

TABLE 23.—*Geologic and commercial data for mines and deposits in Vermont*

Mines or deposits	Country rock	Form and size of talc bodies; depth of mining	Mineral composition; impurities	Physical and chemical properties	Kind of talc rock mined and milled	Commercial use	Production	Remarks
Johnson mine.....	Quartz-sericite-chlorite schist, minor serpentinite.	Lenses, steeply dipping, irregularly branching and folded, variable in size. Individual lenses as much as 1,000 ft by 600 ft by 180 ft. Mined 550 ft below collar of shaft.	Talc and carbonate; chlorite, magnetite, sulfides, serpentine, rarely tremolite.	Talc rock composed essentially of talc and minor chlorite; ranges in texture from schistose to massive and in color from medium to light gray.	Talc-carbonate rock and talc rock mined nonselectively and milled together. Several grades, based on color and fineness of grinding, are made.	Paper, rubber, textiles, roofing, paint, ceramics, cosmetics, insecticides, asphalt filler.	No data prior to 1924. 1924-49, 629,638 tons; 1949, 29,251 tons.	Talc-carbonate rock forms central core of the deposit; talc rock from 3 in. to 6 ft thick forms peripheral shell.
Waterbury mine.....	Quartz-sericite-chlorite schist, locally albitic; serpentinite.	Body containing talc consists of a nearly vertical pinching and swelling lens. At least 4,500 ft long and as much as 550 ft wide. Depth of mining 100 ft below collar of shaft. Deepest point 700 ft below surface.	Same as Johnson mine, but serpentine common. Proportion of talc in talc-carbonate rock is higher than at Johnson mine. Locally highly tremolitic.	Same as for Johnson mine. Composition of talc-carbonate rock more variable than at Johnson mine.	Talc-carbonate rock and talc rock. Talc rock suitable for crayons handpicked. Remaining material sorted into grades depending on proportion of serpentine and chlorite.	Same as Johnson mine, but also crayons.	No data prior to 1924. 1924-49, 377,174 tons (all grades), 1,500 tons crayons; 1949, 22,264 (all grades), 70 tons crayons.	Talc forms peripheral shell around serpentinite core, locally thicker at keel. Talc-carbonate rock zone 1-20 ft thick next to core. Talc rock 1-3 ft thick borders talc-carbonate rock.
Windham quarry.....	Quartz-sericite schist and greenstone; serpentinite.	Nearly vertical lens at least 700 ft long and 300 ft wide contains talc body. Quarried to depth of less than 100 ft. Could be mined deeper by underground methods.	Talc and carbonate; chlorite, serpentine, locally tremolite.	Talc-carbonate rock variable in composition and texture. Talc and carbonate roughly equal in proportion, but carbonate locally very high. Talc ranges from fine to coarsely flaky; carbonate from disseminated small grains to coarse clots. Talc-carbonate rock locally serpentinitous.	Chiefly talc-carbonate rock with minor talc rock. Milled together. Grades based chiefly on fineness, are made by various milling procedures.	Rubber, paper, insulation for wire and cable, foundry facings, insecticides.	No data prior to 1939. 1939-49, 30,153 tons; 1949, 5,231 tons.	Form of the body not accurately known but probably a thick shell as much as 150 ft thick around serpentinite core. Massive talc rock forms thin discontinuous zone at outer border of talc body.
Hammondsville quarry...	Quartz-sericite schist and greenstone; minor serpentinite.	Broadly arched moderately dipping lens 100 ft thick and at least 450 ft long; downdip extent unknown. Present depth of quarry less than 100 ft.	Talc and carbonate; chlorite, locally tremolite.	Talc rock composed essentially of talc and minor chlorite, highly schistose, medium to light gray. Talc-carbonate rock schistose and consists of coarse grains and clots in flaky talc matrix. Talc and talc-carbonate rock locally contain abundant chlorite and tremolite.	Chiefly coarse flaky talc-carbonate rock, talc rock subordinate. Both milled together. Several grades, based on coarseness and proportion of foliate particles, produced. Milling procedures aim at minimum of grinding.	Used nearly entirely in roofing.	No data available. Annual production probably about 5,000 tons.	Massive talc rock forms thin, possibly discontinuous, zone at outer part of talc body.
Barnes Hill prospect.....	Garnetiferous and biotitic quartz-sericite schist, locally albitic; amphibolite; serpentinite.	Deposits contained in very steeply dipping lens 1,600 ft long, 360 ft wide, and at least 350 ft deep (vertically). Talc occurs as irregular masses at border of and within parent rock body.	Talc and carbonate; serpentine, chlorite, magnetite, sulfides. Material similar to that of Johnson mine, but talc-carbonate rock commonly serpentinitous and proportion of carbonate somewhat higher.		Talc-carbonate rock and talc rock present in the deposit.		Undeveloped.....	Extent of talc deposit imperfectly known, but talc rock is subordinate to talc-carbonate rock.
Rousseau prospect.....	Quartz-muscovite schist, locally albitic; greenstone, locally serpentinite.	Moderately dipping lens 700 ft by 500 ft by 130 ft.	Talc and carbonate; chlorite, serpentine, magnetite, sulfides. Material about the same as that in the Johnson mine.		do.....		do.....	Extent of talc bodies imperfectly known, but massive talc rock probably forms border zone of variable thickness. Do.
Sterling Pond deposits....	Quartz-muscovite schist, locally albitic; greenstone; locally biotitic.	Several folded lenses with gentle to moderate dip. Of undetermined size, but probably average 1,000 ft long and as much as 100 ft thick. Locally small cores of serpentinite occur near center of the talc and talc-carbonate rock.	Talc and carbonate; chlorite, serpentine, magnetite, sulfides. Material generally similar to that at Johnson mine, but talc-carbonate rock locally serpentinitous.		do.....		do.....	
Other deposits.....	Numerous other talc deposits exist in the belt of ultramafic rocks in Vermont. They have essentially the same relations as those described above.						No data available, but total production probably exceeded 100,000 tons.	