

ECONOMIC GEOLOGY

STATE OF PENNSYLVANIA
TOPOGRAPHIC AND GEOLOGIC SURVEY COMMISSION
JOSEPH N. PEW, CHAIRMAN
(Patton)

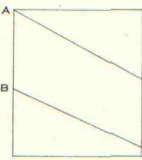
PENNSYLVANIA
EBENSBURG QUADRANGLE

U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

LEGEND

(continued)

Sections



* Coal mines
x Coal prospects

NAMES OF MINES.

Location indicated on the map by numbers.

1. Reed and Bradley.
2. Reed and Bradley.
3. Bennington No. 19.
4. Webster No. 11.
5. Taylor and McCoy.
6. Webster No. 10.
7. Webster No. 9.
8. Kokomo.
9. Sonman No. 4.
10. Lilly.
11. Piper.
12. Bear Rock.
13. Moshannon.
14. Metzger.
15. Webster No. 4.
16. Laughman.
17. Sonman Shaft.
18. Piper No. 1.
19. Webster No. 1.
20. Shoemaker.
21. Sonman Shaft.
22. Hopper.
23. Lukens and Haupt.
24. Toy Ridge.
25. Puritan.
26. Excelsior.
27. Pearce and Sons.
28. South Fork.
29. Winterson.
30. Cambria.
31. Plymouth.
32. N. Y. Coal and Transportation Co.
33. Eleanor.
34. Beaverdam.
35. Logan.
36. Beaverdam No. 15.
37. Wagner.
38. Alton.
39. Cambria.
40. Loyal Hanna.
41. Yellow Run Shaft.
42. Mountain Coal Co.
43. Dunlo Slope.
44. Henrietta No. 1.
45. Henrietta No. 2.



LEGEND

SEDIMENTARY ROCKS
(Areas of subaqueous deposits are shown by patterns of parallel lines; subaerial deposits by patterns of dots and circles)

- | | | |
|---------------|---|------------|
| Recent | Qal | QUATERNARY |
| | Alluvium
(in flood plains of present streams) | |
| | Cm | |
| | Monongahela formation
(shale and thin sandstone) | |
| | Cw | |
| | Ccm | |
| | Csh | |
| | Csb | |
| | Conemaugh formation with Saltsburg, Ebensburg, Summerhill, and Wilkes sandstone lentils
(principally gray sandy shale with sandstone beds; Cw, Csh, Ccm, and Csb respectively) | |
| Pennsylvanian | Ca | |
| | Allegheny formation
(chiefly gray and dark clay shale with beds of coarse gray sandstone, locally developed and several valuable coal beds; Upper Freeport coal at the top) | |
| | Cpv | |
| | Pottsville formation
(two beds of thick bedded sandstone, separated by shale bearing locally a thin coal bed) | |
| | Cmc | |
| Mississippian | Mauch Chunk formation
(coarse sandstone in upper part, gray heavy bedded sandstone in lower part) | |
| | Cpo | |
| | Pocomo formation
(principally gray sandy shale and coarse gray sandstone with several bands of red clay shale) | |
| | Dck | |
| | Catskill formation
(predominantly red shale and red sandstone with some beds of gray and green shale) | |
| | Dch | |
| | Chemung formation
(gray and green shale with sandstone layers in lower part; sandstone shale and sandstone in upper part; fossiliferous throughout) | |
| | Dn | |
| | Nunda formation
(thinly laminated, drab, clay shale at bottom, passing into gray sandy shale containing thin, gray and black sandy stone layers and a few bands of reddish rock; fossils rare) | |
| | Dg | |
| | Genesee shale
(soft black clay shale with limestone nodules, sparingly fossiliferous) | |
| | Dh | |
| | Hamilton formation
(mostly olive and dark green clay shale and sandy shale, with a few thin bands of gray sandstone; fossils abundant) | |
| | Economic and structural data | |
| | Coal
(area underlain by Allegheny formation which contains covered beds of coal of workable thickness) | |
| | Coal outcrops
(coal beds of probably workable thickness) | |
| | u, Upper Freeport coal
l, Lower Freeport coal | |
| | Structure contours
(showing the elevation above sea and the top of the Upper Freeport coal; contour interval is 50 feet up to 5000 feet; 100 feet above 5000 feet to 200 feet) | |

Legend is continued on the left margin.

H.M. Wilson, Geographer in charge.
Control by S.S. Gannett and H.B. Paige.
Topography by Frank Sutton, R.D. Cummin,
T. G. Basinger, and J.S.B. Daingerfield.
Surveyed in 1901-1902.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

APPROXIMATE MEAN DECLINATION 1902.

Scale 42500
1 2 3 4 5 Miles
1 2 3 4 5 Kilometers

Contour interval 20 feet.
Datum is mean sea level.

Edition of Dec. 1905

Geology by Charles Butts,
assisted by W.C. Phalen,
under the direction of Marius R. Campbell.
Surveyed in 1903.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

IMAPS#10435