

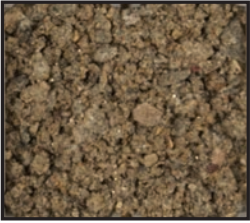
Depth (feet) and description	Depth (feet) and description
 <p>10: Gravel (G); granules to very large pebbles with minor medium to very coarse sand; very poorly sorted; very angular to subrounded; various colors; <i>rhyolite and felsic clasts; artificial fill</i>.</p>	 <p>60: Gravelly sand (gS); medium to very coarse sand with granules to small pebbles; poorly to moderately sorted; angular to subrounded; light yellowish brown (2.5Y 6/4).</p>
 <p>20: Sandy gravel (sG); granules to medium pebbles with very fine to very coarse sand and trace clay; very poorly sorted; very angular to subrounded; light olive brown (2.5Y 5/4).</p>	 <p>70: Gravelly sand (gS); medium to very coarse sand with granules to small pebbles; poorly to moderately sorted; angular to subrounded; light yellowish brown (2.5Y 6/3); <i>calcareous</i>.</p>
 <p>30: Sand (S); medium to very coarse sand with trace granules; well sorted; angular to subangular; light yellowish brown (2.5Y 6/3).</p>	 <p>80: Sandy gravel (sG); granules to medium pebbles with medium to very coarse sand and minor clay; poorly to moderately sorted; angular to subrounded; light yellowish brown (2.5Y 6/3); <i>calcareous</i>.</p>
 <p>40: Gravelly sand (gS); fine to very coarse sand with granules to medium pebbles; very poorly sorted; very angular to subrounded; light yellowish brown (2.5Y 6/3).</p>	 <p>90: Gravelly sand (gS); very fine to very coarse sand with granules to small pebbles; very poorly to poorly sorted; subangular to subrounded; light yellowish brown (2.5Y 6/4); <i>calcareous; minor mica</i>.</p>
 <p>42.5: Sandy gravelly silt (gM); silt with granules to medium pebbles, very fine sand, and trace very coarse sand; very poorly sorted; olive (5Y 5/3); <i>core 1</i>.</p>	 <p>100: Gravelly sand (gS); fine to very coarse sand with granules to small pebbles and trace clay; very poorly to poorly sorted; very angular to subangular; light yellowish brown (2.5Y 6/4); <i>calcareous</i>.</p>
 <p>45: Gravelly silty clayey sand (gmS); fine to very coarse sand with clay, silt, and granules to medium pebbles; very poorly sorted; subrounded to rounded; olive brown (2.5Y 4/3); <i>calcareous; core 2</i>.</p>	 <p>110: Clayey sandy gravel (msG); granules to small pebbles with very fine to very coarse sand and clay; very poorly sorted; angular to subrounded; light yellowish brown (2.5Y 6/4); <i>calcareous; heavily abraded shell fragments (2–5 mm)</i>.</p>
 <p>50: Gravelly sand (gS); very fine to very coarse sand with granules to medium pebbles; very poorly sorted; subangular to rounded; light yellowish brown (2.5Y 6/3); <i>core 3</i>.</p>	 <p>120: Clayey sandy gravel (msG); granules to medium pebbles with very fine to very coarse sand and clay; very poorly sorted; subangular to rounded; olive (5Y 5/3); <i>calcareous; abundant moderately to heavily abraded shell fragments (<8 mm)</i>.</p>

Figure 17G. 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) SDGP; (F) SDBP; (**G**) **SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW.

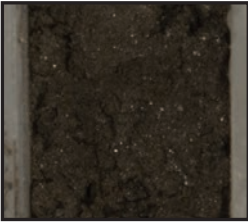
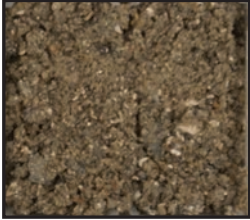
Depth (feet) and description	Depth (feet) and description
 <p>130: Silty sandy gravel (msG); granules to medium pebbles with very fine to coarse sand and silt; very poorly sorted; angular to subrounded; olive (5Y 5/3); <i>calcareous</i>; <i>minor moderately abraded shell fragments (<6 mm)</i>.</p>	 <p>190: Silt (Z); silt with minor clay; very well sorted; very dark gray (5Y 3/1); <i>slightly calcareous</i>; <i>trace shell fragments (<2 mm)</i>; <i>core 5</i>.</p>
 <p>140: Clayey gravelly sand (gmS); very fine to very coarse sand with granules to medium pebbles and clay; very poorly sorted; subangular to subrounded; olive (5Y 5/3); <i>calcareous</i>; <i>abundant moderately to heavily abraded shell fragments (2–9 mm) with trace boreholes</i>; <i>trace solitary coral (<6 mm)</i>.</p>	 <p>200: Gravelly sand (gS); medium to very coarse sand with granules to large pebbles; very poorly sorted; angular to subrounded; olive (5Y 4/3); <i>calcareous</i>; <i>shell fragments (<12 mm)</i>.</p>
 <p>150: Sandy gravel (sG); granules to medium pebbles with coarse to very coarse sand; poorly to moderately sorted; subangular to rounded; light olive brown (2.5Y 5/4); <i>calcareous</i>; <i>abundant unabraded to abraded shell fragments (<19 mm)</i>.</p>	 <p>210: Gravelly sand (gS); medium to very coarse sand with granules to large pebbles; very poorly sorted; angular to subrounded; olive (5Y 4/3); <i>calcareous</i>; <i>shell fragments (<3 mm)</i>.</p>
 <p>160: Sandy gravel (sG); granules to large pebbles with very fine to very coarse sand and minor clay; very poorly sorted; subangular to rounded; olive gray (5Y 4/2); <i>calcareous</i>; <i>abundant unabraded to abraded shell fragments (<16 mm)</i>.</p>	 <p>220: Slightly gravelly sandy clay ((g)sM); clay with very fine to coarse sand and granules to small pebbles; very poorly sorted; very dark gray (5Y 3/1); <i>very calcareous</i>; <i>whole shells and shell fragments (<5 mm) (gastropods, bivalves)</i>.</p>
 <p>170: Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules to medium pebbles; very poorly sorted; subrounded; olive gray (5Y 5/2); <i>calcareous</i>; <i>minor shell fragments (2–17 mm)</i>.</p>	 <p>230: Slightly gravelly sand ((g)S); fine to very coarse sand with granules to medium pebbles; poorly sorted; angular to subrounded; olive gray (5Y 4/2); <i>calcareous</i>; <i>gastropod, scallops, and other bivalve shell fragments (<9 mm)</i>.</p>
 <p>180: Gravelly sand (gS); very fine to very coarse sand with granules to medium pebbles and minor clay; very poorly sorted; subangular to rounded; olive gray (5Y 4/2); <i>calcareous</i>; <i>shell fragments (<11 mm)</i>.</p>	 <p>240: Silty bivalve coquina; bivalve coquina with silt and minor fine to coarse sand matrix; very poorly sorted; very angular to subrounded; olive gray (5Y 4/2); <i>very calcareous</i>; <i>minor mica</i>; <i>abundant shell fragments (<14 mm) (clams, oysters, scallops, minor gastropods, trace echinoderm spines)</i>; <i>trace wood fragments (<8 mm)</i>.</p>
 <p>185: Silty sand (zS); very fine to fine sand with silt; well sorted; angular to subrounded; dark gray (5Y 4/1); <i>calcareous</i>; <i>core 4</i>.</p>	 <p>250: Silt (Z); silt with trace granules to medium pebbles; very well sorted; dark gray (5Y 4/1); <i>very calcareous</i>; <i>abundant bivalves, gastropods, and echinoderm shell fragments (<12 mm)</i>.</p>

Figure 17G. 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) SDGP; (F) SDBP; (G) **SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.

Depth (feet) and description	Depth (feet) and description
 <p>260: Silt (Z); silt with minor very fine sand; well to very well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant weakly to moderately abraded whole shells and shell fragments (bivalves and gastropods) (<10 mm).</i></p>	 <p>330: Silt (S); silt; very well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant shell fragments (<11 mm).</i></p>
 <p>270: Clayey silt (M); silt with clay; well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant unabraded to moderately abraded bivalve (clams, oysters, scallops) shell fragments (<16 mm); moderately indurated.</i></p>	 <p>340: Silt (Z); silt with minor very fine to coarse sand; moderately to well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant shell fragments (<10 mm); very well indurated.</i></p>
 <p>280: Silt (Z); silt with trace granules to medium pebbles; very well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant gastropod and bivalve shell fragments (<12 mm).</i></p>	 <p>350: Clayey bivalve coquina; coquina with clay matrix; very poorly sorted; very angular to rounded and moderately to heavily abraded shell fragments; dark gray (5Y 4/1); <i>very calcareous; abundant bivalve fragments (<8 mm) with trace echinoderm spines (1–2 mm).</i></p>
 <p>290: Silt (Z); silt with trace granules to medium pebbles; very well sorted; olive gray (5Y 4/2); <i>very calcareous; abundant shell fragments (<10 mm).</i></p>	 <p>360: Silt (Z); silt; very well sorted; dark gray (5Y 4/1); <i>calcareous; abundant shell fragments (<13 mm); very well indurated.</i></p>
 <p>300: Silt (Z); silt; very well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant shell fragments (<16 mm); very well indurated.</i></p>	 <p>370: Sand (S); very fine to very coarse sand with trace granules to medium pebbles; poorly to moderately sorted; subrounded; olive gray (5Y 4/2); <i>calcareous; trace mica; minor shell fragments (<8 mm).</i></p>
 <p>310: Silt (Z); silt; very well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant gastropod and bivalve shell fragments (<6 mm); very well indurated.</i></p>	 <p>380: Sand (S); very fine sand with coarse sand and trace granules to medium pebbles; poorly to moderately sorted; subrounded to rounded; olive gray (5Y 4/2); <i>calcareous; minor shell fragments (<4 mm); trace very well indurated calcareous shell-bearing siltstone clasts.</i></p>
 <p>320: Silt (Z); silt; very well sorted; dark gray (5Y 4/1); <i>very calcareous; abundant shell fragments (<15 mm); very well indurated.</i></p>	 <p>390: Sandy clayey silt (sM); silt with clay and very fine to coarse sand; very poorly sorted; olive gray (5Y 4/2); <i>calcareous; abundant abraded shell fragments (<23 mm); very well indurated.</i></p>

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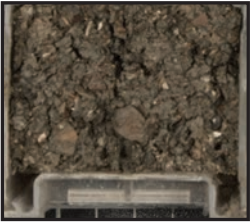


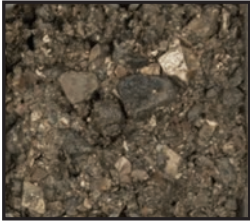








Depth (feet) and description	Depth (feet) and description
 <p>400: Sandy silty clay (sM); clay and silt with very fine to very coarse sand; very poorly sorted; dark gray (5Y 4/1); <i>calcareous</i>; <i>abundant shell fragments</i> (<8 mm); <i>very well indurated</i>.</p>	 <p>470: Clayey silt (M); silt with clay; well sorted; olive gray (5Y 4/2); <i>calcareous</i>; <i>abundant shell fragments</i> (<11 mm).</p>
 <p>410: Sandy silt (sZ); silt with very fine to coarse sand; poorly to moderately sorted; subangular to rounded; dark gray (5Y 4/1); <i>calcareous</i>; <i>abundant shell fragments</i> (<6 mm); <i>very well indurated</i>.</p>	 <p>480: Gravelly clayey silt (gM); silt with clay and granules to medium pebbles; very poorly sorted; angular to subrounded; olive gray (5Y 4/2); <i>calcareous</i>; <i>abundant gastropod and bivalve shell fragments</i> (<12 mm).</p>
 <p>420: Sandy silt (sZ); silt with very fine to coarse sand; poorly to moderately sorted; subangular to subrounded; dark gray (5Y 4/1); <i>calcareous</i>; <i>abundant shell fragments</i> (<12 mm); <i>very well indurated</i>.</p>	 <p>483: Silt (Z); silt with trace coarse sand; very well sorted; dark olive gray (5Y 3/2); <i>calcareous</i>; <i>shell fragments</i> (<1 mm); <i>core 6</i>.</p>
 <p>430: Sandy clayey silt (sM); silt with clay and very fine to coarse sand; poorly sorted; subangular to rounded; olive gray (5Y 4/2); <i>calcareous</i>; <i>abundant shell fragments</i> (<14 mm).</p>	 <p>488: Silt (Z); silt; very well sorted; dark gray (5Y 4/1); <i>calcareous</i>; <i>micaceous</i>; <i>minor shell fragments</i> (<2 mm); <i>core 7</i>.</p>
 <p>440: Silty bivalve coquina; 1–10 mm fragmented shells with silt matrix and minor granules to medium pebbles; very poorly sorted; olive gray (5Y 4/2).</p>	 <p>500: Clayey silt (M); silt with clay, minor fine to coarse sand, and trace granules to large pebbles; moderately sorted; olive gray (5Y 4/2); <i>calcareous</i>; <i>abundant gastropod and bivalve fragments</i> (<6 mm).</p>
 <p>450: Silty bivalve coquina; 1–6 mm whole and fragmented bivalve and gastropod shells with silt matrix; olive (5Y 4/3); <i>calcareous</i>.</p>	 <p>510: Silt (Z); silt with trace coarse to very coarse sand, and granules to medium pebbles; very well sorted; dark olive gray (5Y 3/2); <i>calcareous</i>; <i>shell fragments</i> (<3 mm).</p>
 <p>460: Silty bivalve coquina; 1–15 mm fragmented bivalve shells with silt matrix and trace granules to small pebbles; olive (5Y 4/3); <i>calcareous</i>.</p>	 <p>520: Silt (Z); silt; very well sorted; dark olive gray (5Y 3/2); <i>calcareous</i>; <i>whole gastropod and bivalve fragments</i> (<14 mm).</p>

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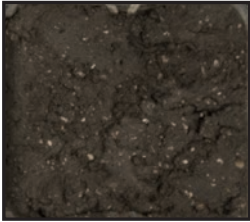
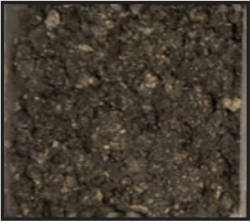

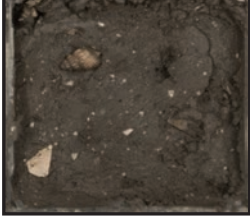
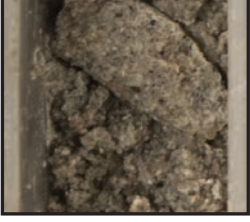




Depth (feet) and description	Depth (feet) and description
 <p>530: Clayey silt (M); silt with clay; well sorted; black (5Y 2.5/1); <i>calcareous</i>; <i>abundant whole gastropod and bivalve fragments (<6 mm)</i>.</p>	 <p>600: Silty clay (M); clay with silt and trace granules to medium pebbles; well sorted; very dark gray (5Y 3/1); <i>calcareous</i>; <i>shell fragments (<3 mm)</i>.</p>
 <p>540: Clayey silt (M); silt with clay; well sorted; black (5Y 2.5/1); <i>calcareous</i>; <i>abundant gastropod and bivalve fragments (<5 mm)</i>.</p>	 <p>610: Silty sand (zS); very fine to very coarse sand with silt; moderately sorted; subangular to rounded; dark gray (5Y 4/1); <i>calcareous</i>; <i>abundant shell fragments (<4 mm)</i>.</p>
 <p>550: Silt (Z); silt; very well sorted; black (5Y 2.5/2); <i>calcareous</i>; <i>abundant shell fragments (<3 mm)</i>.</p>	 <p>620: Clayey sand (cS); fine to very coarse sand with clay and trace granules; very poorly sorted; subangular to rounded; greenish gray (10Y 5/1); <i>calcareous</i>; <i>trace shell fragments (<4 mm)</i>.</p>
 <p>560: Silt (Z); silt; very well sorted; black (5Y 2.5/2); <i>calcareous</i>; <i>abundant whole gastropod and bivalve fragments (<10 mm)</i>.</p>	 <p>623: Quartz arenite; medium to very coarse sand with minor clay; moderately sorted; subrounded; greenish gray (10Y 6/1); <i>calcareously cemented</i>; <i>minor biotite</i>; <i>very well indurated</i>; <i>core 8</i>.</p>
 <p>570: Silt (Z); silt; very well sorted; black (10Y 2.5/1); <i>calcareous</i>; <i>abundant shell fragments with trace whole gastropods (<14 mm)</i>.</p>	 <p>623.5: Quartz arenite; medium to very coarse sand with minor clay; moderately sorted; subrounded; greenish gray (10Y 6/1); <i>calcareously cemented</i>; <i>minor biotite</i>; <i>very well indurated</i>; <i>core 9</i>.</p>
 <p>580: Silt (Z); silt with trace granules to medium pebbles; very well sorted; black (10Y 2.5/1); <i>calcareous</i>; <i>abundant shell fragments (<8 mm)</i>.</p>	 <p>630: Clayey sand (cS); fine to very coarse sand with clay; very poorly sorted; subrounded to rounded; olive gray (5Y 5/2); <i>calcareous</i>.</p>
 <p>590: Clayey silt (M); silt with clay and trace granules to large pebbles; well sorted; very dark gray (5Y 3/1); <i>calcareous</i>; <i>abundant gastropod and bivalve (scallops) shell fragments (<12 mm)</i>.</p>	 <p>640: Sandy clay (sC); clay with fine to coarse sand and trace granules; very poorly to poorly sorted; gray (5Y 5/1); <i>calcareous</i>.</p>

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Depth (feet) and description	Depth (feet) and description
 <p>650: Clayey sand (cS); fine to coarse sand with clay and trace granules; very poorly to poorly sorted; subrounded to rounded; grayish brown (2.5Y 5/2); <i>slightly calcareous</i>.</p>	 <p>700: Gravelly clayey sand (gmS); very fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subrounded to rounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>
 <p>658: Slightly gravelly sandy clay ((g)sM); clay with fine to very coarse sand and granules to small pebbles; very poorly sorted; light brownish gray (10YR 6/2); <i>calcareous</i>.</p>	 <p>710: Clay (C); clay with trace coarse sand; very well sorted; light yellowish brown (2.5Y 6/3); <i>calcareous</i>.</p>
 <p>663: Sandy clay (sC); clay with fine to coarse sand; very poorly to poorly sorted; light brownish gray (10YR 5/3); <i>core 10</i>.</p>	 <p>720: Clay (C); clay with trace medium to coarse sand; very well sorted; light brownish gray (2.5Y 6/2); <i>calcareous</i>.</p>
 <p>668: Clay (C); clay with minor fine to very coarse sand; poorly to well sorted; brown (10YR 5/3); <i>core 11</i>.</p>	 <p>730: Slightly gravelly sandy clay ((g)sM); clay with fine to very coarse sand, and granules to small pebbles; very poorly sorted; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>
 <p>673: Clay (C); clay with minor fine to very coarse sand; poorly to well sorted; brown (10YR 5/3); <i>core 12</i>.</p>	 <p>740: Slightly gravelly sandy clay ((g)sM); clay with fine to very coarse sand, and granules to small pebbles; very poorly sorted; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>
 <p>680: Clayey sand (cS); very fine to coarse sand and clay; very poorly sorted; rounded; light olive brown (2.5Y 5/3); <i>slightly calcareous</i>.</p>	 <p>750: Sand (S); medium to very coarse sand with minor clay; moderately to well sorted; subangular to subrounded; grayish brown (2.5Y 5/2); <i>slightly calcareous</i>.</p>
 <p>690: Gravelly clayey sand (gmS); very fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subrounded to rounded; grayish brown (2.5Y 5/2); <i>slightly calcareous</i>.</p>	 <p>760: Clayey sand (cS); coarse to very coarse sand with clay and trace granules to small pebbles; very poorly sorted; rounded; light brownish gray (2.5Y 6/2); <i>calcareous</i>.</p>

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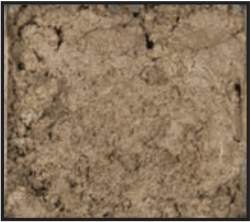

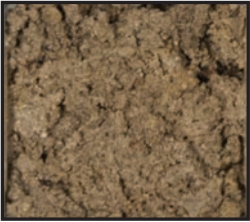
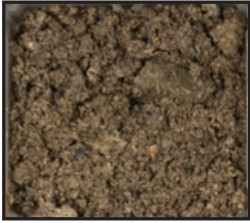







Depth (feet) and description	Depth (feet) and description
 <p>770: Clayey sandy gravel (msG); granules to large pebbles with medium to very coarse sand and clay; very poorly sorted; very angular to rounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>840: Clayey sand (cS); fine to very coarse sand with clay and trace granules; very poorly sorted; subangular to rounded; light brownish gray (2.5Y 6/2); <i>calcareous</i>.</p>
 <p>780: Gravel (G); granules to large pebbles with minor medium to very coarse sand; very poorly to moderately sorted; very angular to subrounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>850: Clayey sand (cS); fine to very coarse sand with clay, and trace granules to small pebbles; very poorly sorted; subangular to rounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>790: Clayey sandy gravel (msG); granules to large pebbles with medium to very coarse sand and clay; very poorly sorted; very angular to rounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>	 <p>860: Clayey sand (cS); fine to very coarse sand with clay, and trace granules to medium pebbles; very poorly sorted; subangular to rounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>800: Clayey sand (cS); fine to very coarse sand with clay and trace granules to small pebbles; very poorly sorted; subangular to rounded; light brownish gray (2.5Y 6/2); <i>calcareous</i>.</p>	 <p>865: Silt (Z); silt; very well sorted; light brownish gray (2.5Y 6/2); <i>calcareous</i>; core 13.</p>
 <p>810: Slightly gravelly sandy clay ((g)sM); clay with fine to very coarse sand, and granules to large pebbles; very poorly sorted; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>	 <p>870 14C Shoe: Silt (Z); silt; very well sorted; light brownish gray (2.5Y 6/2); core 14.</p>
 <p>820: Clayey sand (cS); fine to very coarse sand with clay, and trace granules to medium pebbles; very poorly sorted; subangular to rounded; grayish brown (10YR 5/2); <i>calcareous</i>.</p>	 <p>880: Silty clayey gravel (mG); granules to large pebbles with clay, silt, and minor very fine to medium sand; very poorly sorted; subrounded to rounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>830: Clayey sand (cS); fine to very coarse sand with clay; very poorly sorted; subangular to rounded; light gray (10YR 7/2); <i>calcareous</i>.</p>	 <p>890: Gravelly clay (gM); clay with granules to medium pebbles; very poorly sorted; grayish brown (10YR 5/2); <i>calcareous</i>; minor charcoal (<2 mm).</p>

Figure 17G. 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) SDGD; (B) SDSY; (C) SDLH; (D) SDAQ; (E) SDGP; (F) SDBP; **(G) SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.

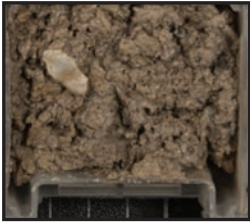
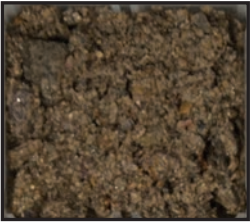
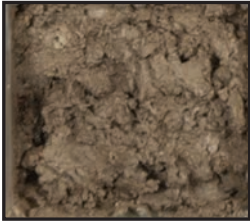
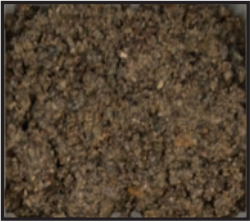

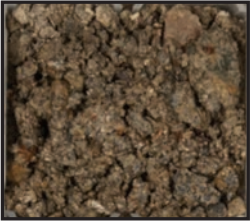






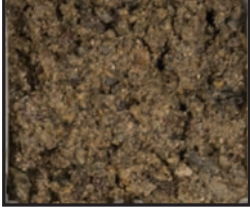
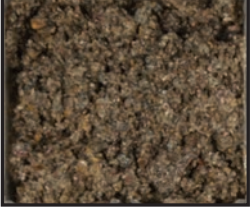
Depth (feet) and description	Depth (feet) and description
 <p>900: Silty clayey sandy gravel (msG); granules to medium pebbles with very fine to medium sand, clay, and silt; very poorly sorted; subangular to very well rounded; grayish brown (2.5Y 5/2); <i>calcareous</i>; <i>minor charcoal</i> (<2 mm).</p>	 <p>970: Sandy gravel (sG); granules to large pebbles with fine to very coarse sand; very poorly sorted; angular to rounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>910: Slightly gravelly clayey silt ((g)M); silt with clay and granules to small pebbles; very poorly to moderately sorted; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>980: Gravel (G); granules to large pebbles with minor medium to very coarse sand; poorly to moderately sorted; angular to subangular; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>920: Slightly gravelly clayey sandy silt ((g)sM); silt with fine to very coarse sand, clay, and granules; very poorly sorted; grayish brown (2.5Y 5/2); <i>calcareous</i>; <i>trace charcoal</i> (<2 mm).</p>	 <p>990: Gravel (G); granules to large pebbles with minor medium to very coarse sand; poorly to moderately sorted; angular to subangular; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>
 <p>930: Sandy clayey silt (sM); silt with clay and very fine to medium sand; moderately sorted; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>1,000: Sandy gravel (sG); granules to medium pebbles with fine to very coarse sand; very poorly sorted; very angular to subrounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>940: Slightly gravelly clayey silt ((g)M); silt with clay and granules; very poorly sorted; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>1,010: Sandy gravel (sG); granules to small pebbles with fine to very coarse sand; very poorly sorted; subangular to rounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>950: Slightly gravelly sand ((g)S); fine to coarse sand with granules to small pebbles and trace clay; poorly sorted; subangular to rounded; light olive brown (2.5Y 5/3); <i>minor biotite</i>.</p>	 <p>1,020: Sandy gravel (sG); granules to medium pebbles with fine to very coarse sand; very poorly sorted; very angular to subrounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>
 <p>960: Gravelly sand (gS); fine to very coarse sand with granules to medium pebbles; very poorly sorted; angular to rounded; light olive brown (2.5Y 5/3); <i>slightly calcareous</i>; <i>minor biotite</i>.</p>	 <p>1,030: Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; very poorly sorted; angular to subrounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>

Figure 17G. 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) SDGD; (B) SDSY; (C) SDLH; (D) SDAQ; (E) SDGP; (F) SDBP; **(G) SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.

Depth (feet) and description	Depth (feet) and description
 <p>1,040: Sandy gravel (sG); granules to medium pebbles with medium to very coarse sand; poorly to moderately sorted; angular to subrounded; olive gray (5Y 5/2); <i>calcareous</i>.</p>	 <p>1,110: Clayey sandy gravel (msG); granules to small pebbles with fine to very coarse sand and clay; very poorly sorted; subangular to rounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>
 <p>1,050: Gravel (G); granules to medium pebbles with minor medium to very coarse sand; moderately sorted; angular to subrounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>	 <p>1,120: Sandy gravel (sG); granules to large pebbles with fine to very coarse sand and minor clay; very poorly sorted; subangular to rounded; grayish brown (2.5Y 5/2); <i>calcareous</i>; <i>minor chlorite</i>.</p>
 <p>1,060: Gravel (G); granules to medium pebbles with minor medium to very coarse sand; moderately sorted; angular to subrounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>1,130: Sand (S); medium to coarse sand with minor clay and trace granules; well sorted; subrounded to rounded; olive gray (5Y 5/2); <i>calcareous</i>.</p>
 <p>1,070: Sandy gravel (sG); granules to medium pebbles with medium to very coarse sand; poorly to moderately sorted; angular to subrounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>1,140: Clayey sand (cS); medium to coarse sand with clay; poorly sorted; subangular to rounded; dark gray (5Y 4/1); <i>calcareous</i>.</p>
 <p>1,080: Sandy gravel (sG); granules to medium pebbles with medium to very coarse sand; poorly to moderately sorted; subangular to subrounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>1,150: Sand (S); medium to coarse sand with minor clay; well sorted; subrounded to rounded; olive gray (5Y 5/2); <i>calcareous</i>.</p>
 <p>1,090: Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules to medium pebbles; very poorly sorted; angular to subrounded; light olive brown (2.5Y 5/3); <i>calcareous</i>.</p>	 <p>1,160: Sand (S); medium to coarse sand with minor clay; well sorted; subrounded to rounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>
 <p>1,100: Clayey sand (cS); fine to very coarse sand with clay and trace granules; very poorly sorted; angular to subrounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>1,170: Sand (S); medium to coarse sand; well sorted; subrounded to rounded; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>

Figure 17G. 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) SDGD; (B) SDSY; (C) SDLH; (D) SDAQ; (E) SDGP; (F) SDBP; **(G) SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.

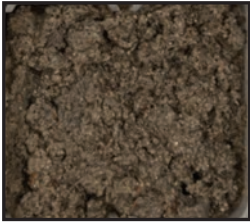




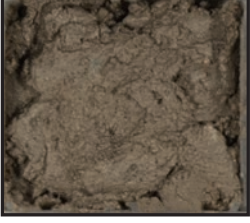








Depth (feet) and description	Depth (feet) and description
 <p>1,180: Slightly gravelly sandy clay ((g)sM); clay with medium to very coarse sand, and granules to small pebbles; very poorly sorted; grayish brown (2.5Y 5/2); <i>calcareous</i>.</p>	 <p>1,250: Sandy clay (sC); clay with very fine to very coarse sand; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor biotite</i>.</p>
 <p>1,190: Sand (S); medium to very coarse sand with minor clay; well sorted; subangular to rounded; olive gray (5Y 4/2); <i>calcareous</i>.</p>	 <p>1,260: Sandy clay (sC); clay with very fine to very coarse sand; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>trace chlorite</i>.</p>
 <p>1,200: Clayey sand (cS); fine to very coarse sand with clay; very poorly sorted; subangular to rounded; dark gray (2.5Y 4/1).</p>	 <p>1,270: Sandy clay (sC); clay with very fine to medium sand, and trace granules to small pebbles; poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,210: Clayey sand (cS); fine to very coarse sand with clay and trace granules; very poorly sorted; subrounded to rounded; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor chlorite</i>.</p>	 <p>1,280: Sandy silty clay (sM); clay with silt and very fine to fine sand; moderately to well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor mica</i>.</p>
 <p>1,220: Slightly gravelly sandy clay ((g)sM); clay with fine to very coarse sand and granules; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>trace biotite</i>.</p>	 <p>1,290: Clay (C); clay with minor fine to medium sand and trace granules; well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,230: Sandy clay (sC); clay with very fine to very coarse sand, and trace granules to small pebbles; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor biotite</i>.</p>	 <p>1,300: Clay (C); clay with minor fine to very coarse sand; well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,240: Clayey sand (cS); very fine to very coarse sand with clay and trace granules to small pebbles; very poorly sorted; subrounded; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>	 <p>1,310: Clayey silt (M); silt with clay, trace fine sand, and granules; well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>

Figure 17G. 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) SDGD; (B) SDSY; (C) SDLH; (D) SDAQ; (E) SDGP; (F) SDBP; **(G) SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.

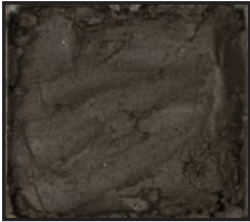

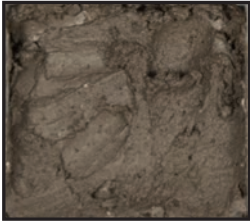

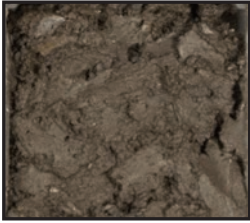


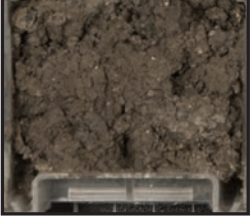

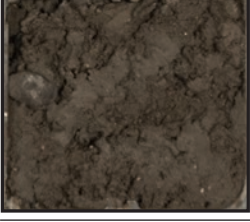

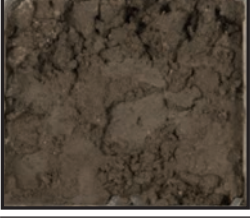


Depth (feet) and description	Depth (feet) and description
 <p>1,320: Clayey silt (M) silt with clay, minor fine to medium sand, and trace granules; well sorted; very dark gray (5Y 3/1); <i>calcareous</i>.</p>	 <p>1,380: Slightly gravelly clayey silt ((g)M); silt with clay, granules to small pebbles, and minor fine to coarse sand; very poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor mica</i>.</p>
 <p>1,330: Slightly gravelly clayey silt ((g)M); silt with clay, granules, and minor fine to medium sand; very poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>	 <p>1,390: Gravelly silt (gM); silt with granules to medium pebbles; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,340: Gravelly clayey silt (gM); silt with clay, granules to small pebbles, and minor fine to medium sand; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>	 <p>1,400: Gravelly silt (gM); silt with granules to small pebbles; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,345: Silt (Z); silt; very well sorted; very dark gray (5Y 3/1); <i>calcareous</i>; <i>core 15</i>.</p>	 <p>1,410: Sandy silt (sZ); silt with fine to coarse sand and trace granules; poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,349.5: Silt (Z); silt; very well sorted; very dark gray (5Y 3/1); <i>calcareous</i>; <i>core 16</i>.</p>	 <p>1,420: Slightly gravelly sandy silt ((g)sM); silt with very fine to very coarse sand, and granules; poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,360: Gravelly sandy silt (gM); silt with very fine to coarse sand and granules to large pebbles; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>	 <p>1,430: Slightly gravelly silt ((g)M); silt with granules to medium pebbles, and minor fine to coarse sand; poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor mica</i>.</p>
 <p>1,370: Gravelly silt (gM); silt with granules to medium pebbles and minor fine to coarse sand; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor mica</i>.</p>	 <p>1,440: Clayey silt (M); silt with clay and minor fine to medium sand; moderately to well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor mica</i>.</p>

Figure 17G. 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) SDGD; (B) SDSY; (C) SDLH; (D) SDAQ; (E) SDGP; (F) SDBP; (**G**) **SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.


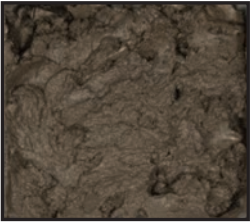
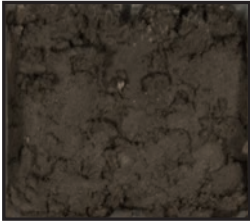
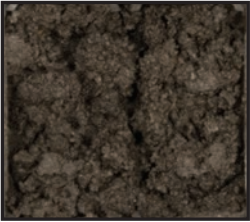



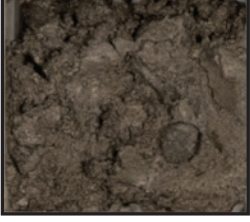

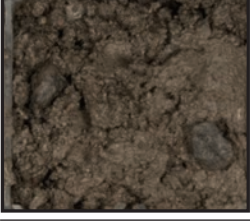
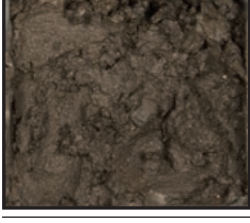

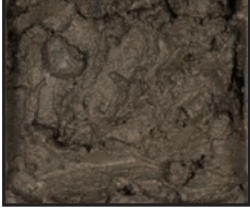
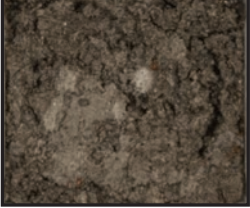
Depth (feet) and description	Depth (feet) and description
 <p>1,450: Silt (Z); silt with minor fine to coarse sand; moderately to very well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor mica</i>.</p>	 <p>1,520: Gravelly silt (gM); silt with granules to large pebbles and minor very fine to medium sand; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,460: Silt (Z); silt with minor very fine to medium sand and trace granules; moderately to very well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>minor mica</i>.</p>	 <p>1,530: Slightly gravelly sandy silt ((g)sM); silt with very fine to fine sand, and granules to small pebbles; poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,470: Silt (Z); silt with trace clay; very well sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>trace mica</i>.</p>	 <p>1,540: Slightly gravelly sandy silt ((g)sM); silt with very fine to medium sand and granules to small pebbles; very poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,480: Slightly gravelly sandy silt ((g)sM); silt with very fine to coarse sand and granules to small pebbles; very poorly to poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>	 <p>1,550: Slightly gravelly clayey sandy silt ((g)sM); silt with very fine to medium sand, clay, and granules to medium pebbles; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,490: Gravelly silt (gM); silt with granules to small pebbles and trace very fine to fine sand; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>trace mica</i>.</p>	 <p>1,560: Gravelly sandy silt (gM); silt with very fine to medium sand, and granules to medium pebbles; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>
 <p>1,500: Slightly gravelly silt ((g)M); silt with minor fine to medium sand and granules to medium pebbles; very poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i>; <i>trace mica</i>.</p>	 <p>1,570: Silty sand (zS); fine to coarse sand with silt and trace granules; poorly to moderately sorted; subangular to rounded; gray (5Y 5/1); <i>calcareous</i>.</p>
 <p>1,510: Gravelly silt (gM); silt with granules to small pebbles and minor very fine to medium sand; very poorly sorted; dark gray (2.5Y 4/1); <i>calcareous</i>.</p>	 <p>1,580: Clayey silty sand (mS); very fine to coarse sand with silt and clay; very poorly to poorly sorted; rounded; dark gray (5Y 4/1); <i>calcareous</i>.</p>

Figure 17G. 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) SDGD; (B) SDSY; (C) SDLH; (D) SDAQ; (E) SDGP; (F) SDBP; **(G) SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.

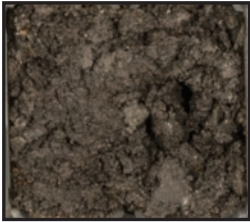
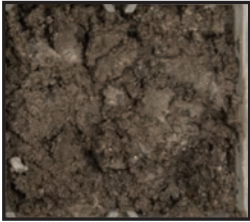




Depth (feet) and description	
	1,590: Clayey sand (cS); very fine to medium sand with clay; poorly to moderately sorted; subrounded to rounded; black (5Y 2.5/2); <i>calcareous</i> .
	1,600: Sandy clay (sC); clay with very fine to coarse sand; poorly sorted; very dark gray (2.5Y 3/1); <i>calcareous</i> .
	1,610: Clayey sand (cS); medium to coarse sand with clay; poorly sorted; subrounded to rounded; dark gray (5Y 4/1); <i>calcareous</i> .
	1,620: Clayey sand (cS); fine to coarse sand with clay; poorly sorted; subrounded to rounded; gray (2.5Y 5/1); <i>calcareous</i> .
	1,630: Clayey sand (cS); fine to coarse sand with clay; poorly sorted; subrounded to rounded; dark gray (2.5Y 4/1); <i>calcareous</i> ; <i>trace biotite</i> .
	1,640: Clayey sandy silt (sM); silt with very fine to medium sand and clay; poorly to moderately sorted; dark gray (2.5Y 4/1); <i>calcareous</i> ; <i>trace biotite</i> .

Figure 17G. 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) SDCP; (F) SDBP; **(G) SDHF**; (H) SDEP; (I) SDNB; (J) SDSW; (K) SDMC; (L) SDLD; (M) SDCC; (N) SDOR; (O) SDOT; and (P) SDBW. —Continued.