On August 19, 1999, we entered the hole with a 9.875-inch bit to clean the hole down to the lower bridge plug. We encountered salt bridges at approximately 1398 and 1508 ft bgs in the Salado, but drilled through them in a few feet. At approximately 4017 ft bgs, we began to circulate the hole, recovering a lot of salt chips and crystals. We hit the top of the seal nipple at 4037 ft bgs, approximately 10 ft deeper than expected. We then tripped out and switched over to the washover shoe. We washed down around the seal nipple until the washover shoe was grinding on the metal of the bridge-plug assembly. We made one attempt to retrieve the bridge plug that day, but were unsuccessful.

On August 20,1999, we tried again to retrieve the bridge plug and succeeded. We then tripped in with the 9.875-inch bit to clean the hole to its total depth of 4291 ft bgs. Cleaning the hole to its total depth was important because the 1983 DSTs had shown that the lowermost 120 ft was the most permeable portion of the Bell Canyon penetrated by the well (Beauheim et al., 1983). At 4171 ft, we hit dehydrated drilling mud which we had to "drill" through the rest of the way. ("Dehydrated" drilling mud is actually the clay, barium, and other additives put in drilling brine to increase its density and viscosity. During drilling, these substances stay in suspension because of the agitation and circulation of the drilling mud. When drilling mud simply stands in a hole, these substances settle out, forming "dehydrated" drilling mud.) The drilling mud probably got into the Bell Canyon section of the hole during the period in 1986 between the removal of the PIP isolating the Bell Canyon and its replacement with a bridge plug. The denser fluid in the Salado-Castile portion of the hole probably displaced the lighter Bell Canyon fluid during the three days (Stensrud et al., 1987) when the two intervals were connected. The dehydrated drilling mud was light gray in color and had the consistency of modeling clay. Cleaning the hole from 4171 to 4291 ft bgs took approximately three hours and 45 minutes because the dehydrated drilling mud tended to plug the bit.

After tripping the bit out of the hole, we ran in with a 7-inch PIP which was set with the center of the element at 4020.2 ft bgs in anhydrite near the base of the Castile where the caliper log showed the hole maintained a uniform diameter. We disengaged the 2.375-inch tubing from the PIP, pulled out 599 ft (19 joints), and placed a 10.375-inch PIP in the tubing string. We then went back down and latched onto the lower PIP and set the upper PIP in the casing with the center of its element at 603.8 ft bgs. Before latching onto the lower PIP, we threaded the top of the tubing string into a bonnet which was bolted onto the wellhead before the upper PIP was inflated. A one-inch hole in the bonnet provides access for a water-level probe to measure the Culebra water level in the annulus between the well casing and the tubing above the upper PIP. The Bell Canyon water level can be monitored in the tubing. The Salado and Castile are isolated between the two PIPs.

From August 21 through 25, 1999, we swabbed brine from the tubing to remove circulation/drilling fluid from below the lower PIP and draw native Bell Canyon brine into the well. Approximately 5800 gallons of brine were swabbed, representing five times the volume of the open hole through the Bell Canyon. Specific gravity of the fluid removed was monitored during swabbing (Figure 1). The final specific gravity measured was 1.126, very similar to that measured in 1983.