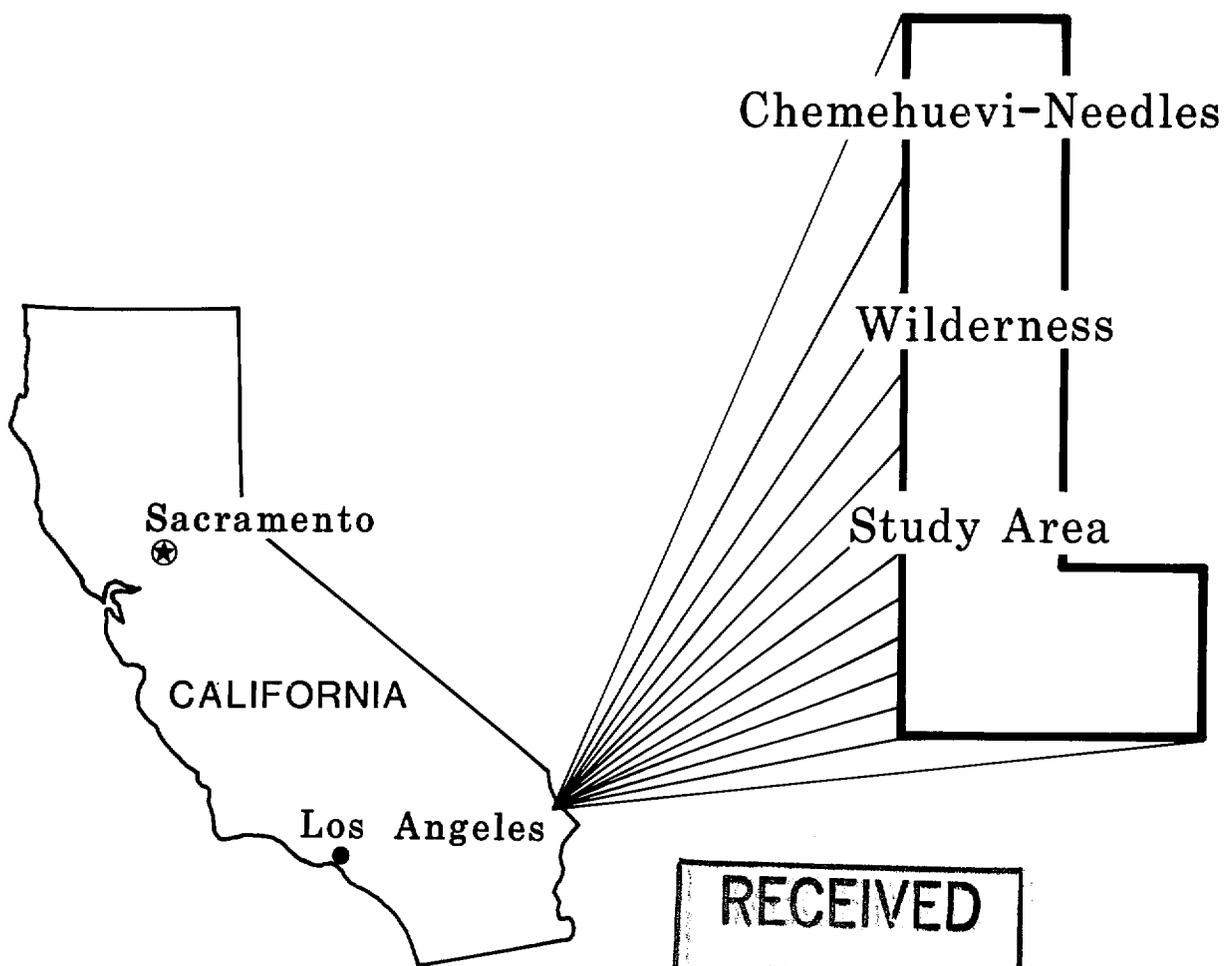


MLA 50-85

Mineral Land Assessment
Open File Report/1985

**Mineral Investigation of the Chemehuevi-Needles
Wilderness Study Area (AZ-050-004),
San Bernardino County, California**



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**United States Department of the Interior
Bureau of Mines**

MINERAL INVESTIGATION OF THE CHEMEHUEVI-NEEDLES WILDERNESS STUDY
AREA (AZ-050-004), SAN BERNARDINO COUNTY, CALIFORNIA

by

Michael E. Lane

MLA 50-85
1985

Intermountain Field Operations Center, Denver, Colorado

UNITED STATES DEPARTMENT OF THE INTERIOR
Donald P. Hodel, Secretary

BUREAU OF MINES
Robert C. Horton, Director

PREFACE

The Federal Land Policy and Management Act (Public Law 94-579, October 21, 1976) requires the U.S. Geological Survey and the U.S. Bureau of Mines to conduct mineral surveys on certain areas to determine the mineral values, if any, that may be present. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a mineral survey of the Chemehuevi-Needles Wilderness Study Area (AZ-050-004), San Bernardino County, California.

This open-file report summarizes the results of a Bureau of Mines wilderness study and will be incorporated in a joint report with the U.S. Geological Survey. The report is preliminary and has not been edited or reviewed for conformity with the Bureau of Mines editorial standards. Work on this study was conducted by personnel from the Mineral Land Assessment Branch (MLA), Intermountain Field Operations Center, Building 20, Denver Federal Center, Denver, CO 80225.

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UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT

ft	foot/feet
mi	mile(s)

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Michael E. Lane, Bureau of Mines

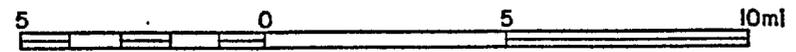
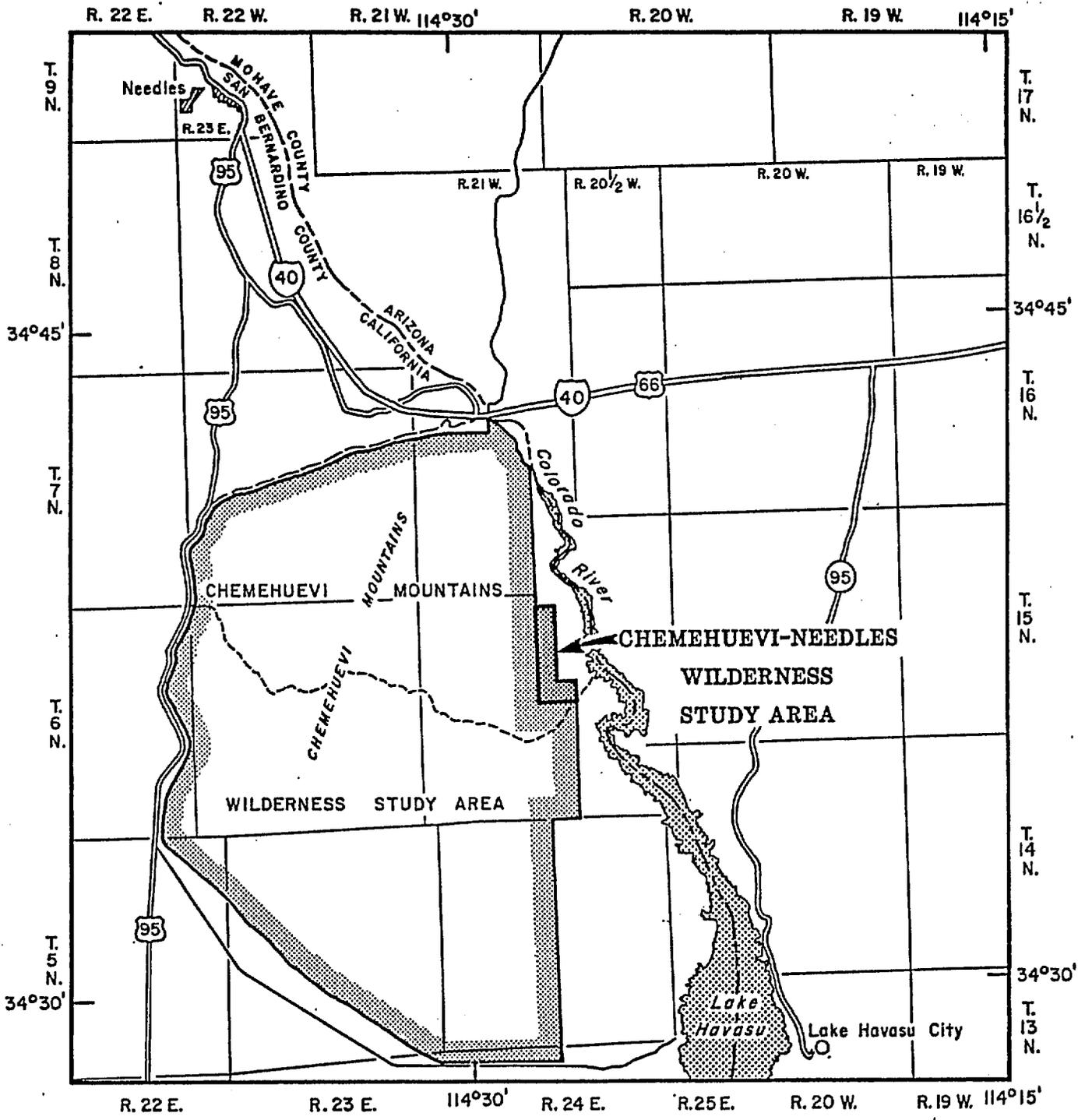
SUMMARY

In June 1985, the Bureau of Mines conducted a mineral survey of the 960-acre Chemehuevi-Needles Wilderness Study Area in eastern San Bernardino County, California. The survey was done as required by Public Law 94-579 (October 21, 1976). No mines, prospects, or mineralized areas were found and no samples taken. Available literature and field data indicate that no mineral occurrences exist in the study area and Bureau of Land Management records show no oil and gas leases cover the area.

INTRODUCTION

In June 1985, the Bureau of Mines, in cooperation with the U.S. Geological Survey (USGS), conducted a mineral investigation of the Chemehuevi-Needles Wilderness Study Area (WSA). The Bureau surveys and studies mines, prospects, and mineral occurrences to evaluate identified resources. The USGS assesses the potential for undiscovered mineral resources based on reconnaissance geological, geochemical, and geophysical surveys. This report presents the results of the Bureau of Mines study.

The WSA comprises 960 acres of Bureau of Land Management (BLM) land in extreme eastern San Bernardino County, California, about 18 mi southeast of Needles, California, and about 12 mi northwest of Lake Havasu City, Arizona (fig. 1). The area is in California, but is administered from the BLM office in Yuma, Arizona. The L-shaped study area is roughly parallel to and lies about 1 mi east of the Colorado River. The only vehicle access to the WSA is



- EXPLANATION
- INTERSTATE HIGHWAY
 - U.S. HIGHWAY
 - STATE HIGHWAY
 - UNIMPROVED ROAD
 - TRAIL

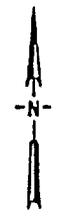


Figure 1.--Index map of the Chemehuevi-Needles Wilderness Study Area, San Bernardino County, California.

by way of a road which exits U.S. Highway 95 about 9 mi west and ends near the south end of the area.

The desert-type terrain is characterized by sandy washes, rocky knobs, and sparse vegetation. The highest elevation is about 1,000 ft in the northwest corner of the study area; the lowest elevation is 560 ft in the washes on the east edge of the WSA. No prominent geographic features exist within the study area.

The WSA is contiguous with the Chemehuevi Mountains WSA (fig. 1) studied by Kreidler (1983), U.S. Bureau of Mines and by Miller and others (1983), USGS. Geologic mapping by Miller and others includes the Chemehuevi-Needles WSA. Field work done by the Bureau consisted of helicopter reconnaissance of the area. No mines or prospects were found and no samples were taken. No evidence was found to indicate the possibility of any mineral occurrences in the WSA. BLM records were examined; no mining claims or oil and gas leases were found in the WSA. Literature was searched to obtain pertinent information concerning the study area, but no references to mineralization were found.

GEOLOGIC SETTING

The majority of the WSA is underlain by gneiss and migmatite (Mesozoic? and Proterozoic?) and volcanic and sedimentary rock of Miocene and Oligocene(?) age. In addition, relatively small areas of Quaternary alluvium and undifferentiated gneiss and granite (of Proterozoic age?) are exposed. A low-angle detachment fault transverses the study area approximately north to northwest. (See Miller and others, 1983.)

MINING HISTORY

No mining activity has occurred within the WSA; no mining claims or oil and gas leases are in the WSA. No organized mining districts are in or near the WSA. The nearest mine, the Blue Boy Mine, is about 7 mi northwest in the Chemehuevi Mountains WSA and was described by Kreidler (1983).

CONCLUSIONS

No evidence was found during field investigation to indicate any mineralization. No prospects were found and information obtained from literature substantiates the fact that mineral occurrences are not likely to be found in this area.

REFERENCES

- Kreidler, T. J., 1983, Mineral investigation of the Chemehuevi Mountains Wilderness Study Area, San Bernardino County, California: U.S. Bureau of Mines Open-File Report MLA 42-83, 9 p.
- Miller, D. M., John, B. E., Antweiler, J. C., Simpson, R. W., Hoover, D. B., Raines, G. L., and Kreidler, T. J., 1983, Mineral resource potential of the Chemehuevi Mountains Wilderness Study Area (CDCA-310), San Bernardino County, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1584-A, 1:48,000.