







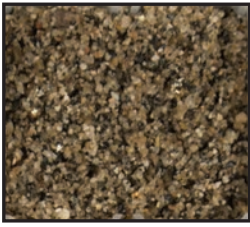

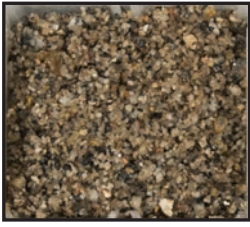





Depth (feet) and description	Depth (feet) and description	Depth (feet) and description	Depth (feet) and description
	<p>10: Sandy gravel (G); granules to very large pebbles, and medium to very coarse sand; very poorly sorted; angular to subangular; grayish brown (2.5Y 5/2); <i>trace mica; feldspathic; mafics (hornblende, biotite); minor rounded diorite clasts (10–12 mm); and trace low-grade gneiss clasts (<33 mm).</i></p>		<p>80: Gravelly clayey sand (gmS); very fine to very coarse sand with clay and granules to medium pebbles; very poorly sorted; angular to subangular; dark olive brown (2.5Y 3/3); <i>minor mica; minor mafics (hornblende, biotite); oxidized.</i></p>
	<p>20: Sandy silty clay (sM); clay with silt, and medium to very coarse sand; very poorly sorted; black (2.5Y 2.5/1); <i>micaceous (biotite).</i></p>		<p>90: Silty clay (M); clay and silt with minor fine to coarse sand, and trace granules to medium pebbles; very poorly sorted; olive brown (2.5Y 4/3); <i>minor mica; minor mafics (hornblende, biotite); oxidized.</i></p>
	<p>30: Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles and trace silt; very poorly sorted; angular to subangular; dark grayish brown (2.5Y 4/2); <i>micaceous; feldspathic; mafics (hornblende, biotite).</i></p>		<p>100: Silty clay (M); clay with silt, minor fine to coarse sand, and trace granules to small pebbles; very poorly sorted; olive brown (2.5Y 4/3); <i>minor mica; minor mafics (hornblende, biotite); trace rounded gneiss clasts (10 mm); oxidized.</i></p>
	<p>40: Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles; very poorly sorted; angular to subangular; dark grayish brown (2.5Y 4/2); <i>minor mica; feldspathic; mafics (hornblende, biotite).</i></p>		<p>110: Slightly gravelly sandy silty clay ((g)sM); clay with silt, very fine to very coarse sand, and trace granules to medium pebbles; very poorly sorted; olive brown (2.5Y 4/3); <i>trace mica; trace mafics (hornblende, biotite); oxidized.</i></p>
	<p>50: Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; very poorly sorted; angular to subangular; dark grayish brown (2.5Y 4/2); <i>minor mica; feldspathic; mafics (hornblende, biotite); trace olivine.</i></p>		<p>120: Sandy silty clay (sM); clay with silt, very fine to very coarse sand, and trace granules to medium pebbles; very poorly sorted; olive brown (2.5Y 4/3); <i>trace mica; trace mafics (hornblende, biotite); oxidized.</i></p>
	<p>60: Gravelly sand (gS); medium to very coarse sand with granules to small pebbles; very poorly sorted; very angular to angular; dark grayish brown (2.5Y 4/2); <i>minor mica; feldspathic; mafics (hornblende, biotite).</i></p>		<p>130: Gravelly silty sand (gmS); medium to very coarse sand with silt and granules to large pebbles; very poorly sorted; angular to subangular; dark grayish brown (2.5Y 4/2); <i>minor mica; feldspathic; mafics (hornblende, biotite); diorite.</i></p>
	<p>70: Gravelly clayey sand (gmS); medium to very coarse sand with clay and granules to medium pebbles; very poorly sorted; angular to subangular; very dark grayish brown (2.5Y 3/2); <i>trace mica; minor mafics (hornblende, biotite); trace granitic clasts (8–16 mm).</i></p>		<p>140: Gravelly sand (gS); medium to very coarse sand with granules to small pebbles and trace silt; very poorly sorted; angular to subangular; olive brown (2.5Y 4/3); <i>trace mica; feldspathic; mafics (hornblende, biotite); oxidized; heavily weathered diorite.</i></p>

Figure 17B. Lithologic descriptions and photographs of **shaker** drill cuttings collected from the borehole at 16 USGS multiple-depth, monitoring-well sites in San Diego County, California, 2003–2017: (A) SDCD; **(B) SDSY**; (C) SDLH; (D) SDAQ; (E) SDPC; (F) SDBP; (G) SDHF; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SLDL; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW.

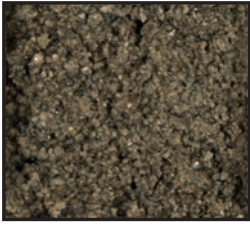
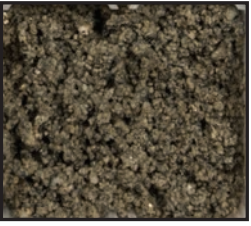
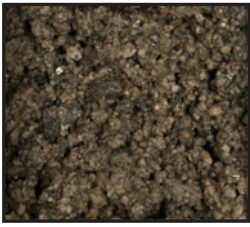
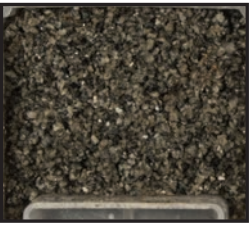
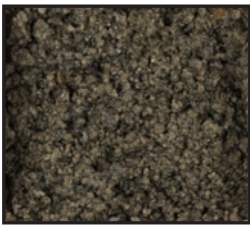
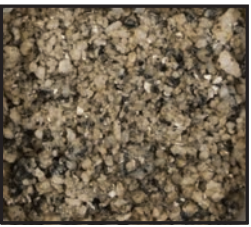
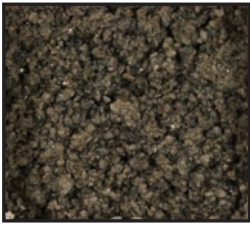
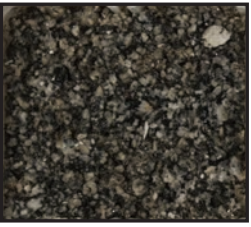
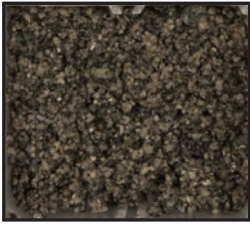
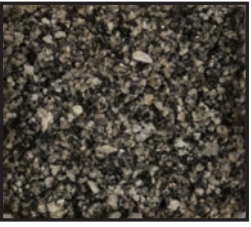
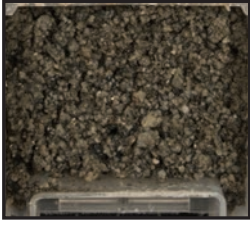

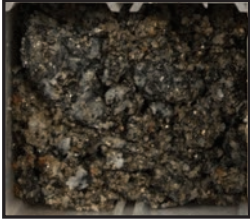
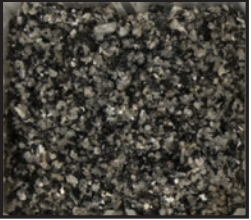
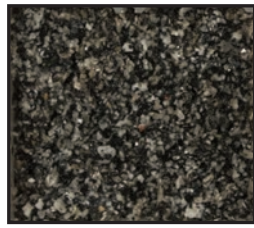
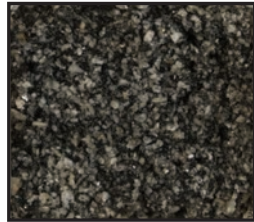
Depth (feet) and description	Depth (feet) and description	Depth (feet) and description	Depth (feet) and description
	<p>150: Gravelly silty sand (gmS); medium to very coarse sand with silt and granules to small pebbles; very poorly sorted; angular to subangular; olive gray (5Y 4/2); <i>micaceous; feldspathic; mafics (hornblende, biotite); minor oxidation; heavily weathered diorite.</i></p>		<p>210: Slightly gravelly sand ((g)S); medium to very coarse sand with granules and minor clay; poorly sorted; angular to subangular; dark gray (5Y 4/1); <i>micaceous; feldspathic; mafics (hornblende, biotite); weathered granodiorite.</i></p>
	<p>160: Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules to medium pebbles; very poorly sorted; angular to subangular; olive gray (5Y 4/2); <i>minor mica; feldspathic; mafics (hornblende, biotite); weakly oxidized; heavily weathered diorite.</i></p>		<p>220: Slightly gravelly sand ((g)S); medium to very coarse sand with granules and trace clay; poorly sorted; very angular to angular; dark gray (5Y 4/1); <i>micaceous; feldspathic; mafics (hornblende, biotite); weathered granodiorite.</i></p>
	<p>170: Slightly gravelly silty sand ((g)mS); medium to very coarse sand with silt and granules to large pebbles; very poorly sorted; angular to subangular; olive gray (5Y 4/2); <i>minor mica; feldspathic; mafics (hornblende, biotite); heavily weathered diorite.</i></p>		<p>230: Gravelly sand (gS); medium to very coarse sand with granules to medium pebbles; very poorly sorted; angular to subangular; grayish brown (2.5Y 5/2); <i>minor mica; feldspathic; minor mafics (hornblende, biotite); weathered granite; dike.</i></p>
	<p>180: Gravelly sand (gS); medium to very coarse sand with granules to small pebbles; very poorly sorted; angular to subangular; olive gray (5Y 4/2); <i>minor mica; feldspathic; mafics (hornblende, biotite); heavily weathered diorite.</i></p>		<p>240: Slightly gravelly sand ((g)S); medium to very coarse sand with granules to small pebbles; poorly sorted; very angular to angular; salt and pepper; <i>micaceous; feldspathic; mafics (hornblende, biotite); granodiorite.</i></p>
	<p>190: Sand (S); medium to very coarse sand with trace granules to small pebbles; well to moderately sorted; angular to subangular; olive gray (5Y 4/2); <i>trace mica; feldspathic; mafics (hornblende, biotite); weathered granodiorite.</i></p>		<p>250: Slightly gravelly sand ((g)S); medium to very coarse sand with granules; poorly sorted; very angular to angular; salt and pepper; <i>micaceous; feldspathic; mafics (hornblende, biotite); granodiorite.</i></p>
	<p>200: Slightly gravelly sand ((g)S); medium to very coarse sand with granules to small pebbles; poorly sorted; angular to subangular; olive gray (5Y 4/2); <i>micaceous; feldspathic; mafics (hornblende, biotite); weathered granodiorite.</i></p>		<p>260: Slightly gravelly sand ((g)S); medium to very coarse sand with granules to small pebbles; poorly sorted; very angular to angular; salt and pepper; <i>micaceous; feldspathic; mafics (hornblende, biotite); granodiorite.</i></p>
	<p>200: Medium to coarse-crystalline hypidiomorphic biotite hornblende granodiorite; salt and pepper; <i>micaceous; oxidized; friable; weathered granodiorite; core 1.</i></p>		<p>270: Slightly gravelly sand ((g)S); medium to very coarse sand with granules to small pebbles; poorly sorted; very angular to angular; salt and pepper; <i>micaceous; feldspathic; mafics (hornblende, biotite); granodiorite.</i></p>

Figure 17B. Lithologic descriptions and photographs of **shaker** drill cuttings collected from the borehole at 16 USGS multiple-depth, monitoring-well sites in San Diego County, California, 2003–2017: (A) SDCD; (B) **SDSY**; (C) SDLH; (D) SDAQ; (E) SDPC; (F) SDBP; (G) SDHF; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SLDL; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.

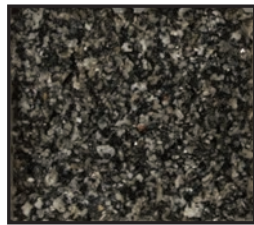
Depth (feet) and description



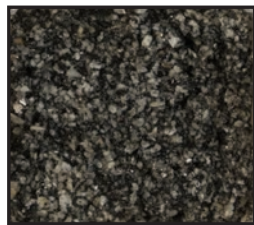
280: Slightly gravelly sand ((g)S); medium to very coarse sand with granules to small pebbles; poorly sorted; very angular to angular; salt and pepper; *micaceous; feldspathic; mafics (hornblende, biotite); diorite.*



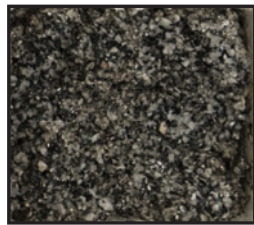
290: Slightly gravelly sand ((g)S); medium to very coarse sand with granules; poorly sorted; very angular to angular; salt and pepper; *micaceous; feldspathic; mafics (hornblende, biotite); diorite.*



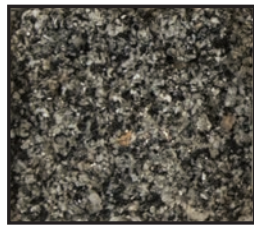
300: Slightly gravelly sand ((g)S); medium to very coarse sand with granules; poorly sorted; very angular to angular; salt and pepper; *micaceous; feldspathic; mafics (hornblende, biotite); diorite.*



310: Slightly gravelly sand ((g)S); medium to very coarse sand with granules to small pebbles; poorly sorted; very angular to angular; salt and pepper; *micaceous; feldspathic; mafics (hornblende, biotite); diorite.*



320: Slightly gravelly sand ((g)S); medium to very coarse sand with granules to small pebbles; poorly sorted; very angular to angular; salt and pepper; *micaceous; feldspathic; mafics (hornblende, biotite); diorite.*

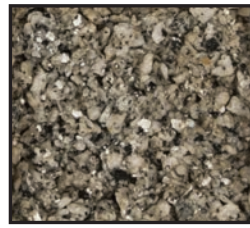


330: Slightly gravelly sand ((g)S); medium to very coarse sand with granules; poorly sorted; very angular to angular; salt and pepper; *micaceous; feldspathic; mafics (hornblende, biotite); diorite.*

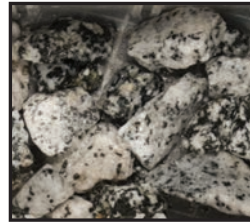


340: Slightly gravelly sand ((g)S); fine to very coarse sand with granules; poorly sorted; angular to subangular; olive gray (5Y 5/2); *minor mica; feldspathic; minor mafics (hornblende, biotite); granite; dike.*

Depth (feet) and description



350: Sandy gravel (sG); granules to small pebbles with medium to very coarse sand; very poorly sorted; angular to subangular; olive gray (5Y 5/2); *feldspathic; minor mafics (hornblende, biotite); granite; dike.*



355: Weakly foliated fine-crystalline xenomorphic-hypidiomorphic leucocratic biotite hornblende granite intruding a coarse-crystalline hypidiomorphic biotite hornblende diorite; salt and pepper; *trace limonite; fractured; core 2.*



355: *Solid rock; core 2.*

Figure 17B. Lithologic descriptions and photographs of **shaker** drill cuttings collected from the borehole at 16 USGS multiple-depth, monitoring-well sites in San Diego County, California, 2003–2017: (A) SDCD; **(B) SDSY**; (C) SDLH; (D) SDAQ; (E) SDPC; (F) SDBP; (G) SDHF; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SLDL; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.