

Lode Mines and Prospects in the Elkhorn 7.5' Quadrangle, North Santiam Mining District, Marion County, Oregon – Topographic Base

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Lode Mines and Prospects in the North Santiam Mining District,
Marion and Clackamas Counties, Oregon

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PLATE 7 of 8

NOTICE

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. This publication cannot substitute for site-specific investigations by qualified practitioners. Site-specific data may give results that differ from the results shown in the publication. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. government.

DISCUSSION

The purpose of this map is to show the locations of 64 abandoned mine land (AML) features on a digital raster graphic (topographic) base of the Elkhorn 7.5' quadrangle, Marion County, Oregon (Figures 1 and 2). A companion lidar map (Plate 8) is used to display the locations of the same AML features.

These plates are part of an exchange-of-technology project related to how lidar-derived terrain data can be confidently and practically applied to the inventory of mine openings and other features associated with abandoned mine land. Using lidar to inventory AML features has a large potential for cost savings as a tool to aid field surveys. Lidar cannot completely replace field inspection of AML features, but the technology does provide a screening tool that will makes field surveys more accurate and efficient.

For this project, the North Santiam Mining District (NSMD) in the Cascade Range of Oregon was used as an example locale. This district is one of five gold/base metal mining districts that occur throughout the Cascade Range from the Columbia River to the California line, and the only one with full lidar coverage. The NSMD lies near the northeast corner of Marion County (Figure 1), within the Willamette National Forest, with dimensions roughly 17 km (~11 mi) long from east to west, and as much as 8 km (5 mi) at its widest (Figure 2). The primary access route is via the North Fork Road to Forest Road 2209. As can be seen in Figure 2, the Little North Santiam River flows westward through a fairly precipitous valley, the course of which serves to bisect the district and as the boundary between the Opal Creek Wilderness to the north and the Opal Creek Scenic Recreation Area to the south.

Topography in the district is characterized by rugged mountains that rise 914 to 1,524 m (3,000 to 5,000 ft) above sea level and by steeply incised valleys. Most of the area is densely forested with Douglas fir, Pacific silver fir, and Western Hemlock plant associations. Only rock cliffs are barren of timber.

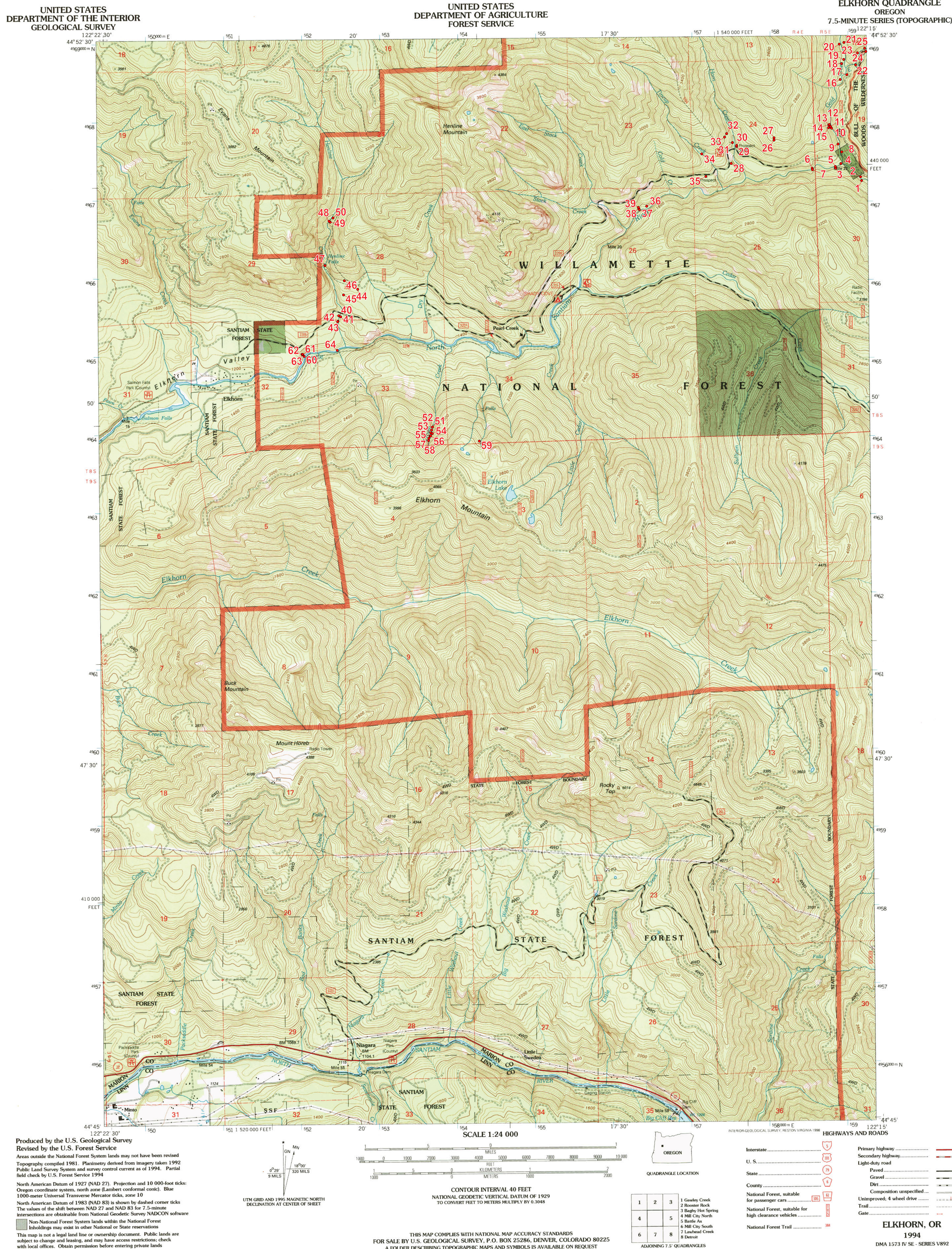
After five periods of known mining in the NSMD at least 236 AML features (by this study's count) in the form of adits and open cuts/exploration pits, waste rock areas, etc. remain. Table 1 lists AMLs indexed to map number and name. The first mineral claims were made in the 1860s immediately west of this map area, near the confluence of Gold Creek and the North Santiam River. Placer gold was first discovered there and an ensuing rush was short-lived. However, early prospectors also found well-defined fissure veins that carried copper with zinc and lead. By 1903, most claims for those minerals had been located. When Callahan and Buddington (1938) and Leever (1941) visited the district, the mines were inactive. It was not until 1977 that mining in the district resumed when the Shiny Rock Mining Corporation reopened the Ruth Mine and several other claims were developed. By 1992, all mining activity in the district ceased with the closing of the Ruth Mine.

The Oregon Department of Geology and Mineral Industries (DOGAMI) compiled the important mines in the district in Bulletin 14-D (Oregon Department of Geology and Mineral Industries, 1951) and Bulletin 61 (Brooks and Ramp, 1968). The work of Olson (1978), Pollock and Cummings (1985, 1986), Cummings and Pollock (1984), and Ma and others (2009) put the district in its regional context with Cascade Range stratigraphy and structure. Cox (1985) and George (1985) provided cultural property inventories and historical surveys of the district. Niewendorp and Geitgey (2010) compiled those sites into Mineral Information Layer for Oregon, release 2.

The area of this project covers a portion of the Elkhorn 7.5' quadrangle and extends into three other quadrangles: Battle Ax, Bagby Hot Springs, and Rooster Rock (Figure 2; also see Plates 1–6 and 8).

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MAP SYMBOL

- 1 (index number) 6 Location of AML feature; see Table 1

Warning: Respect the rights of private property owners. Understand that recreation in or around inactive mine sites is extremely dangerous and can result in serious injury or death. Stay out and stay alive!

Table 1. Index to map numbers and AML names.

1 Santiam #1	33 04-08-24c
2 Santiam 2	34 Redwing No. 2
3 Santiam 5 (south prospect adit)	35 Silver Star and Helvetia
4 Santiam 4 (east prospect adit)	36 Wolz (east open cut)
5 Santiam 5 (north prospect acit)	37 Wolz (short adit)
6 Riverside North	38 Wolz (long adit)
7 Riverside South	39 Wolz (upper adit)
8 Santiam 4 (Gold Creek prospect)	40 Capital
9 Santiam 5 (Gold Creek prospect adit)	41 Capital (open cut)
10 Santiam 8 (prospect 1)	42 Capital (adit 2)
11 Santiam 8 (prospect 2)	43 Capital (adit 3)
12 Santiam 8 (prospect 3)	44 Silver King (shaft)
13 Santiam 8 (prospect 4)	45 Silver King (prospect)
14 Santiam 8 (north adit)	46 Silver King (open cut)
15 Mayday	47 Silver King Group
16 Eureka 21 (west prospect adit)	48 Silver King (upper east adit)
17 Josephine crosscut	49 Silver King (upper west adit)
18 Shilo	50 Deer Trail prospect
19 Lower Granger	51 Crown Mine (prospect 1)
20 Santiam 11a	52 Crown Mine (prospect 2)
21 Santiam 11b	53 Crown Mine
22 Eureka 20	54 Crown Mine (open cut)
23 Eureka 19	55 Crown Mine (prospect 3)
24 Eureka 16 (south)	56 Crown Mine (prospect 4)
25 Eureka 16 (north)	57 Crown Mine (prospect 5)
26 04-08-24b	58 Crown Mine (prospect 6)
27 04-08-24a	59 08-04-34
28 08-04-24 prospect	60 Hazel No. 1
29 Black Eagle (south prospect)	61 Hazel No. 2
30 Black Eagle (north prospect)	62 Hazel No. 3
31 Black Eagle	63 Hazel No. 3a
32 04-08-24d	64 08-04-33

Names of AML features are based on a claim map by the Shiny Rock Mining Corp. (DOGAMI archives).

Figure 1. Location map of the North Santiam Mining District.

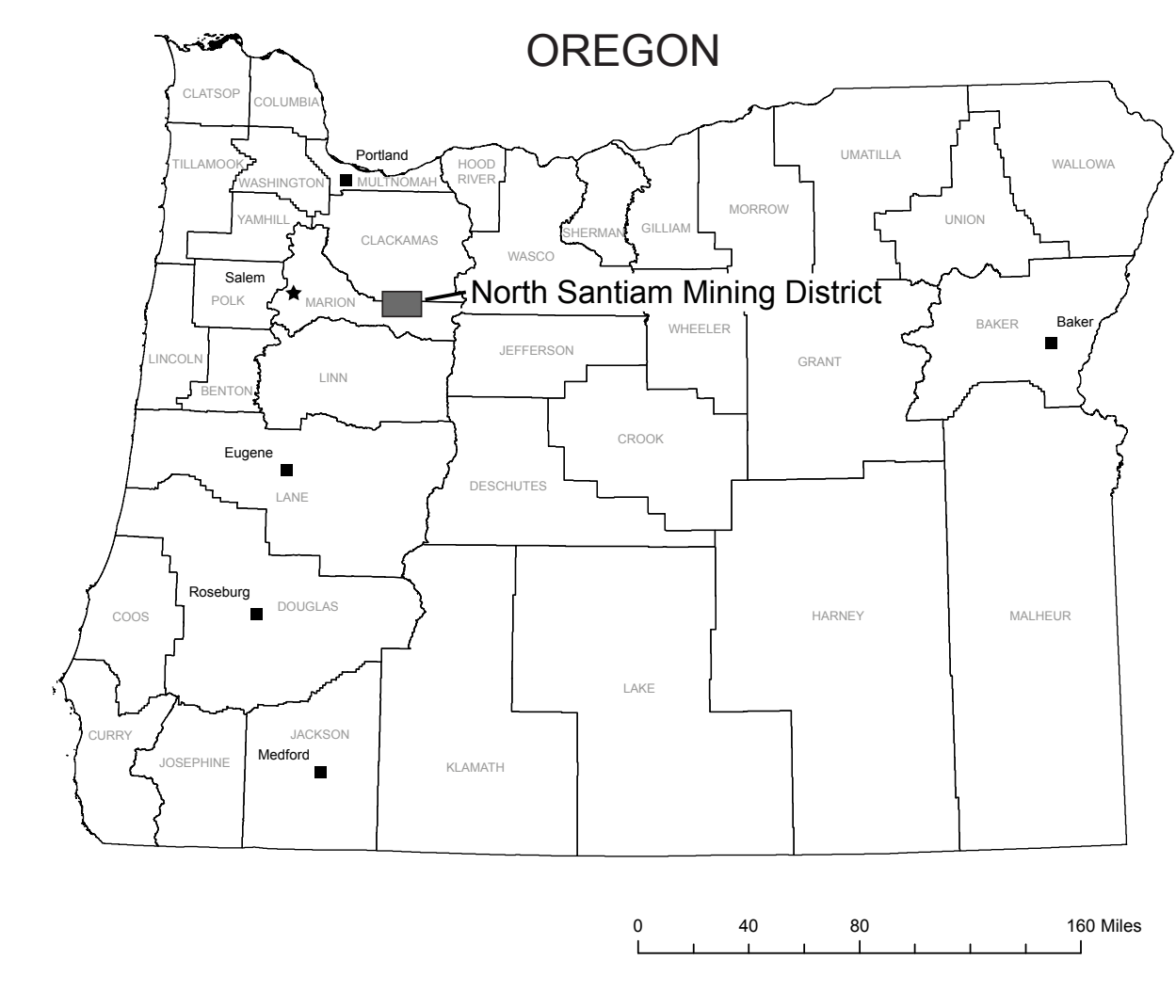
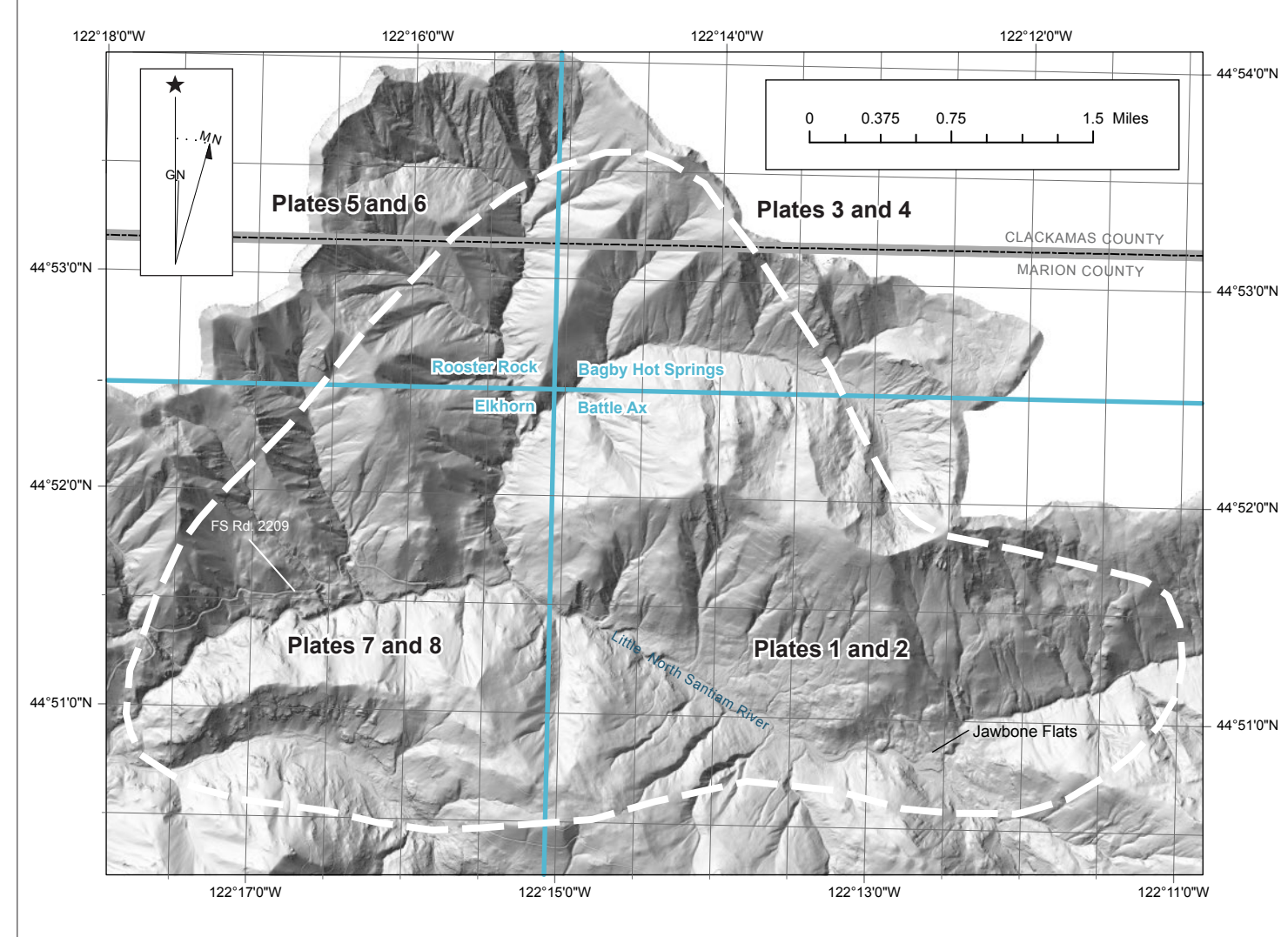


Figure 2. Hillshade image of the North Santiam Mining District (NSMD), Marion and Clackamas counties, Oregon. White dashed line represents the portion of the NSMD that contains the majority of abandoned mine land sites; blue lines are quadrangle boundaries.



Produced by the U.S. Geological Survey

Revised by the U.S. Forest Service

Areas outside the National Forest System lands may not have been revised

Topography compiled 1981. Primarily derived from imagery taken 1992

Public Land Service. System and survey control current as of 1994. Partial

field check by U.S. Forest Service 1998

North American Datum of 1927 (NAD 27). Projection and 10 000-foot ticks

Oregon coordinate system, north arrow (Lambert conformal conic). Blue

1000-meter Universal Transverse Mercator ticks, zone 10

North American Datum of 1983 (NAD 83) is shown by dashed corner ticks

The values of the adit between NAD 27 and NAD 83 for 7.5-minute

intersections are obtainable from National Geographic Society NADCON software

Non-National Forest System lands within the National Forest

Holdings may exist in other National or State reservations

This map is not a legal land use or ownership document. Public lands are

subject to change and leasing, and may have access restrictions; check

with local offices. Obtain permission before entering private lands

UTM GRID AND 1000-METER NORTH

DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

TO CONVERT FEET TO METERS MULTIPLY BY 0.3048

THIS MAP COMBINES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 25286, DENVER, COLORADO 80225

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ADJOINING 7.5' QUADRANGLES

1 2 3

4 5 6

7 8 9

10 11 12

13 14 15

16 17 18

19 20 21

22 23 24

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