UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER 588
PLATE 7

KANSAS
OKLAHOMA

R. 22 E.

R. 23 E.

T. 29 N.

Stanley

Whisk Broom

Gordon No. 2

Laura Jenny Zheka

Bird Dog 14

Pelican

Gordon No. 3

Mehunka Zheka Beaver

Gordon No. 4

Garrett

DEEP DRILL HOLE

Little Greenback

Flora Greenback

Tongaha

Kitty

Anna Beaver

Garrett

Tongaha

Velie-Lion

Wesa Greenback

Kitty

Velie-Lion

John Beaver

Crystal

Central

Cardin Townsite

Wesa Greenback

Harrisburg

DEEP DRILL HOLE

BEN DELARI MONOCLINE

MIAMI TROUGH

13

18

24

19

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. Brockie, H. M. Callaway, N. E. Eastmore, Jr., R. P. Fischer, P. K. Hurlbut, Andrew Kuklis, J. P. Lyden, E. T. McKnight, Curtis Templain, J. M. Thiel, and F. G. Wells, 1934–62

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1965—G67364

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

500 0 500 1000 1500 2000 2500 FEET

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 interbanded 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 chertification)

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 "chertified." 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. Drifts through part of core of the Gordon dolomite mass, shown on this plate, reveal a high proportion of "soap" and chert in M bed, practically to exclusion of gray spar dolomite. Though "soap" is universally distributed through the workings of the district, whether inside or outside of dolomite masses, areas of almost complete "chertification" in M bed are believed to be largely confined to dolomitized areas

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. Hachures indicate closed basin; only innermost contour in a continuous decreasing sequence is hachured. 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)

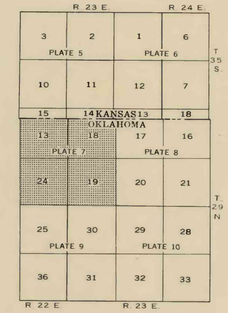
Workings in G and H beds (Moccasin Bend Member of Boone Formation)

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



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