

EXPLANATION

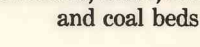
SEDIMENTARY AND METAMORPHIC ROCKS



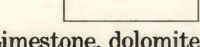
Gravel, sand, and clay



Sandstone, shale, limestone, and coal beds



Limestone, dolomite, shale, and sandstone



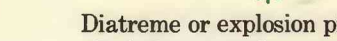
Porphyry, granite, and gabbro metavolcanic rocks

INTRUSIVE IGNEOUS ROCKS OF DEVONIAN(?) AGE
Include occurrences in mines and drill holes. Number indicates specified number of closely spaced intrusions

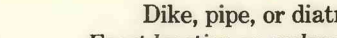
Mafic rock in drill hole, outcrop, sill neck or plug, and dike in which trend is not known



Mafic dike showing trend



Diatreme or explosion pipe breccia



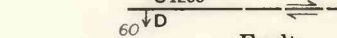
Dike, pipe, or diatreme



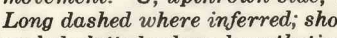
Central area of circular dome caused by igneous intrusion or explosion



Contact



Fault



Thrust fault



Anticline



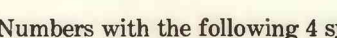
Dome



Syncline



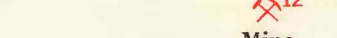
Numbers with the following 4 symbols refer to list of mines and prospects



Area containing large mineral deposits



Mine



Prospect



Minor occurrence

Symbols for types of deposits:

Pb Lead

Zn Zinc

Fe Iron

Ba Barite

Cu Copper

Py Pyrite

Mn Manganese

Co Cobalt

F Fluorite

Ag Silver

W Tungsten

Lm Limestone

LIST OF MINES AND PROSPECTS
SOUTHEAST MISSOURI DISTRICT (SOUTHERN PART) AND OUTLYING AREAS

MADISON COUNTY
Fredericktown and Mine La Motte areas (lead, copper, cobalt, nickel)

1. Hill
2. Dr. Robb and Ferringier
3. Schulte
4. Ruth
5. St. Louis Smelting and Refining Division mine (from northeast No. 1, No. 2, or Park City, No. 8 mine)
6. National Lead Company (Missouri Cobalt Company) No. 1 and No. 2 mines
7. Marshall
8. Tucker
9. New Mine La Motte mines (St. Joseph Lead Co. and National Lead Co.)
10. Mine La Motte mine group
11. Mine La Motte copper mine
12. Fredericktown Lead Company (Ozark and Catherine) group
13. Hickory Nut (No. 1, 2, 3)
14. Gossney and Nitong
15. Einstein Silver Mine group (silver, lead, tungsten)
16. Starkey (pyrite)
17. Marquand prospects
- 17A. Higdon area

STE. GENEVIEVE COUNTY
18. Avon prospect
19. Cornwall Copper
20. Swansea Copper

ST. FRANCOIS COUNTY
Lead Belt: Flat River, Bonne Terre, Doe Run Areas (lead)

21. Doe Run mines
22. Federal group
23. National group
24. Desloge group
25. St. Joseph Lead Company No. 8 mine
26. Owl Creek Basin group
27. Hayden Creek
28. Schultz Basin group
29. Bonne Terre

Iron Mountain district (iron)
30. Iron Mountain

WASHINGTON COUNTY

31. Mineral Point group (lead-barite)
32. Potosi group (lead, barite, zinc)
33. Mines Aux Burton
34. Strawberry Diggings (zinc-lead)
35. Peach Orchard mine (silver-lead)
36. Palmer group (lead-barite-zinc)

CRAWFORD COUNTY

37. Jumbo (lead-zinc)
38. Poverty Flat (lead-zinc)
39. Lead mine (zinc)
40. Kings (barite)
41. Fort (zinc)
42. Mattheson (lead)
43. Cherry Valley mine (filled-sink, pyrite)
44. Eaton mine (barite)
45. Metcalf diggings (lead-barite)
46. Arthur barite prospects
47. Cole lead prospect

IRON, REYNOLDS, DENT, AND SHANNON COUNTIES

48. Viburnum area, St. Joseph Lead Company mine (lead)
49. Boss area (iron-copper)
50. West Fork-Bee Fork area (lead)
51. Blair Creek area (lead)
52. Shannon County copper area
53. Shannon County vein manganese area
54. Annapolis lead mine
55. Minium lead mine
56. Pilot Knob (iron)

PHELPS COUNTY

57. Beaver Creek mine (iron)
58. Moselle No. 10 mine (filled-sink, pyrite)
59. Niles, Newburgh Mining and Development Co. (lead-zinc)
60. Hughes (lead, zinc, barite)

GENERALIZED GEOLOGIC AND MINERAL DEPOSITS MAP OF THE ROLLA QUADRANGLE, MISSOURI AND ILLINOIS

SCALE 1:250,000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 100 FEET

DASHED LINES REPRESENT HALF-INTERVAL CONTOURS

DATUM IS MEAN SEA LEVEL

Major sources of data: Ball and Singewald (1930); Bastin and others (1939); Bridge (1930); Brown (1958); Buckley (1909); Crane (1912); Dake (1930); Emmons (1929); Flint (1926); Gravel (1945); Grohkopf (1955); Hayes (1962); Hendricks (1954); James (1949); Kidwell (1947); Kilgusard, T. H. (written commun. 1963); Lee (1913); Mining Congress Journal (1962); Mining World (1962a, b); Missouri Division of Geological Survey and Water Resources (1939, 1962); Ohle and Brown (1954); Rust (1937); Snyder and Emery (1956); Spurr (1926b); Tarr (1918, 1936); Tennison (1962); Wagner (1947); Weller and St. Clair (1928); Winslow (1894, sec. 2)