



EXPLANATION

Dolomitized areas in M and higher beds

Boundary dashed where inferred or generalized; queried, mainly in workings opened after fieldwork was completed

The dolomite mapped is coarse-grained massive gray spar, not the pink spar, which is slightly more widespread than the gray spar though commonly coextensive with it. Boundaries shown are extreme limits of the gray spar; hence colored areas may also include much jasperoid interbedded or intimately intermixed with gray spar. Included in colored areas are small local areas from which gray spar is excluded by "soap" (both residual clay and introduced Pennsylvanian shale), by limestone (small residual blocks protected from solution or dolomitization by shells of "soap"), and by chert (either residual after removal through solution of all calcareous material, or possibly in part new, formed by additional certification)

Note the many places in which ore runs follow very closely the borders of dolomitized areas. This localization of ore is likely to be pronounced where ground bordering a dolomite mass is either jasperoid or "boulder ground"; it is much less pronounced, or nonexistent, where M bed in the bordering ground contains excessive amount of "soap" or is almost completely "certified." Centers of the dolomite masses may or may not contain enough lower grade ore to be mineable; many are so barren or low grade that no workings have been extended into them

Mines that contain ore in beds higher than M bed are particularly numerous in the area shown on this sheet. These higher mineralized levels commonly show dolomite masses that are in general coextensive with those in M bed, but boundaries do not superpose in detail. Dolomite areas in higher levels are also more likely to be well mineralized throughout rather than chiefly on the margins. To avoid confusion of color patterns in the areas of more than one level only the dolomite on the M bed level is shown

- Fault
Dashed where inferred. U, upthrown side; D, downthrown side
- Slump pipe
Dashed where inferred. U, upthrown side; D, downthrown side
- Structure contours
Drawn on top of Grand Falls Chert Member of Boone Formation, equals top of N bed of Fowler and Lyden (1932). Dashed where inferred. Hardcores indicate closed basin; only innermost contour in a continuous decreasing sequence is hardcored. Contour interval 5 feet. Datum is mean sea level
- Shaft
- Workings in Chester strata and E bed of Fowler and Lyden (1932)
(E bed is in Moccasin Bend Member of Boone Formation)
- Workings in G and H beds (Moccasin Bend Member of Boone Formation)
- Workings in K bed (Baxter Springs Member of Boone Formation)
- Workings in M bed (Joplin Member of Boone Formation)
- Workings in N bed "sheet ground" (Grand Falls Chert Member of Boone Formation)
- Property tie

R 23 E			R 24 E		
1	2	3	4	5	6
PLATE 5			PLATE 6		
7	8	9	10	11	12
PLATE 7			PLATE 8		
13	14	15	16	17	18
PLATE 9			PLATE 10		
19	20	21	22	23	24
PLATE 11			PLATE 12		
25	26	27	28	29	30
PLATE 13			PLATE 14		
31	32	33	34	35	36

INDEX MAP

Base, underground workings, and classification of workings from Eagle-Picher Co., 1:3,600, 1956

Geologic features based on underground mapping, examination of drill cuttings, or interpretation of drill logs by C. C. Addison, K. R. Bowie, D. C. Brookie, H. M. Callaway, N. E. Eastmore, Jr., R. P. Fischer, P. K. Hurlbut, Andrew Kukis, J. P. Lyden, E. T. McKnight, Curtis Templin, J. M. Thiel, and F. G. Wells, 1950-62

MAP SHOWING STRUCTURAL GEOLOGY AND DOLOMITIZED AREAS IN PART OF THE PICHER
ZINC-LEAD FIELD, OKLAHOMA AND KANSAS; NORTHWEST SHEET

500 0 500 1000 1500 2000 2500 FEET