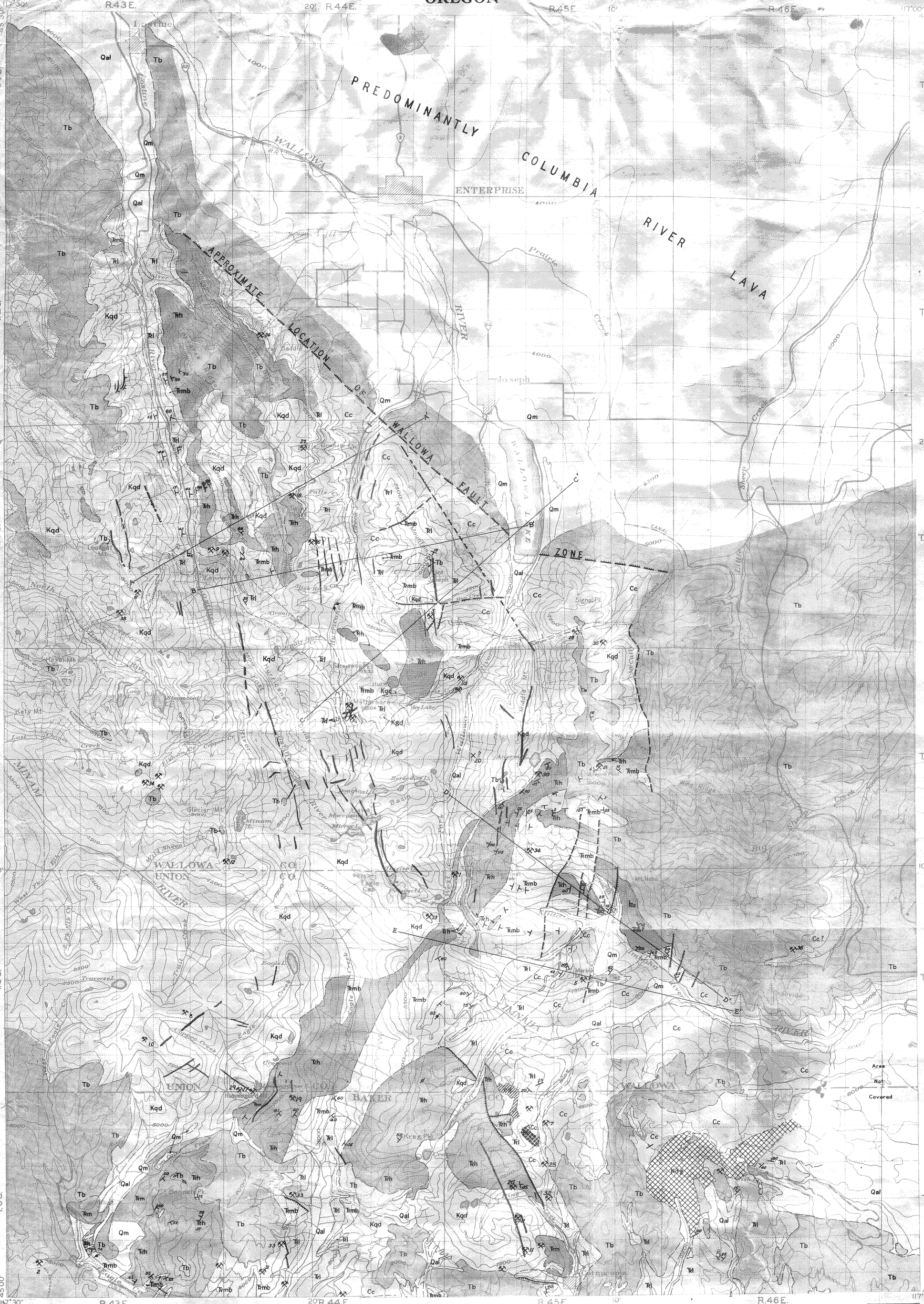
PLATE I

RECONNAISSANCE GEOLOGIC MAP
OF THE
WALLOWA LAKE QUADRANGLE
OREGON

ISSUED BY THE
STATE OF OREGON
DEPARTMENT OF GEOLOGY AND
MINERAL INDUSTRIES
EARL K. NIXON, DIRECTOR
PORTLAND, OREGON

TO ACCOMPANY BULLETIN No. 12
"GEOLOGY AND PHYSIOGRAPHY OF THE
NORTHERN WALLOWA MOUNTAINS" By
WARREN D. SMITH, JOHN ELIOT ALLEN
AND OTHERS.



Base after United States Forest Service
Forest Atlas, Wallowa and Minam Folio Sheets,
Surveyed 1912–1917.

APPROXIMATE MEAN
DECLINATION 1937

1 0 1 2 3 4 5 Miles

Contour interval 500 feet
Datum is mean sea level

1941

I Geology by Warren D. Smith, John Eliot Allen, Ray C. Treasher, Wayne Lowell, Lloyd L. Ruff. 1938–1939
II Geology by Clyde P. Ross, 1938.
III Geology by E. T. Hodge, 1938.
IV Geology inferred or incomplete.

EXPLANATION
(in part after Ross, 1938)

Qal Qm — Alluvial and glacial deposits
(Unconsolidated gravel and sand, and morainal material)

UNCONFORMITY

Tb — Columbia River basalt
(Principally basalt flows and feeder dikes. May also include a few lamprophyric dikes)

UNCONFORMITY

Kqd — Quartz diorite and granodiorite
(Batholithic masses of quartz diorite and granodiorite with numerous variations in composition)

Kb — Oligoclase bostonite
(Dark bluish-gray aphanitic rock with small feldspar phenocrysts)

Kdg — Diorite-gabbro complex

Trh — Hurwal formation

Trm — Metamorphic facies
(Includes "Younger Mesozoic sedimentary rocks" and "Triassic (?) volcanic rocks" of Ross, 1938. Mostly shales, black and gray slates, and micaceous and quartzitic sandstone; altered in places to hornfels, schists, quartzites and gneiss. Fossiliferous)

Trmb — Martin Bridge formation
(Crystalline limestone, minor amounts of calcareous shale, and some conglomerate. Fossiliferous)

UNCONFORMITY

Trl — Lower sedimentary series

Eg — Epidote-garnet rock
(Includes "Carboniferous (?) sedimentary series" of Ross, 1938, south of the Imnaha River. Shales, sandstones, with minor amounts of limestone and conglomerate; mostly altered to slate, hornfels, schist, and crystalline limestone. Fossiliferous on Point Joseph. Epidote-garnet rock probably a contact-altered phase)

UNCONFORMITY DOUBTFUL

Cc — Clover Creek greenstone
(Green, gray, and purple metamorphosed lavas and pyroclastic rocks, principally andesite, with some interbedded sediments and limestone lenses)

Pleistocene and Recent — QUATERNARY
Miocene — TERTIARY — CENOZOIC
Intrusives — CRETACEOUS (?)
Upper Karnic — UPPER TRIASSIC — MESOZOIC
Middle Karnic (in part at least)
Permian — CARBONIFEROUS — PALEOZOIC

Contact

Contact inferred

Attitude of beds
vertical
horizontal

Fault (showing downthrow side)

Fault inferred or approximately located

Mines and Prospects
(Numbers refer to alphabetical list of mines and numbers given in text.)

MINES AND PROSPECTS
(*Described in text)

1. Andy Heaverne's Prospect	Sec. 6, T. 5 S., R. 45 E.	
2. Basin Mine	W½ sec. 29, T. 6 S., R. 43 E.	
3. B. C. Basin Prospect	NW¼ sec. 36, T. 3 S., R. 44 E.	
5. Boner Flat Prospect	Center south line of SE¼ sec. 15, T. 5 S., R. 45 E.	
6. Bowman Creek Prospect	Just N. of Center of sec. 27, T. 3 S., R. 43 E.	
7. Carnahan Mine	SE¼ sec. 4, T. 6 S., R. 45 E.	
8. Colton Claims	SE¼ sec. 22, T. 5 S., R. 43 E.	
9. *Contact Group (also known as Iron Dyke, Peacock, White Eagle, Dr. Scott Claims)	Center of E. ½ sec. 24, T. 3 S., R. 43 E.	
10. Copper Creek (Dotson) Prospects	Sec. 27, T. 5 S., R. 43 E.	
11. Cornucopia Mountain Claims	Mostly in secs. 21, 27 and 28, T. 6 S., R. 45 E.	
Companion; Corundum Group; Forest Queen; Geo. W. Smith Claims; Jackley	Jim Fisk; Last Chance; Mayflower; Mountain Chief; Queen of the West; Red Boy	Red Cross; Red Jacket; Robert Emmett; Union; Valley View (Wild Irishman); White Elephant
12. Donnelly Prospect (Blue Lake Mine)	SE cor. sec. 36, T. 4 S., R. 43 E.	
13. *Frazier Prospect (Golden Cat, Sunset, etc.)	Center N½ sec. 12, T. 5 S., R. 44 E.	
14. Great Northern Prospects (Three prospects).	E½ sec. 22 and W½ of sec. 23, T. 4 S., R. 43 E.	
15. *Green Group (formerly known as Gem Group: Copper Gem, Mountain Gem, etc., and Copper King).	SE¼ sec. 6 and N½ sec. 7, T. 4 S., R. 45 E.	
16. Gyllenberg's Prospect (Hecla Consolidated).	NW¼ sec. 21, T. 3 S., R. 44 E.	
17. Hummingbird Mountain (Veatch) Prospect.	NE corner sec. 6, T. 6 S., R. 44 E.	
18. *LeGore Prospect	SE¼ sec. 8, T. 3 S., R. 44 E.	
19. Love and Kelly Prospect	NE¼ sec. 5, T. 6 S., R. 44 E.	
20. Manuel Lopez Prospect	Sec. 18 or 19, T. 4 S., R. 45 E.	
21. McCully Basin Prospect	NW¼ sec. 23, T. 4 S., R. 45 E.	
22. Metzger Property	Sec. 5, T. 3 S., R. 44 E.	
24. *Northwest Lime Co. (formerly Black Marble & Lime Co.)	SE¼ sec. 19, T. 2 S., R. 44 E.	
25. Norway	SE¼ sec. 9, T. 6 S., R. 45 E.	
26. Red Mountain	E½ sec. 17, T. 6 S., R. 45 E.	
28. Royal Purple Prospect	Center of W½ sec. 34, T. 3 S., R. 45 E.	
29. Schirmer and Landis Prospect	NW¼ sec. 6, T. 6 S., R. 44 E.	
30. *Seeber Prospect (Walla Walla Group)	Center sec. 21, T. 4 S., R. 45 E.	
31. Sheep Rock Mine (also known as McGee property).	SE¼ sec. 30, T. 6 S., R. 44 E.	
32. Simmons Mine	SE¼ sec. 16, T. 6 S., R. 45 E.	
33. Summit Mining Co. (includes Woodard and Dunham Miles Groups and Apex, Midway, Woodrow and Zenith claims).	Sec. 17, 20, and N½ sec. 29, T. 6 S., R. 44 E.	
34. *Tenderfoot "Mine"	Near center sec. 33, T. 4 S., R. 45 E.	
35. Transvaal Prospect	SW corner sec. 35, T. 3 S., R. 45 E.	
36. Wallowa County Mining & Development Co. (Williams "Mine").	NE¼ sec. 15, T. 5 S., R. 46 E.	
37. *Wilmot Group (Matterhorn Group)	SW¼ sec. 10, T. 4 S., R. 44 E.	
38. Wilson "Mine"	NW¼ sec. 33, T. 3 S., R. 43 E.	