

Table 3.--Stratigraphy and water-bearing character of the marine sedimentary rocks of Tertiary age

Geologic unit	Lithologic character and thickness	Importance as a source of water
<p><u>Etchegoin Formation</u> named for exposure in vicinity of Etchegoin Ranch, 20 miles northeast of Coalinga, Calif. (Anderson, 1905). In the oilfields on the east side of the San Joaquin Valley the marine siltstone and claystone immediately overlying the Chanac Formation of Pliocene age is designated as the Etchegoin Formation.</p>	<p>Occurs only in the subsurface and consists of clayey micaceous siltstone and claystone with lenses of well-sorted fine silty to medium grained sand (Diepenbrock, 1933, p. 13). In the Jasmin Oilfield, southeast of Richgrove, Calif., the Etchegoin Formation is about 500 feet thick (Park and Weddle, 1959).</p>	<p>Claystone and siltstone are poorly permeable but lenses of well-sorted sand may contribute small amounts of water to wells.</p>
<p><u>Santa Margarita Formation</u> named for exposures at Santa Margarita, San Luis Obispo, Calif. In the oilfields of the east side of the San Joaquin Valley, marine sand immediately underlying Pliocene and Pleistocene continental deposits, are designated as the Santa Margarita Formation (Diepenbrock, 1933, p. 13).</p>	<p>Occurs only in the subsurface and consists of fairly well-sorted to well-sorted gray sand. In the Jasmin oilfield, southeast of Richgrove, it is 150 feet thick; the thickness ranges from 0 to 600 feet.</p>	<p>Extensively utilized in the Richgrove area.</p>
<p><u>Round Mountain Silt</u> of Diepenbrock (1933, p. 14-16).</p>	<p>Crops out only near Poso Creek. In Mount Poso oilfield it consists of 220 feet of gray and brown siltstone, including a 50-foot bed of diatomite 70 feet below top and 57 feet of gray silty sand 3 feet above base. The thickness ranges from 0 to 220 feet.</p>	<p>Poorly permeable and not used as a source of water.</p>
<p><u>Olcese Sand</u> of Diepenbrock (1933, p. 14).</p>	<p>Crops out only near Poso Creek. Mainly unconsolidated medium- to coarse-grained gray sand, contains occasional pebble and siltstone beds. In the Jasmin oilfield, southeast of Richgrove, the unit is approximately 650 feet thick (Kretsinger and Nelson, 1957, p. 6); it ranges from 0 to 650 feet in thickness.</p>	<p>Moderately permeable to permeable; potentially a source of water in the area east of Richgrove.</p>
<p><u>Freeman-Jewett Silt</u> of Albright and others (1957, p. 13).</p>	<p>Hard compact sandy siltstone and silty sand; ashy in upper portion. In Mount Poso oilfield the unit is approximately 1,100 feet thick; thickness ranges from 0 to 1,100 feet.</p>	<p>Probably not important as a potential source of water.</p>
<p><u>Pyramid Hill and Vedder Sands</u> of Albright and others (1957, p. 13)</p>	<p>Consists of upper sand, olive brown, very clayey; black pebbles at base. Lower sand, alternating fine-grained marine sand and nonmarine rough gritty sand and gravel. Combined thickness ranges from 0 to approximately 340 feet.</p>	<p>Little information available. At present is not used as a source of water, but may be a potential source for a limited area east of Richgrove.</p>