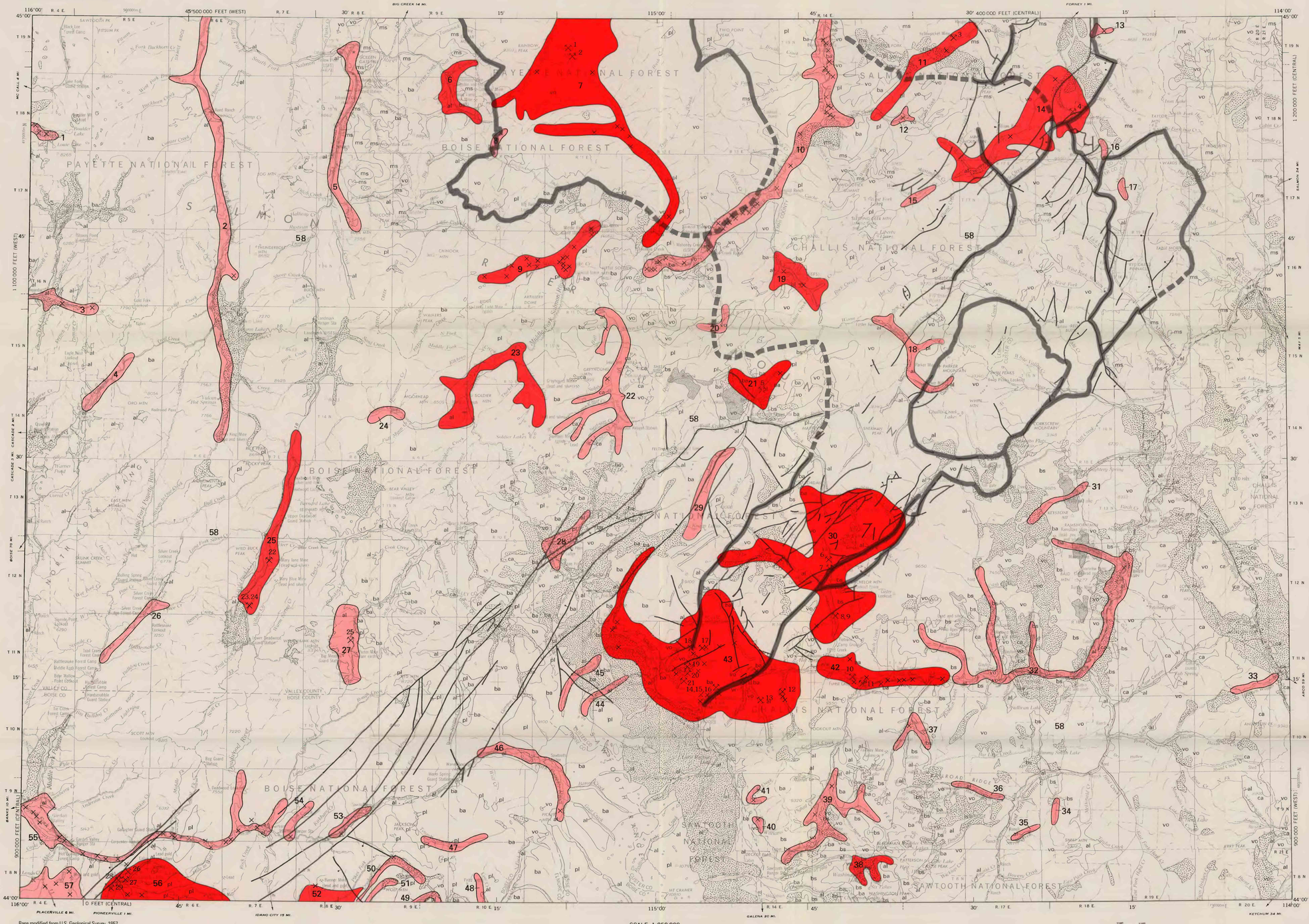
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PROFESSIONAL PAPER 1525
PLATE 22



Base modified from U.S. Geological Survey, 1957
Limited revision 1963
100,000-foot grids based on Idaho coordinate system, central and west zones

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

1995 MAGNETIC DECLINATION VARIES FOR THIS SHEET FROM 16°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 16°00' FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 5' WESTERLY

RESOURCE POTENTIAL FOR GOLD PLACER DEPOSITS IN THE CHALLIS 1° × 2° QUADRANGLE, IDAHO

By
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1995

EXPLANATION OF RESOURCE POTENTIAL

Area having resource potential for gold placer deposits—See table 40 for scoring of recognition criteria

- 7 — **High potential**—Areas 7, 21, 30, 42, 43, 56
- 6 — **Moderate potential**—Areas 6, 9, 11, 14, 19, 23, 25, 38, 52
- 1 — **Low potential**—Areas 1–5, 8, 10, 12, 13, 15–18, 20, 22, 24, 26–29, 31–37, 39–41, 44–51, 53–55, 57
- 58 — **No potential for gold placer deposits**—Area 58
- ×4 — **Mine having more than 100 oz gold production**—See list below
- × — **Other mines and prospects**

NAMES OF MINES

1 Dewey
2 Sunnyside
3 Yellowjacket
4 Ramey and Kane
5 Loon Creek
6 Jordan Creek
7 Pocket
8 Yankee Fork
9 Horsetail
10 Centaurus
11 The Great Centennial
12 Rough Creek
13 Big Casino
14 Hot Stuff (Golden Rule)
15 Joes Gulch
16 Lucky Strike
17 Kelly Creek
18 Buckley Bar
19 Stanley Creek
20 Stanley Basin
21 Stanley Five Bars
22 Deadwood
23 H.G. Catlin
24 Deadwood Basin
25 Bear Valley
26 Golden Age
27 Noble
28 Apple Jack
29 J.S. Placer

Apple Jack (28)
Bear Valley (25)
Big Casino (13)
Buckley Bar (18)
Centaurus (10)
Deadwood (22)
Deadwood Basin (24)
Dewey (1)
Golden Age (26)
The Great Centennial (11)
H.G. Catlin (23)
Horsetail (9)
Hot Stuff (Golden Rule) (14)
J.S. Placer (29)
Joes Gulch (15)
Jordan Creek (6)
Kelly Creek (17)
Loon Creek (5)
Lucky Strike (16)
Noble (27)
Pocket (7)
Ramey and Kane (4)
Rough Creek (12)
Stanley Basin (20)
Stanley Creek (19)
Stanley Five Bars (21)
Sunnyside (2)
Yankee Fork (8)
Yellowjacket (3)

LIST OF GEOLOGIC TERRANES

- al — **Alluvial terrane**
- pl — **Eocene Plutonic terrane**
- vo — **Challis volcanic terrane**
- ba — **Idaho batholith terrane**
- bs — **Black shale terrane**
- ca — **Carbonate terrane**
- ms — **Proterozoic terrane**

Trans-Challis fault system terrane

Regions of overlap between carbonate terrane and black shale terrane

Mostly rock glaciers; alluvial fans; landslide debris; talus; and terminal, end, and lateral moraines. Also includes Miocene volcanic and sedimentary rocks and noncarbonate roof pendants in the Idaho batholith of undivided (Paleozoic? or Proterozoic?) age

Terrane boundary

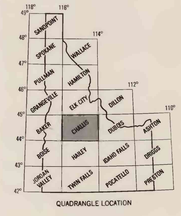
Boundaries of calderas and other volcano-tectonic structures—Dashed where approximately located

DEFINITIONS OF RESOURCE POTENTIAL

High mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics favorable for resource accumulation are known to be present, or where enough of these characteristics are present to give strong support to genetic models favorable for resource accumulation and where evidence shows that mineral concentration—mineralization in the broad sense—has taken place (Taylor and Steven, 1983, p. 1269).

Moderate mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics favorable for resource accumulation are known or can reasonably be inferred to be present but where evidence for mineralization is less clear or has not yet been found (Taylor and Steven, 1983, p. 1269).

Low mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics are unfavorable, where evidence indicates that mineral concentrations are unlikely, or where requirements for genetic models cannot be supported (Taylor and Steven, 1983, p. 1269).

Unknown mineral resource potential exists where the level of knowledge, at an appropriate scale, is so inadequate that to classify potential as high, moderate, or low would be misleading (Taylor and Steven, 1983, p. 1269).

In some instances an assignment of **no mineral resource potential** for a particular ore deposit type or types has been given to specific areas within the Challis quadrangle. In these cases the occurrence of the particular ore deposit type is dependent on the presence of a specific lithology. Known absence of the required rock type precludes the occurrence of the ore deposit.