

Table A-3. Hydrostratigraphic Units Near Savannah River Plant

Geologic unit	Geologic age	Outcrop	Description	Water yield	Thickness (m)
Alluvium ^a	Recent Epoch	River and creek bottoms	Fine-to-coarse sand, silt, and clay	Very little	0 to 9
Terrace deposits ^a	Pleistocene Epoch	In floodplains and terraces of stream valleys	Tan to gray sand, clay, silt, and gravel on higher terraces	Moderate to none	0 to 9
Upland Unit ^a	Post Eocene	Surface of Aiken Plateau	Gravel and sandy clay	Little or none	0 to 10
Hawthorn Formation ^a	Post Eocene	Large part of ground surface	Tan, red, and purple sandy clay with many "clastic dikes"	Little or none	0 to 10
Barnwell Formation ^a	Eocene Epoch	Large part of ground surface near streams	Red, brown, yellow, and buff fine-to-coarse sand and sandy clay	Limited but sufficient for domestic use	0 to 27
McBean and Congaree Formations ^a	Eocene Epoch	In banks of larger streams	Yellow-brown-to-green, fine-to-coarse glauconite-quartz sand, intercalated with green, red, yellow, and tan clay, sandy marl, and lenses of siliceous limestone	Moderate to large	30 to 76
Ellenton Formation ^a	Paleocene Epoch	None on SRP	Dark-gray-to-black sandy, lignitic, micaceous clay containing disseminated crystalline gypsum and coarse quartz sand	Moderate to large; higher sulfate and iron than water from other formations	1 to 30
Tuscaloosa ^a	Cretaceous Period	None on SRP	Tan, buff, red, and white cross-bedded, micaceous, quartzitic and arkosic sand and gravel imbedded with red, brown and purple clay and white kaolin	Large (well production up to 7.6 m ³ /min); soft (low in total solids)	170 to 250
Newark Series "red beds" ^b	Triassic/Jurassic Period	None on SRP	Dark-brown and brick-red sandstone, siltstone, and claystone containing gray calcareous patches; fanglomerates near border	Very little	>914
Basement rocks of Slate Belt and Charlotte Group ^c	Precambrian and Paleozoic Eras	None on SRP	Hornblende gneiss, chlorite-hornblende schist, and lesser amounts of quartzite; covered by saprolite layer derived from basement rock	Very little	Thousands

^aCoastal Plain sediments.^bDunbarton Basin sediments.^cCrystalline and metamorphic rock.

Note: Formation Terminology after Siple, 1967.