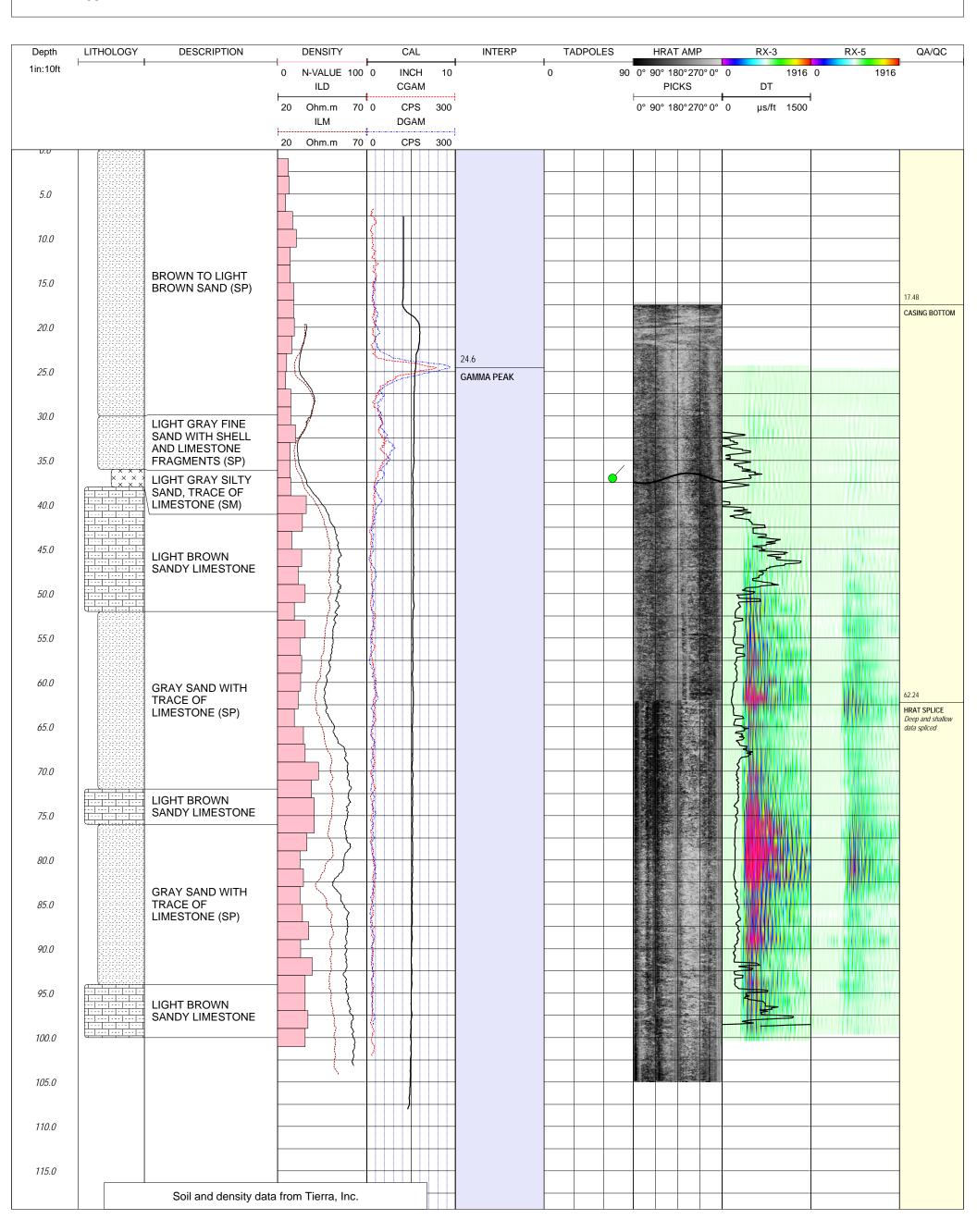
WELL ID: W-4D

PROJECT: C-139 Expansion

Date Logged: 30 Jul 2013



⁻Each borehole was mud-filled, and the thickness of the mud varied with depth and borehole.

⁻Each borehole was logged in stages, with half of the casing removed to log the deep portion and the remainder removed to log the shallow portion. 20 feet of casing was left in each borehole to stabilize it near the groundwater table.

⁻The mud attenuation of the sonic signal from the full-waveform sonde and HRAT televiewer was extreme.

⁻The gamma peaks rarely aligned with the occurrences of clay, although the resistivity peaks often substantiated the presence of clay. The gamma peaks may be related to minerals other than clays, and the observed clays may be entirely calcium carbonate. -Higher resistivity appeared to correspond to higher SPT N-values.