and Germany. Credit: A. Schmidt, PNAS Early Edition (2011)

What if one of the largest volcanic eruptions in recent history happened today? A new study suggests that a blast akin to one that devastated Iceland in the 1780s would waft noxious gases southeastward and kill tens of thousands of people in Europe. And in a modern world that is intimately connected by air traffic and international trade, economic activity across much of Europe, including the production and import of food, could plummet.

From June of 1783 until February of 1784, the [Laki volcano](#) in south-central Iceland erupted. Although the event didn't produce large amounts of volcanic ash, it did spew an estimated 122 million metric tons of sulfur dioxide gas into the sky—a volume slightly higher than human industrial activity today produces in the course of a year, says Anja Schmidt, an atmospheric scientist at the University of Leeds in the United Kingdom.

Historical records suggest that in the 2 years after the Laki eruption, approximately 10,000 Icelanders died—about one-fifth of the population—along with nearly three-quarters of the island's livestock. Parish records in England reveal that in the summer of 1783, when the event began, death rates were between 10% and 20% above normal. The Netherlands, Sweden, and Italy reported episodes of decreased visibility, respiratory difficulties, and increased mortality associated with the eruption. According to one study, an estimated 23,000 people died from exposure to the volcanic aerosols in Britain alone. But elsewhere in Europe, it's difficult to separate deaths triggered by the air pollution from those caused by starvation or disease, which were prominent causes of death at the time.

To assess how such an eruption might affect the densely populated Europe of today, Schmidt and her colleagues plugged a few numbers into a computer simulation. They used weather models to estimate where sulfur dioxide emissions from an 8-month-long eruption that commenced in June would end up. They also estimated the resulting increases in the concentrations of airborne particles smaller than 2.5 micrometers across, the size of aerosols that are most easily drawn into human lungs and that cause cardiopulmonary distress. Then, they used modern medical data to estimate how many people those aerosols would kill.

In the first 3 months after the hypothetical eruption began, the average aerosol concentration over Europe would increase by 120%, the team reports online today in the *Proceedings of the National Academy of Sciences*. The number of days during the eruption in which aerosol concentrations exceed air-quality standards would rise to 74, when a normal period that length typically includes only 38. Not surprisingly, the air would become thickest with dangerous particles in areas downwind of the eruption, such as Iceland and northwestern Europe, where aerosol concentrations would more than triple. But aerosol concentrations in southern Europe would also increase dramatically, rising by 60%.

In the year after the hypothetical eruption commences, the increased air pollution swept from Iceland to Europe would [cause massive amounts of heart and lung disease, killing an estimated 142,000 people](#). Fewer than half that number of Europeans die from seasonal flu each year.

At least four Laki-sized eruptions have occurred in Iceland in the past 1150 years, Schmidt and her colleagues say. So the new figures are cause for concern.

The team "has done a good job of showing where volcanic aerosols would end up, and the human health response to such aerosols is well understood," says Brian Toon, an atmospheric scientist at the University of Colorado, Boulder. "This is all very solid science."

Icelandic volcanoes [shut down European air traffic](#) for more than a week in April 2010 and for several days in May of this year. But those eruptions are tiny compared with a Laki-sized eruption, which could ground airplanes for 6 months or more, says Alan Robock, an atmospheric scientist at Rutgers University in New Brunswick, New Jersey. Such an event would have a huge impact on crop yields and, by affecting shipping and air traffic, would also affect Europeans' ability to import food, he notes. It could even have a dramatic effect on daily life, he says. "If there are sulfur dioxide clouds over Europe, people with respiratory problems can't do much about it except stay indoors."

**This article has been corrected. In the first paragraph and in the image caption, compass directions were originally misstated and should have read southeastward and southeastern, respectively.*

19 September 2011, Science

Calendar of Events

- November 5-6, 2011: LANCASTER, CALIFORNIA:** 10th annual show; Palmdale Gem & Mineral Club; Antelope Valley Fairgrounds, Van Dam Pavilion, 2551 W. Ave. H; Sat. 9-5, Sun. 9-5; free admission; gemstones, minerals, beads, lapidary, jewelry, display supplies, dinosaur program with Richard Wade, petrified wood programs with Walton Wright, kids' scavenger hunt, silent auction, demonstrations, raffle
- November 5-6, 2011: SAN DIEGO, CALIFORNIA:** Annual show; San Diego Mineral & Gem Society; Al Bahr Shrine, 5440 Kearny Mesa Rd.; Sat. 9:30-5, Sun. 10-4; free admission; free gem I.D., more than 12 dealers, more than 40 exhibits, club sales, slabs, books, magazines, junior booth, door prizes, demonstrators, faceting, lost wax casting, silver chain making, sphere making, wire wrapping.
- November 19-20, 2011: OXNARD, CALIFORNIA:** Annual show; Oxnard Gem & Mineral Society; Oxnard Performing Arts Center, 800 Hobson Way; Sat. 9-5, Sun. 10-4; free admission; free rock for each child, lapidary demonstrations, glass-bead making, wire wrapping, rock polishing, dealers, gems, minerals, fossils, stone beads, Idaho opals, silver craft, finished jewelry, tools, lapidary supplies, books.
- November 11-13, 2011: SANTA ANA, CALIFORNIA:** Wholesale/retail show, "Fall West Coast Gem & Mineral Show"; Martin Zinn Expositions Holiday Inn-Orange County Airport, 2726 S. Grand Ave. Fri. 10-6, Sat. 10-6, Sun. 10-5; free admission; open to the public
- January 21, 2012: MSSC Installation and Banquet.** Oak Tree Room (next to Coco's on Colorado and Michelin in East Pasadena). Official starting time for Happy Hour and cost of banquet will be in next bulletin. This would be a good time to pay your 2012 dues.
-

Society Contacts for 2011

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Past President	Geoffrey Caplette	

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	Geoffrey Caplette	
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	Fred Elsnau:	

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<i>Field Trip</i>	Vacant	
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<i>Program and Education</i>	Bruce Carter	See VP
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About the Mineralogical Society of Southern California

Organized in 1931, the Mineralogical Society of Southern California, Inc. is the oldest mineralogical society in the western United States. The MSSC is a member of the California Federation of Mineralogical Societies, and is dedicated to the dissemination of general knowledge of the mineralogical and related earth sciences through the study and collecting of mineral specimens. The MSSC is a scientific non-profit organization that actively supports the geology department at Pasadena City College, Pasadena, California. Support is also given to the Los Angeles and San Bernardino County Museums of Natural History. The Bulletin of the Mineralogical Society of Southern California is the official publication of the Mineralogical Society of Southern California, Inc.

The MSSC meetings are usually held the second Friday of each month, January, February and August excepted, at 7:30 p.m. in Building E, Room 220, Pasadena City College, 1570 E Colorado Boulevard, Pasadena, California. The annual Installation Banquet is held in January, and the annual Picnic and Swap Meeting is held in August. Due to PCC holidays meetings may vary. Check the Society web page for details. The Society also sponsors the annual Pacific Micro mount Symposium held at the San Bernardino County Natural History Museum during the last weekend of January.

Annual Membership dues for the MSSC are \$20.00 for an individual membership, \$30.00 for a family membership.

The Society's contact information:

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The Mineralogical Society of California, Inc.

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Celestite



Sulphur



Sulphur Clouds



Sulphur Crystal



**BAKERSFIELD FIELD OFFICE, CALIFORNIA: MINES AND MINERALS IN AREAS OF CRITICAL ENVIRONMENTAL CONCERN
AND SPECIAL MANAGMENT AREAS**

WITH DRAWN	ACEC NAME	site_name	county	commod1	dev_stat	ore	long	lat	REFERENCE
NO	Bitterwater	The Sulfur Mine	Kern	Sulfur	Unknown	Sulfur	-119.32373	34.96669	{Deposit:: CALIF. DIV. MINES AND GEOL. COUNTY REPORT 1, 1962, NO. 536,}{Deposit:: P. 288.}
NO	Chico Martinez	Carneros Rocks Quarry	Kern	Stone, Crushed/Broken	Past Producer	Stone	-119.85095	35.43307	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 58, 1981,}{Deposit:: P. 40.}
NO	Chico Martinez	Chi Claims	Kern	Uranium	Occurrence	Uranium	-119.81155	35.41637	{Deposit:: MINOBRAS, 1978, URANIUM DEPOSITS OF ARIZONA-CALIFORNIA-}{Deposit:: NEVADA: P. 84.}
YES	Compensation Lands	Mckittrick Quarry	Kern	Stone, Crushed/Broken	Past Producer	Stone	-119.74875	35.35778	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 103, 1990,}{Deposit:: P.}

YES	Cyprus Mnt	Cypress Mountain Group	San Luis Obispo	Mercury	Prospect	Cinnabar, Native Hg	-120.95908	35.61636 {Deposit:: CALIF. STATE MINING BUR. BULLETIN 27, 1908, P. 156.}{Deposit:: CALIF. STATE MINING BUR. REPORT 15, 1915, P. 706.}{Deposit:: U.S. GEOLOGICAL SURVEY BULLETIN 922-R, 1941, P. 561.}{Deposit:: U.S. BUREAU OF MINES IC 8252, 1965, P. 197.}
YES	Cyprus Mnt	Kismet	San Luis Obispo	Mercury	Occurrence	Cinnabar	-120.93459	35.60190 {Deposit:: HOLMES, G. W., JR., 1965, MERCURY IN CALIFORNIA: IN USBM IC 8252}{Deposit:: ECKEL, E. B., YATES, R. G., AND GRANGER, A. E., 1940, QUICKSILVER DEPOSITS IN SAN LUIS OBISPO COUNTY AND SOUTHWESTERN MONTEREY COUNTY, CALIFORNIA: USGS BULL. 922-

									R, P.
YES	Cyprus Mnt	Kismet Group	San Luis Obispo	Mercury	Prospect	Cinnabar, Native Hg	-120.92678	35.59826	{Deposit:: U.S. GEOLOGICAL SURVEY BULLETIN 922-R, 1941, P. 548-549, 561.}{Deposit:: U.S. BUREAU OF MINES IC 8252, 1965, P. 197.}
YES	Cyprus Mnt	Mayfield Prospect	San Luis Obispo	Gold	Occurrence	Gold	-120.95681	35.61079	{Deposit:: D.O.M. BULL. 152 1950 P. 234}{Deposit:: D.O.M. BULL. 125 1943 P. 170}
YES	Cyprus Mnt	Mayfield Prospect	San Luis Obispo	Gold	Occurrence	Gold	-120.95958	35.61166	{Deposit:: CALIF. DIV. MINES BULLETIN 152, 1950, P. 234.}{Deposit:: U.S. BUREAU OF MINES RI 5579,

									1960, P. 44.}
NO	Cyrus Canyon	Cyrus Canyon Mine 01	Kern	Tungsten	Occurrence	Scheelite	-118.40175	35.71998	TROXEL, B. W., AND MORTON, P. K., 1962, MINES AND MINERAL RESOURCES OF KERN COUNTY, CALIFORNIA: CAL. DIV. MINES AND GEOLOGY, COUNTY REPORT 1, P. 314
NO	Cyrus Canyon	Cyrus Canyon Mine 02	Kern	Tungsten	Prospect	Scheelite	-118.40152	35.71968	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 566, P. 314.}
NO	Cyrus Canyon	Grandad Mine 01	Kern	Tungsten	Past Producer	Scheelite	-118.38536	35.69887	{Deposit:: TROXEL, B. W., AND MORTON, P. K., 1962, MINES AND MINERAL RESOURCES OF KERN COUNTY, CALIFORNIA: CAL. DIV. MINES AND GEOLOGY, COUNTY REPORT 1, P. 300,

									316}{Production:: TROXEL AND MORTON, 1962}
NO	Cyrus Canyon	Grandad Mine 02	Kern	Tungsten	Past Producer	Scheelite	-118.38482	35.69858	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, P. 300,}{Deposit:: MAP NO. 578, P. 316.}
NO	Cyrus Canyon	Play Boy 01	Kern	Tungsten	Occurrence	Scheelite	-118.38620	35.69720	TROXEL, B. W., AND MORTON, P. K., 1962, MINES AND MINERAL RESOURCES OF KERN COUNTY, CALIFORNIA: CAL. DIV. MINES AND GEOLOGY, COUNTY REPORT 1, P. 322
NO	Cyrus Canyon	Play Boy 02	Kern	Tungsten	Unknown	Scheelite	-118.38562	35.69608	CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, P. 322.

YES	Erskin Creek	Illinois and Golden Bell Mine 01	Kern	Gold	Past Producer	Gold	-118.44203	35.58081	{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 36, P. 328.}{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 14, P. 497.}{Production:: CJMG VOL 14, P. 497}
YES	Erskin Creek	Illinois and Golden Bell Mine 02	Kern	Gold	Producer	Gold	-118.43703	35.57970	U.S. BUREAU OF MINES DATA BAS
YES	Erskin Creek	Illinois and Golden Bell Mine 03	Kern	Gold	Past Producer	Gold	-118.43702	35.57968	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 224, P. 159.}

YES	Erskin Creek	Unip Mine 01	Kern	Tungsten	Past Producer	Scheelite	-118.40786	35.56581	{Deposit:: TROXEL, B. W., AND MORTON, P. K., 1962, MINES AND MINERAL RESOURCES OF KERN COUNTY, CALIFORNIA: CAL. DIV. MINES AND GEOLOGY, COUNTY REPORT 1, P. 311, 325}{Production:: TROXEL AND MORTON, 1962}
YES	Erskin Creek	Unip Mine 02	Kern	Tungsten	Past Producer	Scheelite	-118.40622	35.56438	CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, P. 311.
YES	Erskin Creek	Utopia Claims	Kern	Uranium	Occurrence	Uranium	-118.44172	35.58078	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 681, P. 342.}
YES	HORSE CANYON	Filtrol Bentonite Deposit	Kern	Bentonite	Past Producer	Bentonite	-118.27231	35.18939	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, P. 73.}{Deposit:: ALSO IN SEC 2, 32S, 34E.}
YES	HORSE CANYON	Quarry	Kern	Agate	Occurrence	Agate, gemstone	-118.32336	35.19513	

YES	HORSE CANYON	Prospect	Kern	Agate	Occurrence	Agate, gemstone	-118.29194	35.19046	
YES	HORSE CANYON	Quarry	Kern	Agate	Occurrence	Agate, gemstone	-118.31631	35.18985	
YES	HORSE CANYON	Cave	Kern	Agate	Occurrence	Agate, gemstone	-118.29439	35.17073	
YES	HORSE CANYON	Cave	Kern	Agate	Occurrence	Agate, gemstone	-118.29436	35.17054	
NO	Kawiah WSA- Case Mnt SRMA	Britton Ranch	Tulare	Feldspar	Occurrence	Feldspar	-118.78984	36.42776	CALIF. JOUR. MINES AND GEOL., V. 54, 1958, P. 466.
NO	Kawiah WSA- Case Mnt SRMA	Eshom Creek	Tulare	Tungsten	Occurrence	Scheelite	-118.91764	36.59525	{Deposit:: CALIF. JOUR. MINES AND GEOL., V. 39, 1943, P. 175.}{Deposit:: CALIF. JOUR. MINES AND GEOL., V. 54, 1958, P. 445.}
NO	Kawiah WSA- Case Mnt SRMA	Griffith	Tulare	Uranium	Prospect	Uranium	-118.78844	36.44716	CALIF. JOUR. MINES AND GEOL., V. 54, 1958, P. 455.
NO	Kawiah	Mckee	Tulare	Tungsten	Occurrence	Scheelite	-118.82734	36.42076	CALIF. JOUR. MINES AND GEOL., V. 54, 1958, P. 449.
YES	KEYESVILLE	SEE BELOW							

NO	Lokern-Buena Vista	Elsy Pit	Kern	Sand and Gravel, Construction	Past Producer	Stone	-119.55205	35.38218	{Deposit:: CALIF. DIV. MINES AND GEOL. COUNTY REPORT 1, 1962, NO. 490,}{Deposit:: P. 275.}{Deposit:: SOUTHERN PACIFIC CO., 1964, MINERALS FOR INDUSTRY, VOL. III-}{Deposit:: SOUTHERN CALIFORNIA: P. 28.}
NO	Lokern-Buena Vista	Fellows Quarry No. 1	Kern	Stone, Crushed/Broken	Past Producer	Stone	-119.52594	35.38058	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 58, 1981,}{Deposit:: P. 40.}
NO	Lokern-Buena Vista	Morton Pit	Kern	Sand and Gravel, Construction	Past Producer	Sand and Gravel	-119.44874	35.20278	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 103, 1990,}{Deposit:: P.}

NO	Lokern-Buena Vista	Standard Oil Co. Pit	Kern	Sand and Gravel, Construction	Past Producer	Sand and Gravel	-119.62905	35.34308	{Deposit:: CALIF. DIV. MINES AND GEOL. COUNTY REPORT 1, 1962, NO. 506,}{Deposit:: P. 276.}{Deposit:: SOUTHERN PACIFIC CO., 1964, MINERALS FOR INDUSTRY, VOL. III-}{Deposit:: SOUTHERN CALIFORNIA: P. 29.}
YES	POINT SAL	Point Sal	San Luis Obispo	Agate, Gold and Mercury	Mine	Gold, Agate, Cinnabar, Native Mercury	-120.66589	34.90283	
NO	Rusty Peak	Jitney Mine	San Luis Obispo	Chromium	Producer	Chromium	-120.80848	35.45857	CALIF DOM BULL 134,PT II,P 57,82

									{Deposit:: FRANKE, H. A., 1935 ; MINES AND MINERAL RESOURCES OF SAN LUIS OBISPO COUNTY; CALIF. JOUR. MINES AND GEOLOGY, VOL. 31 , NO. 4 ; DIV. OF MINES, P. 419}{Deposit:: LAIZURE, C. MCK, 1925 ; SAN FRANCISCO FIELD DIV.; 21ST REPT. STATE MIN.; CALIF
NO	Rusty Peak	Prodigal Son 01	San Luis Obispo	Copper	Occurrence	Chalcopyrite	-120.82709	35.47329	
NO	Rusty Peak	Prodigal Son 02	San Luis Obispo	Copper	Prospect	Chalcopyrite	-120.83408	35.46826	CALIF. JOUR. MINES AND GEOL., V. 35, 1939, P. 322.
YES	Salinas River	Unnamed Pits	San Luis Obispo	Sand and Gravel, Construction	Past Producer	Sand and Gravel	-120.56067	35.40527	{Deposit:: CALIF. DIV. MINES AND GEOL. BULLETIN 199, 1976, MAP NO. 20,}{Deposit:: TABLE 8, P. 41; PLATE 1.}
YES	Salinas River	Unnamed Quarry	San Luis Obispo	Stone, Crushed/Broken	Past Producer	Stone	-120.56487	35.40777	{Deposit:: CALIF. DIV. MINES AND GEOL. BULLETIN 199, 1976, TABLE 8,}{Deposit:: NO. 19, P. 41.}

NO	Upper Cuyama Valley	Atacami Claims	Santa Barbara	Gypsum-Anhydrite	Unknown	Gypsum	-119.46844	34.79439	U.S. BUREAU OF MINES OPEN-FILE REPORT MLA 9-81, 1981.
NO	Upper Cuyama Valley	Seeley Deposit	Santa Barbara	Gypsum-Anhydrite	Prospect	Gypsum	-119.46924	34.79749	{Deposit:: CALIF. DIV. MINES BULLETIN 163, 1952, P. 41.}{Deposit:: U.S. BUREAU OF MINES OPEN-FILE REPORT MLA 9-81, 1981, TABLE 1,}{Deposit:: NO. 3, P. 9.}

OTHER ACEC'S

NO MINES

WITHDRAWN	ACEC
YES	TIERRA REDONDA
YES	PIEDRAS BLANCAS
NO MINERALS	LOS OSOS
NO	IRISH HILLS
NO	KETTLEMAN HILLS
YES	BLUE RIDGE
YES	ANCIENT LAKESHORES

YES	HOPPER MOUNTAIN
YES	PIUTE-CYPRUS
YES	FROG POND
YES	DEER SRPING
YES	HUASNA PEAK
YES	KEYESVILLE
YES	CALIENTE
YES	TEMBLOR

SPECIAL
RESOURCE
MANAGEMENT
AREAS

KEYESVILLE

WITHDRAWN	SRMA NAME	site_name	county	commod1	dev_stat	ore	long	lat	REFERENCE
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YES	KEYESVILLE	Little Acorn Mine	Kern	Tungsten	Past Producer	Scheelite	-	118.500920	35.716650	{Deposit:: TROXEL, B. W., AND MORTON, P. K., 1962, MINES AND MINERAL RESOURCES OF KERN COUNTY, CALIFORNIA: CAL. DIV. MINES AND GEOLOGY, COUNTY REPORT 1, P. 318.}{Deposit:: LEMMON, D.M., AND TWETO, O.L., 1962, TUNGSTEN IN THE U.S., USGS MAP, MR-25.}
YES	KEYESVILLE	Keyes Mine	Kern	Gold	Past Producer	Gold	-	118.504530	35.639150	{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 36, P. 32-33.}{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 29, P 311-312.}{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 25, P. 37-

									38.}{Deposit:: CALIFORNIA JOURNAL OF MINES A
YES	KEYESVILLE	Little Bonanza	Kern	Gold	Past Producer	Gold	- 118.504810	35.637760	CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 25, P. 39
YES	KEYESVILLE	Opportunity Group of Mines	Kern	Gold	Past Producer	Gold	- 118.497310	35.633590	CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 29, P. 321-322
YES	KEYESVILLE	Pennsylvania-Sunrise Group of Mines	Kern	Gold	Past Producer	Gold	- 118.515640	35.620260	{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 29, P. 322.}{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL.

									25, P. 45.}
YES	KEYESVILLE	Piute Consolidated	Kern	Gold	Past Producer	Gold	118.493140	35.659420	{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 25, P. 45.}{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 14, P. 506-507.}{Production:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 14, P. 507}
YES	KEYESVILLE	Sawyer Mine	Kern	Gold	Past Producer	Gold	118.510640	35.619420	CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 29, P. 327
YES	KEYESVILLE	Keyes	Kern	Gold	Producer	Gold	118.534250	35.666650	
YES	KEYESVILLE	Eagle Claim	Kern	Gold	Producer	Gold	118.510640	35.612200	U.S. BUREAU OF MINES DATA BAS

YES	KEYESVILLE	Opportunity Prospect	Kern	Gold	Producer	Gold	- 118.487590	35.635260	U.S. BUREAU OF MINES DATA BAS
									{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 29, P. 317-318.}{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 25, P. 40-41.}{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 14, P. 502-503.}{Production:: CALIFORNIA JOURNAL OF M
YES	KEYESVILLE	Mammoth Mine	Kern	Gold	Producer	Gold	- 118.510090	35.619420	JOURNAL OF M
YES	KEYESVILLE	Keyes	Kern	Gold	Producer	Gold	- 118.513700	35.632200	U.S. BUREAU OF MINES DATA BAS
YES	KEYESVILLE	Latham Tunnel Prospect	Kern	Gold	Producer	Gold	- 118.513980	35.652480	U.S. BUREAU OF MINES DATA BAS
YES	KEYESVILLE	Mammoth Mine	Kern	Gold	Producer	Gold	- 118.501750	35.623310	U.S. BUREAU OF MINES DATA BAS

YES	KEYESVILLE	Eagle Claim	Kern	Gold	Prospect	Gold	118.510620	35.612180	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 159, P. 145.}
YES	KEYESVILLE	Morton Prospect	Kern	Gold	Occurrence	Gold	118.502620	35.633580	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 279, P. 172.}
YES	KEYESVILLE	Will Jean Prospect	Kern	Gold	Unknown	Gold	118.507320	35.633080	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 375, P. 195.}
YES	KEYESVILLE	Opportunity Prospect	Kern	Gold	Past Producer	Gold	118.487620	35.635280	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 297, P. 176.}
YES	KEYESVILLE	Mooncastle Prospect	Kern	Gold	Prospect	Gold	118.499020	35.618080	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 278, P. 172.}

YES	KEYESVILLE	Homestake Prospect	Kern	Gold	Past Producer	Gold	118.504520	35.635280	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 219, P. 158.}
YES	KEYESVILLE	Bright Spot	Kern	Gold	Unknown	Gold	118.512320	35.625780	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 135, P. 139.}
YES	KEYESVILLE	Keyes Mine	Kern	Gold	Past Producer	Gold	118.513720	35.632180	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 240, P. 163.}{Deposit:: USGS-MRDS GSC, LIST AS OF JUNE 94.}
YES	KEYESVILLE	Pioneer Nos. 1 and 2	Kern	Gold	Past Producer	Gold	118.505920	35.637480	PRODRECS.
YES	KEYESVILLE	Rock Cabin	Kern	Gold	Past Producer	Gold	118.492620	35.667780	PRODRECS.
YES	KEYESVILLE	Blue Jay Prospect	Kern	Gold	Occurrence	Gold	118.506220	35.634380	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit::

									128, P. 137.}
YES	KEYESVILLE	High Grade Mine	Kern	Gold	Past Producer	Gold	118.514020	- 35.620580	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, P. 111-}{Deposit:: 112.}
YES	KEYESVILLE	Mammoth Mine	Kern	Gold	Past Producer	Gold	118.501720	- 35.623280	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, P. 115-}{Deposit:: 116.}
YES	KEYESVILLE	Nob Hill Prospect	Kern	Gold	Prospect	Gold	118.491720	- 35.638880	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 289, P. 174.}
YES	KEYESVILLE	Nephi Prospect	Kern	Gold	Prospect	Gold	118.492620	- 35.639980	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 287, P. 173.}

YES	KEYESVILLE	Keyesville Mines Placers	Kern	Gold	Prospect	Gold	118.505920	35.629680	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 241, P. 163.}
YES	TABLE MNT-SJR GORGE	Riffle Mine	Madera	Gold	Prospect	Gold	119.541570	37.118240	CALIF. STATE MINING BUR. REPORT 12, 1894, P. 162.
YES	TABLE MNT-SJR GORGE	Hazelton and Kennedy Claim	Madera	Gold	Prospect	Gold	119.575370	37.116040	CALIF. DIV. MINES AND GEOL. BULLETIN 152, 1950, P. 103-104.
YES	TABLE MNT-SJR GORGE	W H Childers	Fresno	Feldspar	Past Producer	Feldspar	119.540970	37.135240	CALIF V 47,NO 3,P 502 & PL 31;REPT25,P 311;CALIF B 176,P 196
YES	TABLE MNT-SJR GORGE	Oversight	Fresno	Gold	Past Producer	Gold	119.542670	37.089140	MILS-WFOC PRODUCTION FILES
YES	TABLE MNT	Weatherby Mine	Fresno	Gold	Unknown	Gold	119.565170	37.053240	CALIF REPT 12,P 131
YES	TEMBLOR RANGE	Santa Fe Pit	Kern	Sand and Gravel, Construction	Past Producer	Sand and Gravel, Construction	-119.62284	35.19998	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 103, 1990,}{Deposit:: P.}

YES	TEMBLOR RANGE	Taft Quarry	Kern	Stone, Crushed/Broken	Past Producer	Stone, Crushed/Broken	-119.52594	35.11278	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 103, 1990,}{Deposit:: P.}
YES	TEMBLOR RANGE	Lowes Southern Clay Pit	Kern	Stone, Crushed/Broken	Past Producer	Stone, Crushed/Broken	-119.44284	35.05689	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 58, 1981,}{Deposit:: P. 41.}{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 103, 1990.}
YES	TEMBLOR RANGE	Geeslin-Fiscus Property	Kern	Uranium	Past Producer	Uranium	-119.47874	35.09188	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, NO. 651,}{Deposit:: P. 339.}{Deposit:: MINOBRAS, 1978, URANIUM DEPOSITS OF ARIZONA-CALIFFORNIA-}{Deposit:: NEVADA: P.86.}

YES	TEMBLOR RANGE	Fellows Quarry No. 2	Kern	Stone, Crushed/Broken	Past Producer	Stone, Crushed/Broken	-119.52594	35.11688	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 58, 1981,}{Deposit:: P. 40.}
YES	TEMBLOR RANGE	Tres Amigos Group	Kern	Uranium	Past Producer	Uranium	-119.53034	35.13418	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 679, P. 342.}{Deposit:: MINOBRAS, 1978, URANIUM DEPOSITS OF ARIZONA-CALIFORNIA-}{Deposit:: NEVADA: P. 86.}
YES	TEMBLOR RANGE	Landson Group	Kern	Uranium	Unknown	Uranium	-119.43984	35.06779	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 656, P. 339.}{Deposit:: MINOBRAS, 1978, URANIUM DEPOSITS OF ARIZONA-CALIFORNIA-}{Deposit:: NEVADA: P. 86.}

YES	TEMBLOR RANGE	Mitchell Property	San Luis Obispo	Uranium	Occurrence	Uranium	-119.58424	35.17328	CALIF. DIV. MINES SPECIAL REPORT 49, 1956, P. 33.
YES	TEMBLOR RANGE	Silver Dollar Claims	Kern	Uranium	Occurrence	Uranium	-119.61404	35.18718	{Deposit:: MINOBRAS, 1978, URANIUM DEPOSITS OF ARIZONA-CALIFORNIA-NEVADA: P. 86.}
YES	TEMBLOR RANGE	Gasko Group	Kern	Uranium	Past Producer	Uranium	-119.61514	35.18718	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 650, P. 339.}{Deposit:: SOUTHER PACIFIC CO., 1964, MINERALS FOR INDUSTRY, V. III}{Deposit:: SOUTHERN CALIFORNIA, P. 16.}{Deposit:: MINOBRAS, 1978, URANIUM DEPOSITS OF ARIZO

WITHDRAWN	WILDLAND NAME	SITE NAME	county	commod1	dev_stat	ore	long	lat	REFERENCE
YES	WALKER BASIN-CALIENTE CREEK	Golden Oak Claims	Kern	Gold	Producer	Gold	118.392310	35.582480	U.S. BUREAU OF MINES DATA BAS
YES	WALKER BASIN-CALIENTE CREEK	Golden Oak Claims	Kern	Gold	Prospect	Gold	118.392320	35.582480	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 190, P. 152.}
YES	WALKER BASIN-CALIENTE CREEK	Illinois and Golden Bell	Kern	Gold	Past Producer	Gold	118.442030	35.580810	{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 36, P. 328.}{Deposit:: CALIFORNIA JOURNAL OF MINESL AND GEOLOGY, VOL. 14, P. 497.}{Production:: CJMG VOL 14, P. 497}
YES	WALKER BASIN-CALIENTE CREEK	Illinois and Golden Bell Mine	Kern	Gold	Producer	Gold	118.437030	35.579700	U.S. BUREAU OF MINES DATA BAS

YES	WALKER BASIN-CALIENTE CREEK	Illinois and Golden Bell Mine	Kern	Gold	Past Producer	Gold	118.437020	35.579680	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 224, P. 159.}
YES	WALKER BASIN-CALIENTE CREEK	Jane No. 1 Prospect	Kern	Tungsten	Unknown	Scheelite	118.513720	35.568080	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 586, P. 317.}
YES	WALKER BASIN-CALIENTE CREEK	Latham Tunnel Prospect	Kern	Gold	Prospect	Gold	118.514020	35.569380	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 248, P. 165.}
YES	BEAR MNT- FOX MILL SRING	Little Western Mine	Tulare	Tungsten	Past Producer	Tungsten	118.064810	35.855580	U.S. BUREAU OF MINES FILES (WFOC).
YES	COMPENSATION LANDS	Mckittrick Quarry	Kern	Stone, Crushed/Broken	Past Producer	Stone, Crushed/Broken	119.748750	35.357780	{Deposit:: CALIF. DIV. MINES AND GEOL. SPECIAL PUBLICATION 103, 1990,}{Deposit:: P.}

YES	WALKER BASIN-CALIENTE CREEK	Polar Bear Prospect	Kern	Gold	Past Producer	Gold	118.457030	35.558310	{Deposit:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 14, P. 507}{Production:: CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 14, P. 507.}
YES	PATTERSON BEND	Riffle Mine	Madera	Gold	Prospect	Gold	119.541570	37.118240	CALIF. STATE MINING BUR. REPORT 12, 1894, P. 162.
YES	WALKER BASIN-CALIENTE CREEK	Tip Top Prospect	Kern	Gold	Past Producer	Gold	118.399250	35.584700	CALIFORNIA JOURNAL OF MINES AND GEOLOGY, VOL. 14, P. 512
YES	WALKER BASIN-CALIENTE CREEK	Unip Mine	Kern	Tungsten	Past Producer	Scheelite	118.407860	35.565810	{Deposit:: TROXEL, B. W., AND MORTON, P. K., 1962, MINES AND MINERAL RESOURCES OF KERN COUNTY, CALIFORNIA: CAL. DIV. MINES AND GEOLOGY, COUNTY REPORT 1, P. 311, 325}{Production:: TROXEL AND MORTON, 1962}

YES	WALKER BASIN-CALIENTE CREEK	Unip Mine	Kern	Tungsten	Past Producer	Tungsten	118.406220	- 35.564380	CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, P. 311.
YES	WALKER BASIN-CALIENTE CREEK	Utopia Claims	Kern	Uranium	Occurrence	Uranium	118.441720	- 35.580780	{Deposit:: CALIF. DIV. MINES AND GEOL., COUNTY REPORT 1, 1962, MAP NO.}{Deposit:: 681, P. 342.}
YES	PATTERSON BEND	W H Childers	Fresno	Feldspar	Past Producer	Feldspar	119.540970	- 37.135240	CALIF V 47,NO 3,P 502 & PL 31;REPT25,P 311;CALIF B 176,P 196

WILDLANDS

NO MINES

WITHDRAWN	WILDLAND
YES	CRAIG RANCH
	ROSZEWSKA RANCH
	EDGAR RANCH WEST
	BEAR MOUNTAIN-FOX MILL SPRING
	ATWELL ISLAND

	NPR II
	PIEDRAS BLANCAS