DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY

| | ES | | | R | STRATIGRAP | HIC SECTION OF EXPOSED ROCKS DESCRIPTION |
|-------------------------|--|-----------------|--|--------------|--|---|
| SYSTEM | SERIE | GROUP | FORMATION | MEMBE | LITHOLOGY | (Coal grades from anthracite in the eastern part of the area semianthracite in western part of area.) |
| QUATER- NARY | | / | - | | ,°° | Alluvium: unconsolidated clay, sand, silt, gravel, and cobble Chiefly medium- to dark-gray sandstone, siltstone, shale, and coal. |
| | | | | | | and coal. Rabbit Hole (No. 20) coal bed. |
| | | | | | | Tunnel coal bed. Spahn or Peach Mountain (No. 18) coal bed. |
| | Ivanian | | | | | Little Tracy coal bed. Tracy (No. 16) coal bed. |
| | Upper Pennsylvanian | | _ | | | Little Diamond coal bed. Diamond coal bed. |
| | Jpper F | | Llewellyn | | 0000 | Little Orchard coal bed. |
| | and | | | | .0.00 | Orchard (No. 12) coal bed |
| NA | Middle | | | | 0 | Primrose coal bed. Rough coal bed. |
| PENNSYLVANIAN | | | | | 0.6 | Holmes (No. 10) coal bed. Four-foot coal bed. |
| | an | | | E. | 0.0,0.0 | Mammoth Top Split coal bed. Mammoth Middle Split coal bed. Mammoth Bottom Split (No. 8) coal bed. Skidmore coal bed. |
| | ennsylvanian | | | Mountain | 000 | Seven-foot coal bed. Buck Mountain (No. 5) coal bed. |
| | 0 | | | Sharp | 0,0,0,0,0 | Chiefly conglomerate and sandstone: massive, light- to medium gray, quartz-pebble conglomerate at base. |
| | Middle | | ille | Schuylkill | 0.00000 | Chiefly conglomerate and sandstone: light- to medium-gray, quart granule and pebble conglomerate; medium- to dark-gray con glomerate sandstone, sandstone, siltstone, and shale units ar |
| | er vanian | | Pottsville | Run Sch | 0 | common. Lykens Valley No. 4 (LV4) coal bed. |
| ANIAN | Lower | | | Tumbling Ru | 0000000 | Chiefly conglomerate, sandstone, and shale: medium-gray to olive gray quartz pebble and cobble conglomerate with cobbles a much as 5 inches in diameter; similarly colored sandstone, sill stone and shale units are common |
| PENNSYLVANIAN | p | | | Tun | 0:0:0.0:00 | stone, and shale units are common. |
| VD PEN | pper Mississippian an Lower Pennsylvanian | r Pennsylvaniar | | ber | 0.00.00.00 | Transitional sequence comprised of brownish-gray to grayish-re sandstone, siltstone, and shale characteristic of the underlyin Mauch Chunk Formation, alternating with medium-dark-gray |
| PPIAN MISSISSIPPIAN AND | Mississ r Penns | | | Upper | . 6.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2. | brownish-gray, and olive-gray conglomerate, sandstone, sill stone, and shale characteristic of the overlying Pottsville Formation. |
| | Upper I Lower | | | | 0:0:0:0 | |
| | | | | | | |
| | | | Chunk | | | Sandstone, siltstone, mudstone, and shale: thin- to medium bedded, very fine to medium grained, grayish-red and reddish brown sandstone interbedded with similarly colored siltstone. |
| | u | | Mauch | | | mudstone, and shale; in some mappable units sandstone prodominates, in others siltstone and shale predominate (see map very thin beds of green and grayish-green mudstone are commo throughout; commonly crosslaminated and crossbedded; mud |
| | Upper Mississippian | | | Middle | | cracks, ripple marks, and raindrop impressions locally aburdant. Mostly concealed in Brush Valley. |
| | r Missis | | | | 1,200 feet ± | |
| MISSISSIPPIAN | Uppe | | | | | |
| PPIAN | | | | Lower | | Sandstone, siltstone, and shale: one or more units of yellowish brown to olive-gray sandstone, siltstone, and shale rangin from 10 to 50 feet in thickness, separated by thicker units of |
| | | | | | | grayish-red to reddish-brown sandstone, siltstone, and shale. |
| | u | | | | | |
| | Mississippian | | Pocono | | 0.000 | Chiefly sandstone: thin- to medium-bedded, very light to medium |
| | er Miss | | Poc | | | dark gray, medium- to coarse-grained; interbedded wit similarly colored siltstone and shale. |
| | Lower | | | | 0.00 | Conglomerate: medium-bedded to massive, light-gray t yellowish-brown, quartz-pebble conglomerate. Unconformit |
| SISSIPP | and | | | pf | 0.00.0.0.0 | at base. Chiefly sandstone, siltstone, and shale: medium-gray, yellowish |
| AND MISSISSI | pper Devonian an ower Mississippia | | | Spechty Kopf | 0 0 | brown, and light-olive-gray sandstone, siltstone, and shale generally interbedded with grayish-red sandstone, siltstone and shale; basal part commonly yellowish-brown, quarta |
| | oper De | | | Sp | 0000000 | pebble conglomerate. |
| DEVONIAN | Lo | | | | 3,000 feet ± | |
| | | | | L | 3,000 reet 1 | Sandstone, siltstone, mudrock, and shale: thin- to medium |
| | | | | Buddys Run | | bedded, pale-brown to grayish-red, very fine to fine graine sandstone interbedded with similarly colored siltstone, muc rock, and shale; scattered units of dusky-yellow and ligh olive-gray sandstone, siltstone, and shale which range from |
| | | | Catskill | Bug | | 1 to 175 feet in thickness; sparse, poorly preserved fossil plan fragments. Middle and upper parts mostly concealed. |
| | | | | | ~~~ | |
| | | | | | | |
| | | Loup. | | | | |
| | | 75 | | rish Valley | | Sandstone, siltstone, and shale: thin- to medium-bedded, pale brown and grayish-red alternating with light-olive-gray greenish-gray, and yellowish-brown; red hues predominate in the proper part olive and gray buss in lower casts. |
| | onian | nna | | Iri | 1,300 feet ± | upper part, olive and gray hues in lower part; sparse plant an marine fossils. |
| | Upper Devonian | Susquehanna | | | | |
| | | S | 0) | | | |
| | Up | 4 13 | Sandstone | | | Chiefly sandstone, siltstone, and shale: sandstone, very thin t medium bedded, light-olive-gray, very fine to fine grained Siltstone and shale, very thin to thin bedded, dusky-yellow to the same state of arcillegous limesters when beds of arcillegous limesters were |
| | dn | | S | | 1 200 fort + | olive-gray. Sparse thin beds of argillaceous limestone; ever bedded, flaggy to blocky; abundant marine fossils; flute groove, and load casts. |
| | ΠD | | s Rock | | 1,200 feet ± | |
| /ONIAN | dn | | rimmers Rock | | | |
| DEVONIAN | dN . | | Trimmers Rock | | | |
| DEVONIAN | n | | Trimmers | | | Dark- to olive-gray shale alternating with thin hode of similar |
| DEVONIAN | n | | Brallier Trimmers Shale | | | colored sandstone. Upper 150 feet: upper shale member; chiefly medium- to dark gray, slightly calcareous shale. |
| DEVONIAN | n | | Trimmers | | | colored sandstone. Upper 150 feet: upper shale member; chiefly medium- to dark gray, slightly calcareous shale. |
| DEVONIAN | n | | Brallier Trimmers Shale | ale | | colored sandstone. Upper 150 feet: upper shale member; chiefly medium- to dark gray, slightly calcareous shale. Lower 100 feet: Burket Black Shale Member; grayish-black to |
| DEVONIAN | | | Brallier Trimmers Shale | shal | | colored sandstone. Upper 150 feet: upper shale member; chiefly medium- to dark gray, slightly calcareous shale. Lower 100 feet: Burket Black Shale Member; grayish-black to black shale, pyritic; scattered calcareous nodules. |
| DEVONIAN | | | Harrell Brallier Trimmers Shale Shale | Upper shale | | colored sandstone. Upper 150 feet: upper shale member; chiefly medium- to dark gray, slightly calcareous shale. Lower 100 feet: Burket Black Shale Member; grayish-black to black shale, pyritic; scattered calcareous nodules. Chiefly shale: medium-dark-gray to grayish-black, and olive gray; upper 30 feet highly calcareous with several thin beds of |
| DEVONIAN | | Hamilton | Harrell Brallier Trimmers Shale Shale | Upper shal | | Chiefly shale: medium-dark-gray to grayish-black, and olive gray; upper 30 feet highly calcareous with several thin beds cargillaceous limestone; interbedded silty shale and siltstone. |
| DEVONIAN | Middle Devonian Up | Hamilton | Brallier Trimmers Shale | Upper shal | | Chiefly shale: medium-dark-gray to grayish-black, and olive gray; upper 30 feet highly calcareous with several thin beds or argillaceous limestone; interbedded silty shale and siltston prevalent in middle and lower parts. Abundant marine fossils. |
| DEVONIAN | | Hamilton | Harrell Brallier Trimmers Shale Shale | shal | | Upper 150 feet: upper shale member; chiefly medium- to dark gray, slightly calcareous shale. Lower 100 feet: Burket Black Shale Member; grayish-black to black shale, pyritic; scattered calcareous nodules. Chiefly shale: medium-dark-gray to grayish-black, and olive gray; upper 30 feet highly calcareous with several thin beds of argillaceous limestone; interbedded silty shale and siltstone. |

Shouth half Shamokin