

## **Lucky Strike Mine, Spring Mountains, Clark County Nevada**

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### **Acknowledgement and Disclaimer**

The information in this paper is taken largely from published and public sources. I have reproduced this material and present it pretty much as we found it, not trying to harmonize discrepancies in mine or geologic descriptions. I have changed verb tenses for readability and have used some paraphrase. I have expanded abbreviations or special characters with full text (e.g. feet instead of ft., inches instead of ") Italics indicate quotations. Authors of the original information are indicated at the end of each paragraph. Paragraphs without a citation are our own materials. The maps in this report have been compiled and rectified from digital and paper copies of original sources that were made at different scales and in different geographic projections. Therefore, many of the maps had to be adjusted or stretched. They do not fit perfectly. Most are accurate to within 100 feet, but reproduction and projection errors can be as much as 300 feet for some maps. PLSS means Public Land Survey System. That survey data was obtained from the U.S. Bureau of Land Management website.

MRDS, 2011, Mineral Resources Data System, U.S. Geological Survey, <https://mrdata.usgs.gov/mrds/>. This database relies on records that, in many cases, are inaccurate or imprecise. For example, if a report describes a mine as being in "Section 9", with no other information, MRDS plots the mine location in the center of the section. If a mine is reported in "SW ¼" of a section, MRDS plots the mine in the center of that SW quarter-section. Where I could confidently adjust a MRDS location of a mineral deposit to features identifiable in aerial photographs or topographic maps, I did so.

Help me make this report better. If you have any photographs, memories or reports for this mine that you can share, please send them to [yosoygeologo@gmail.com](mailto:yosoygeologo@gmail.com) so that I can incorporate that information and material into this paper.

### **LOCATION (MRDS, 2011)**

T.19S R.57E Sec 01      36.33499      -115.5397

### **PREVIOUS NAMES**

### **HISTORY AND OWNERSHIP**

[The Lucky Strike mine is within] *the Charleston district is on the eastern flank of the Spring Mountains, 35 miles northwest of Las Vegas. Little is known of the district's history or its total production (Longwell and others, 1965:144).*

*The chief properties in the district, all of which are now idle, are the Lucky Strike mine (No. 78, pl. 2), which produced lead and zinc; the Griffith mine (Stanley B) (No. 79, pl. 2), which produced some lead; and the Iron Age claims (No. So, pl. 2), where iron gossan with perhaps a little lead and zinc was mined (Longwell and others, 1965:144).*

## REGIONAL GEOLOGY

The regional geology of the central Spring Mountains is described in the overview paper for this report series. It can be accessed at

[http://www.greggwilkerson.com/uploads/1/0/6/5/106585235/geology\\_and\\_mining\\_history\\_of\\_the\\_central\\_spring\\_mountains.pdf](http://www.greggwilkerson.com/uploads/1/0/6/5/106585235/geology_and_mining_history_of_the_central_spring_mountains.pdf)

## STRATIGRAPHY

Rocks in the area of the Lucky Strike Mine include:

Carboniferous and Permian Bird Springs Formation  
Mississippian Monte Carlo Group  
Devonian Sultan Limestone  
Silurian Lone Mountain Dolomite  
Ordovician Ely Springs Dolomite Eureka Quartzite and Ordovician Pogonip Group  
Cambrian limestone and dolomite

## MINE GEOLOGY

*Oxidized lead-silver-zinc replacement ore in dolomitized limestones (Longwell and others, 1965:178 table).*

## MAPPING

**1:250,000**

**Workman and others (2002)** mapped the area of the Lucky Strike mine as being in a triangular-shaped block of rocks belonging to the Mississippian Monte Cristo Group (Mm). This block is bounded to the north by a thrust fault for which Monte Cristo Group is on the lower plate. To the west and east of the block is Permian-Mississippian Bird Springs Formation (PIPmb)

**Mm** Monte Cristo Group (Upper and Lower Mississippian)

**PIPmb** Bird Spring (Lower Permian and Pennsylvanian) and Indian Springs Formations (Upper Mississippian)

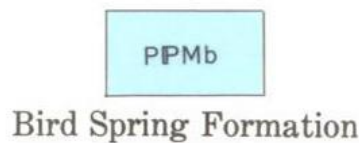
**Page and others (2005)** mapped the area of the Lucky Strike mine as being in a triangular shaped block of rocks belonging to the Mississippian Monte Cristo Group

(Mm). The mine occurs along a southwest-to-northeast trending fault with left-lateral separation. This fault displaces the Deer Creek Thrust fault at a distance of 1,200 feet north of the mine. On the west side of the triangular block is Lower Member Bird Springs Formation (PMbl) and on the east side there is undivided Bird Springs Formation (Pmb).

	Bird Spring Formation (Lower Permian to Upper Mississippian)
Pbu	Upper member (Leonardian and uppermost Wolfcampian)
PMbl	Lower member (upper Wolfcampian to Chesterian)
Pmb	Bird Spring Formation, undivided (Lower Permian to Upper Mississippian)

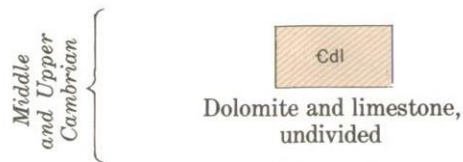
**Longwell and others (1965)** mapped the area of the Lucky Strike mine as being in an area where the sequence of formations from south to north is

PIPMb      Mississippian-Pennsylvanian Bird Springs Fm

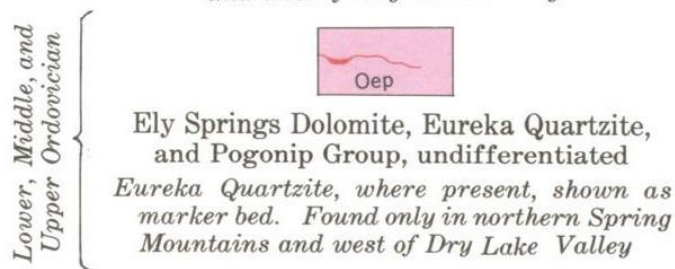


**Fault**

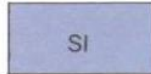
€dl      Cambrian dolomite and limestone, undivided



Oep      Ordovician Ely Springs Dolomite Eureka Quartzite and Ordovician Pogonip Group, undifferentiated

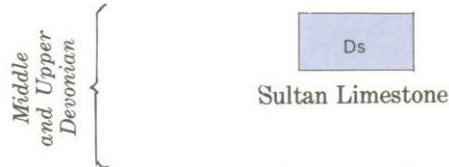


SI      Silurian Lone Mountain Dolomite



Lone Mountain Dolomite  
*Found only in northern Spring Mountains  
and west of Dry Lake Valley*

Ds Devonian Sultan Limestone



There is a bedding plane fault at the south of this sequence that separates Bird Springs Fm to the south from Cambrian dolomite and limestone (undivided) to the north. To the west of the mine is a north-south trending fault. This places the Cambrian through Devonian sequence to the east against the Carboniferous Bird Springs Formation to the west. Longwell and others also map a southwest to northeast thrust fault northwest of the Lucky Mine, but in a different location than the Deer Springs Thrust Fault depicted on the newer map of Page and others (2005).

**1:200,000**

**Bonham and Morris (1983)** mapped the area of the Lucky Strike mine as being in calcareous rocks including limestone, dolomite, and marble (Rc).

**Rc Calcareous rocks--Including limestone, dolomite, and marble**

## **STRUCTURE**

The Lucky Strike mine is a fault-controlled vein.

## **MINERALOGY**

Lead and zinc minerals (Longwell and others, 1965:178).

## **DEVELOPMENT**

Small production (Longwell and others, 1965:178).

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## **MAPS**

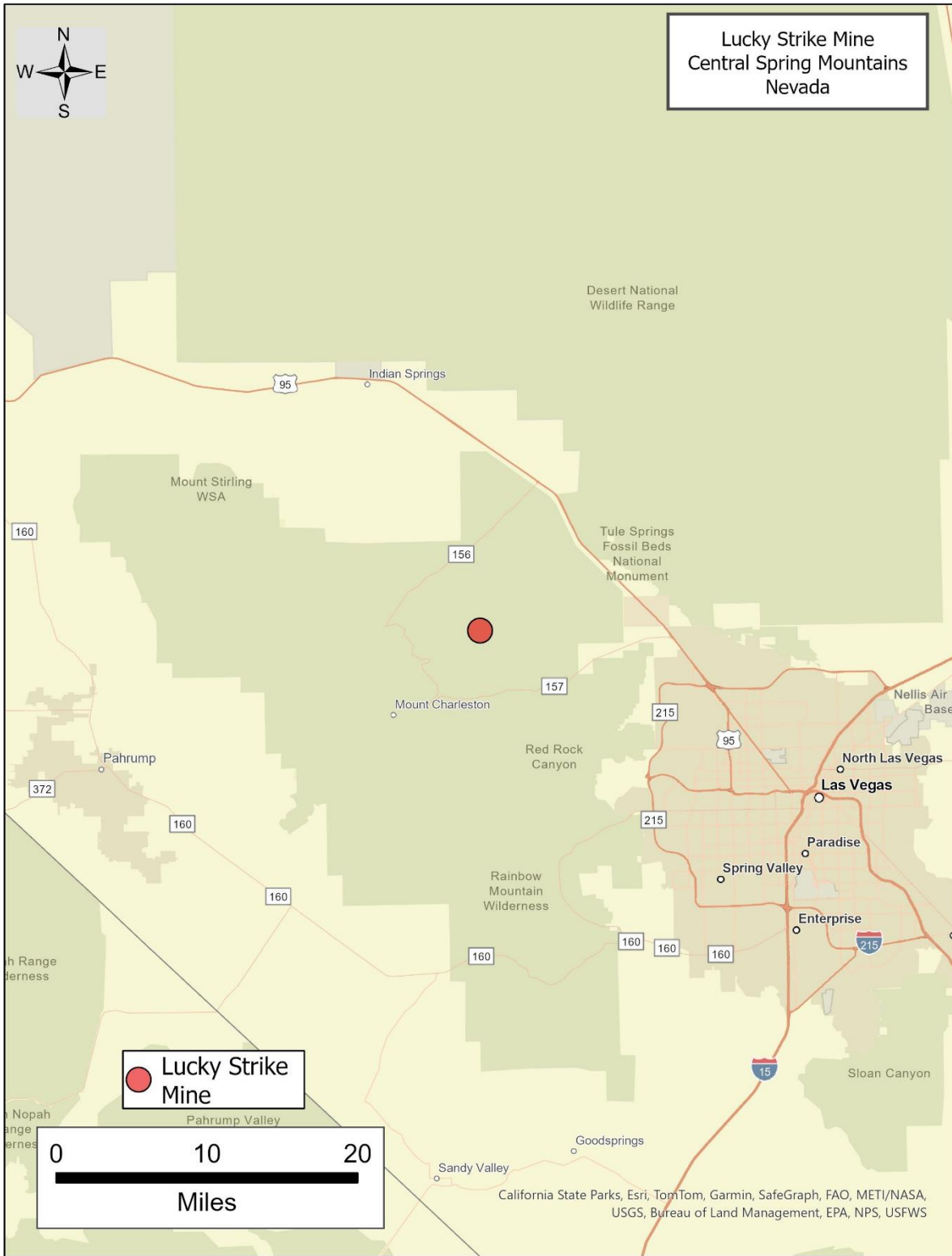


Figure 1. Location map for the Lucky Strike Mine. Open source for educational purposes. No copyright.



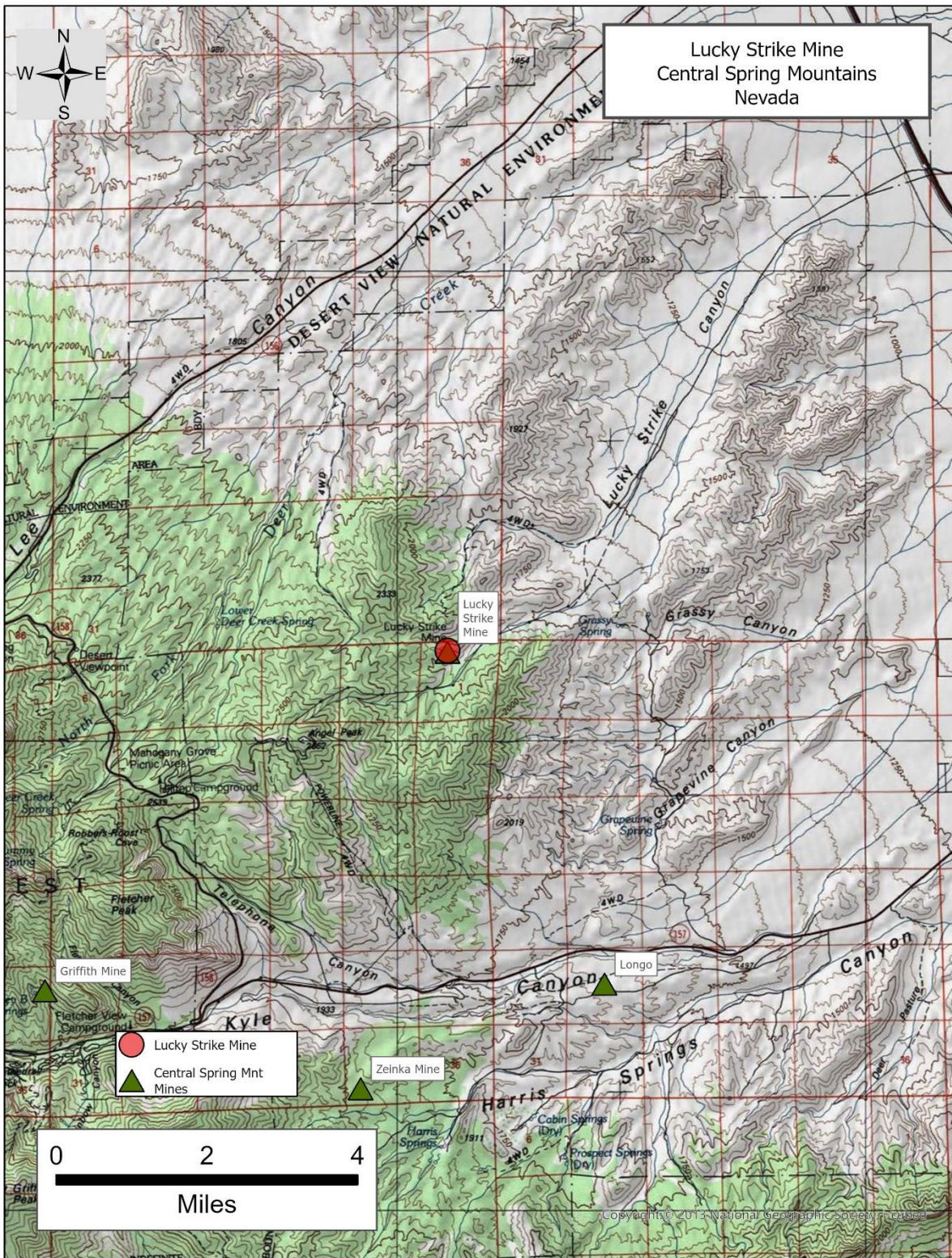


Figure 2. Regional topographic map of the Lucky Strike Mine. Open source for educational purposes. No copyright

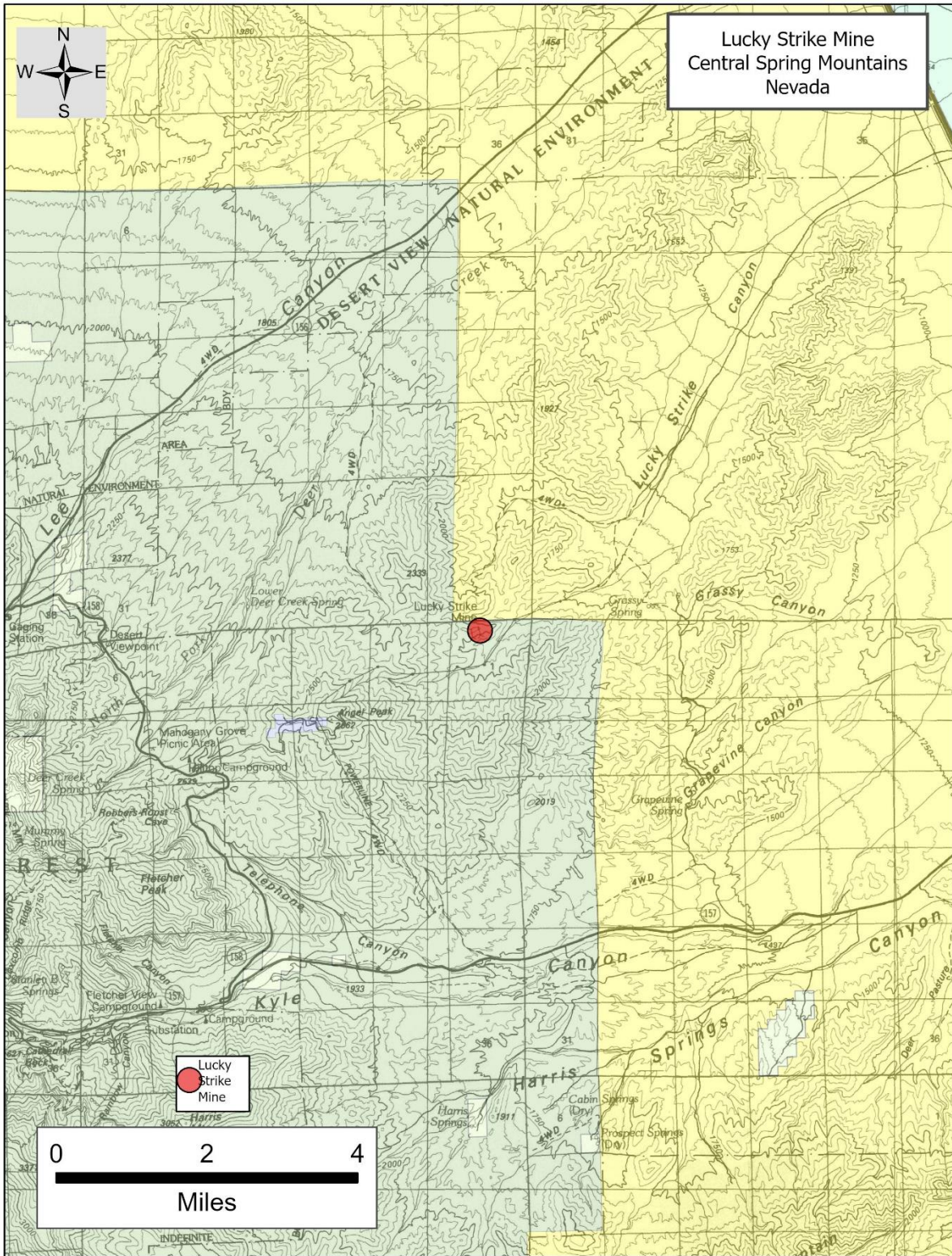


Figure 3. Land status map of the Lucky Strike Mine. Green is U.S. Forest Service. Yellow is U.S. Bureau of Land Management. Blue is private land. Purple is military lands. Open source for educational purposes. No copyright

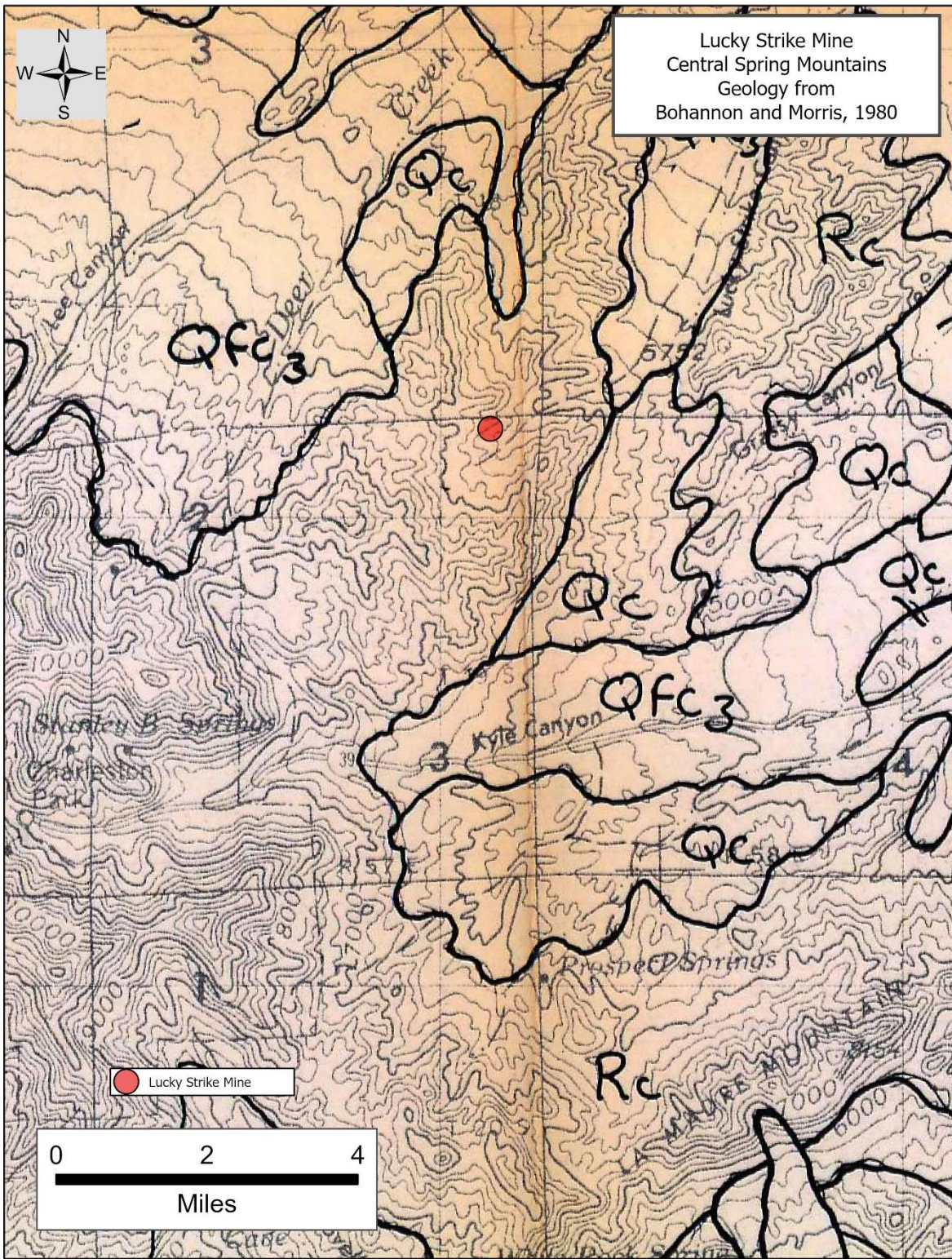


Figure 4. Regional geologic map of the Lucky Strike mine and surrounding areas. Open source for educational purposes. No copyright

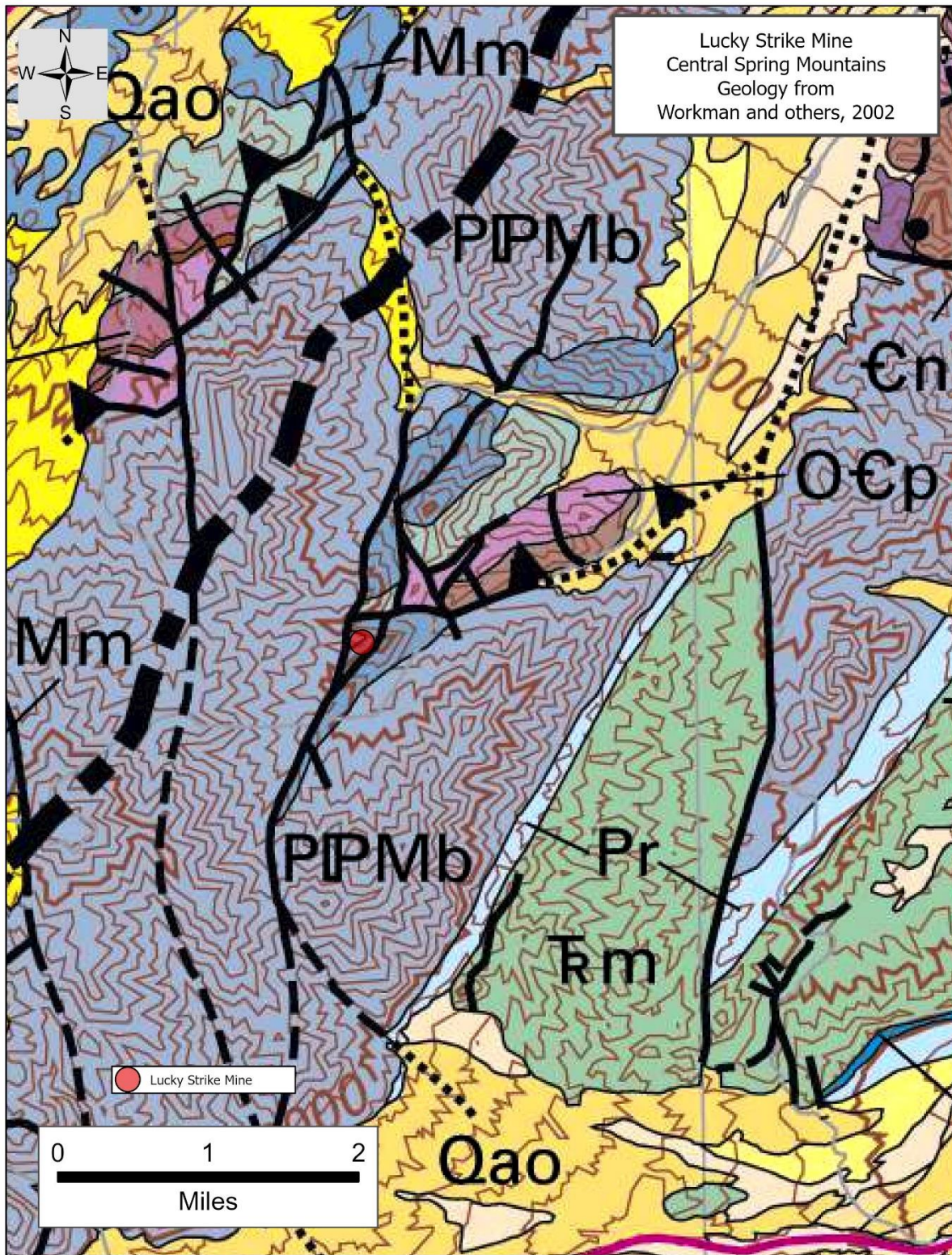


Figure 5. Regional geologic map of the area surrounding the Lucky Strike Mine. Open source for educational purposes. No copyright

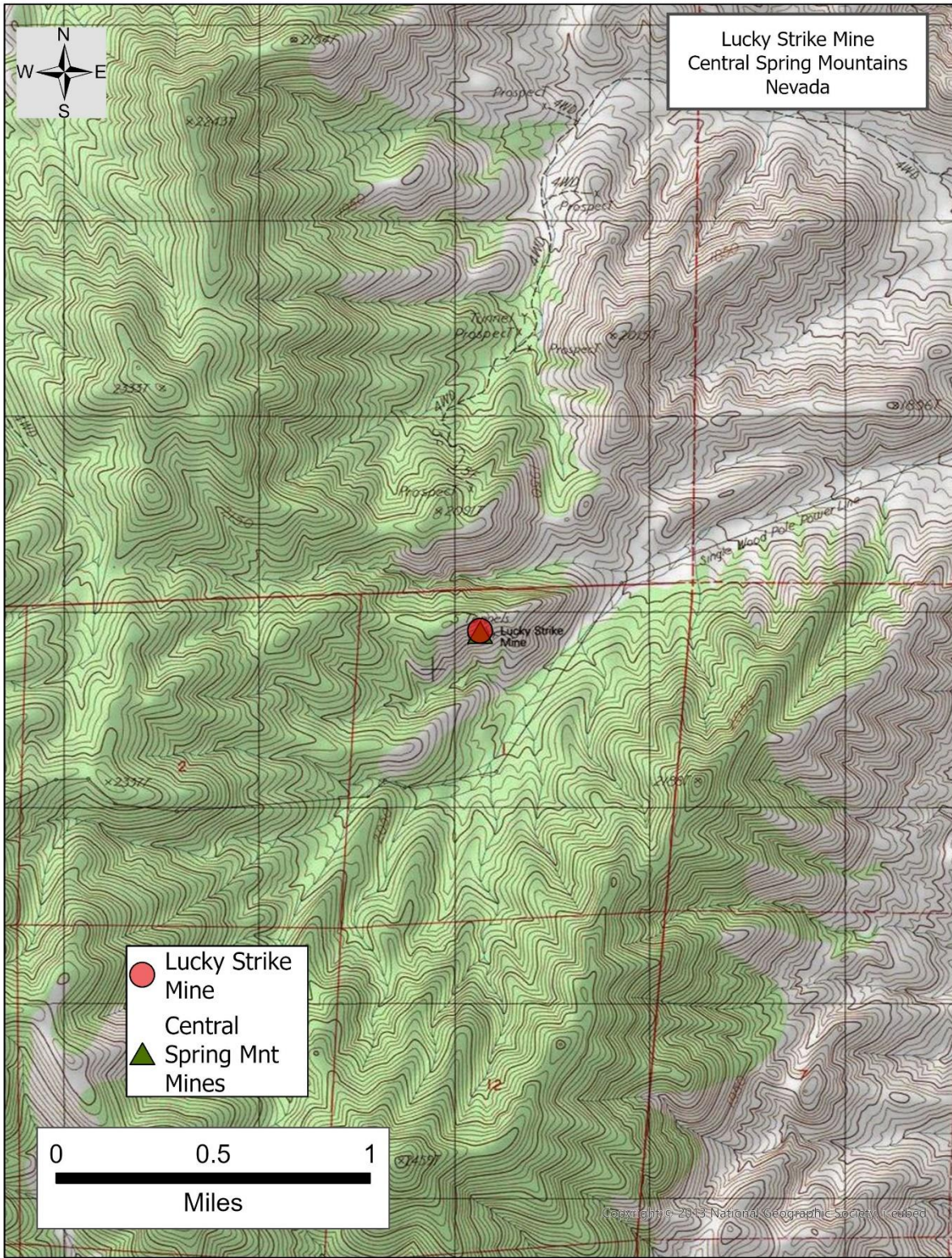


Figure 6. Area topographic map of the Lucky Strike Mine. Open source for educational purposes. No copyright

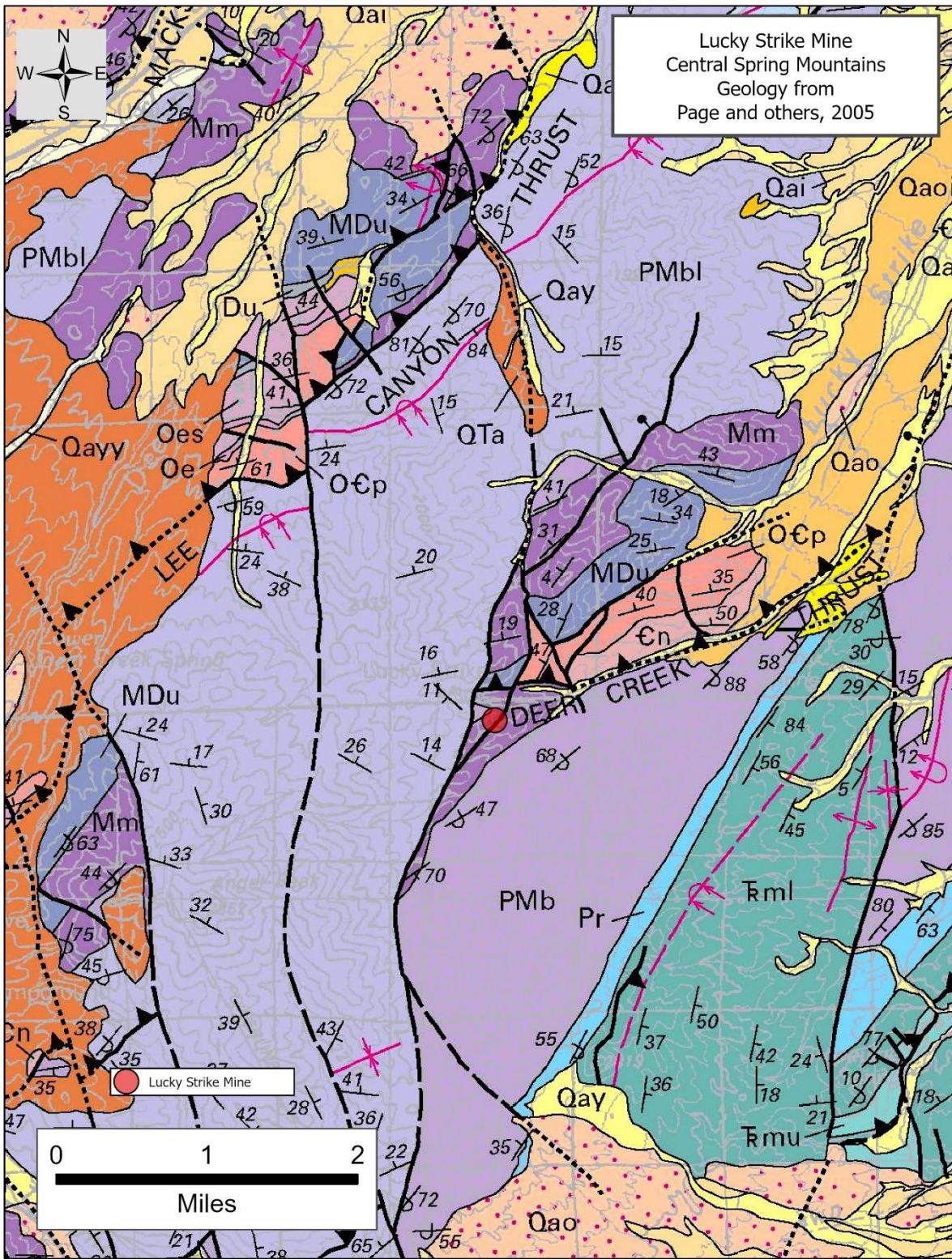


Figure 7. Area geologic map of the Lucky Strike Mine. Open source for educational purposes. No copyright

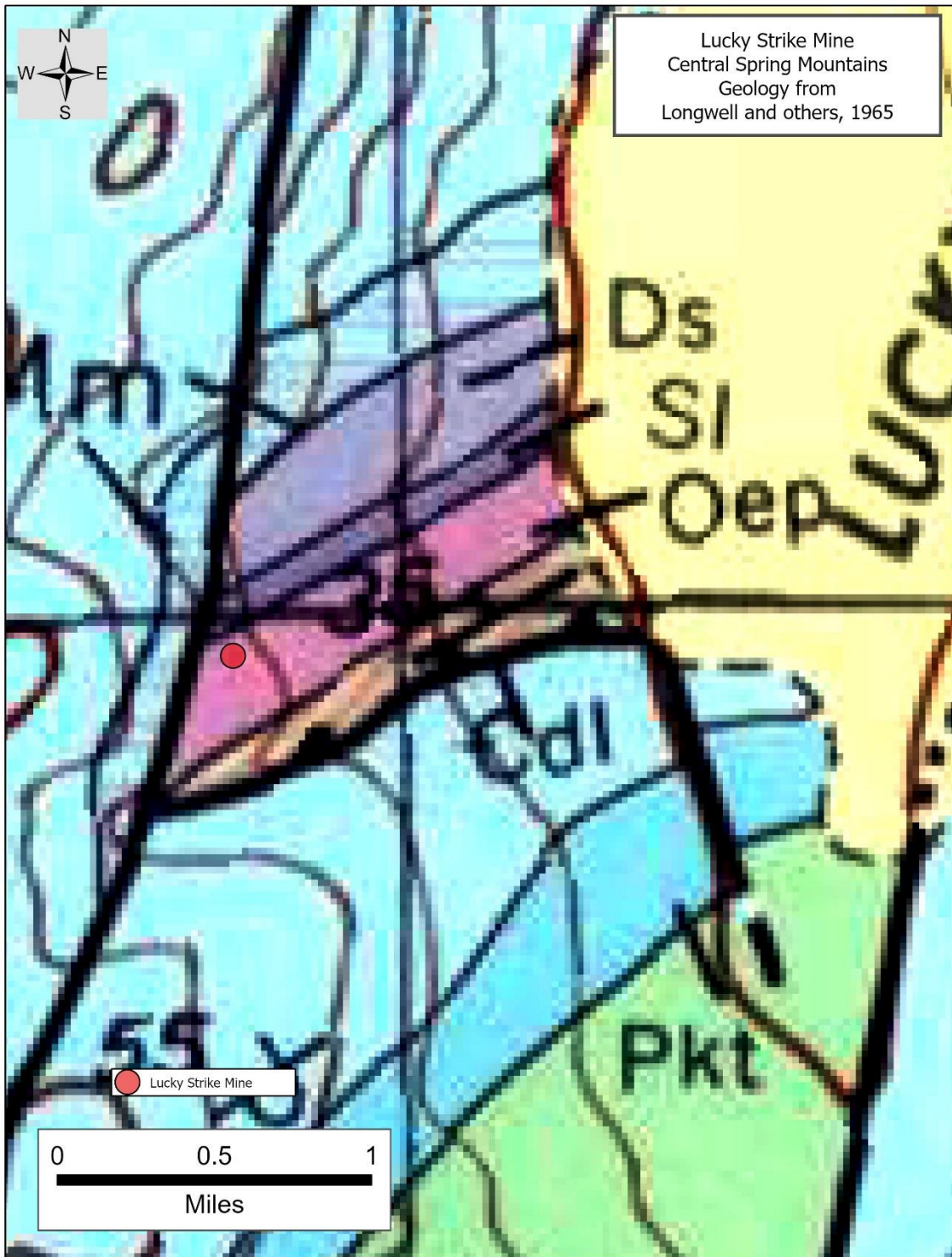


Figure 8. Area geologic map of the Lucky Strike Mine. Open source for educational purposes. No copyright

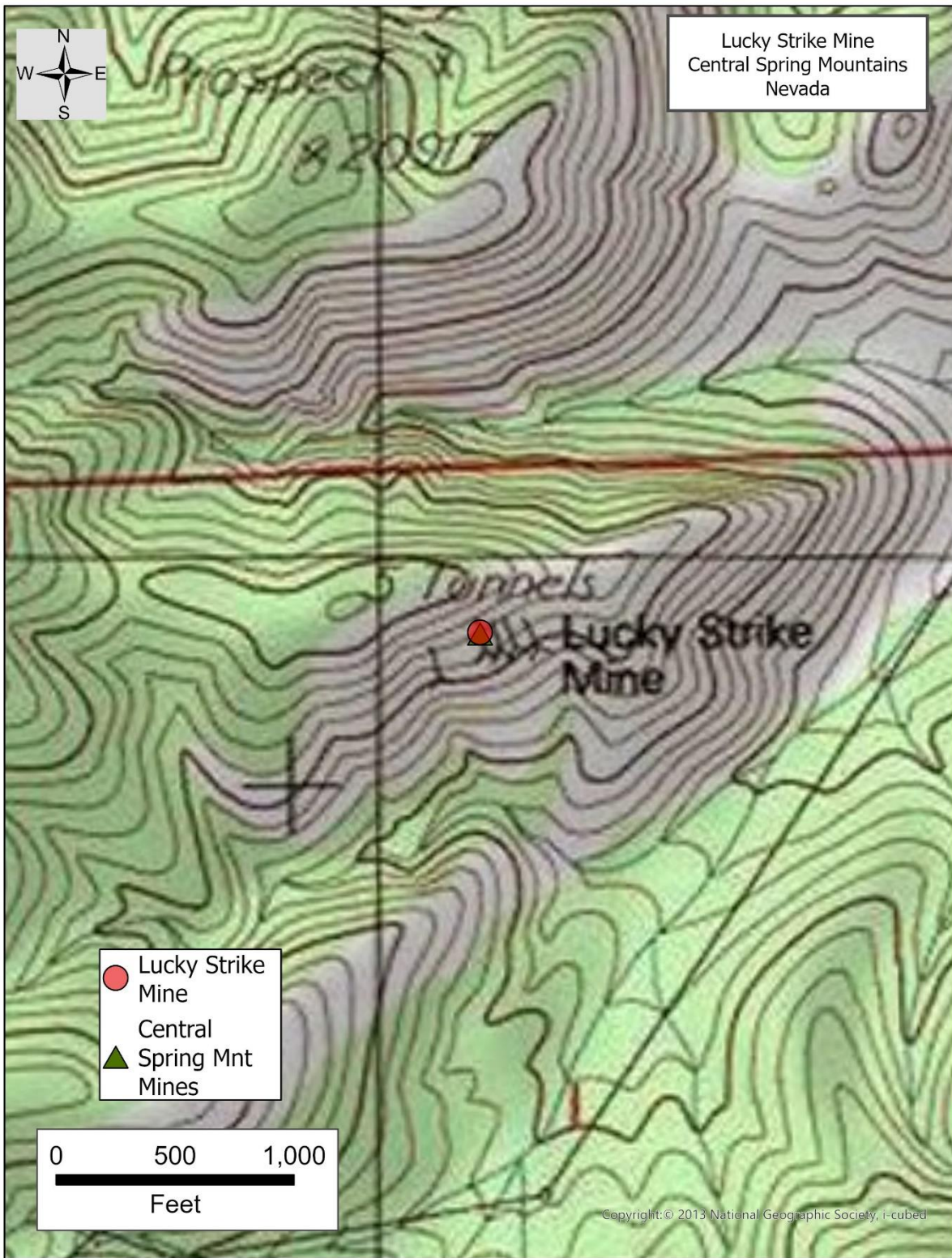


Figure 9. Site topographic map of the Lucky Strike Mine. Open source for educational purposes. No copyright





Figure 10. Detailed aerial photograph of the Lucky Strike District. Open source for educational purposes. No copyright