In this report, wells are arranged as clusters A, B, and C based on well proximity and similarity of water-level elevations (see Potrero Canyon map in “Methods”). For tests performed in Potrero Canyon, wells 3, 4, 5, and 6 were used as pumping wells and wells 1, 2, 4, 5, 8, and 9 were used as observation wells. Wells 6 (24N1) and 25R1 (2S/1E-24P3) were used as observation wells during the recovery period. During the pumping test of February 27 to March 2, 2001, the purpose of the tests was to determine the productivity of each well and the interference (drawdown) of water-level declines in each pumped and undrained observation well.

During each pumping test, a well was pumped at a fairly constant rate for several hours and drawdown was measured in the pumping well, nearby production wells (mostly idle) used as observation wells. Productivity of the pumping well, specific capacity in gallons per minute per foot of drawdown (gal/min/ft), was determined from time-drawdown data in the pumping well. The range of specific capacities from these tests was 2.3 to 124 gal/min/ft measured in well 24P3 (28/2E-24P3) to 12.8 gal/min/ft in well 25H1 (4H/1E-25H1). A specific capacity of 14.4 gal/min/ft was reported (Connors Fleet Test Notes) by McCalla Bros. for well 24N1. The amount of the drawdown in the observation wells during each pumping test was used to determine the interference between wells.

The transducers (pounds per square inch, gauged) pressure transducers and data loggers were calibrated electric measuring tape to verify the accuracy of hand-held electric measuring tape to verify the accuracy of manual water-level measurements were made during the recovery period. During the pumping test at well 5, a well was pumped at a fairly constant rate for several hours and drawdown was measured in the pumping well, nearby production wells (mostly idle) used as observation wells. Productivity of the pumping well, specific capacity in gallons per minute per foot of drawdown (gal/min/ft), was determined from time-drawdown data in the pumping well. The range of specific capacities from these tests was 2.3 to 124 gal/min/ft measured in well 24P3 (28/2E-24P3) to 12.8 gal/min/ft in well 25H1 (4H/1E-25H1). A specific capacity of 14.4 gal/min/ft was reported (Connors Fleet Test Notes) by McCalla Bros. for well 24N1. The amount of the drawdown in the observation wells during each pumping test was used to determine the interference between wells.

Pumping test results showed that wells 5 and 6 within Cluster A have the highest specific capacities and the lowest interference between wells within the same cluster. Wells in Cluster C, especially well 25H1, had an average specific capacity of 32 gallons per minute per foot (gal/min/ft) of drawdown and a maximum interference of 6.8 ft in surrounding wells. Wells within Cluster B, had an average specific capacity of 14 gallons per minute per foot (gal/min/ft) of drawdown, about one half of the value for wells in Cluster A, and a maximum interference value of 27.5 ft in nearby wells, more than double the value for wells in Cluster A. Note that the highest interference occurred between wells 3 and 4 in Cluster B, even though they are further apart (about 75 ft more) than wells 5 and 6 in Cluster A. Therefore, concurrent pumping of wells 3, 4, 5, and 6 in Cluster A would produce a higher yield and less drawdown than pumping wells 5 and 6 within Cluster A. Therefore, concurrent pumping of wells 3, 4, 5, and 6 in Cluster A would produce a higher yield and less drawdown than pumping wells 3, 4, 5, and 6 in Cluster A. Therefore, concurrent pumping of wells 3, 4, 5, and 6 in Cluster A would produce a higher yield and less drawdown than pumping wells 3, 4, 5, and 6 in Cluster A. Therefore, concurrent pumping of wells 3, 4, 5, and 6 in Cluster A would produce a higher yield and less drawdown than pumping wells 3, 4, 5, and 6 in Cluster A. Therefore, concurrent pumping of wells 3, 4, 5, and 6 in Cluster A would produce a higher yield and less drawdown than pumping wells 3, 4, 5, and 6 in Cluster A. Therefore, concurrent pumping of wells 3, 4, 5, and 6 in Cluster A would produce a higher yield and less drawdown than pumping wells 3, 4, 5, and 6 in Cluster A. Therefore, concurrent pumping of wells 3, 4, 5, and 6 in Cluster A would produce a higher yield and less drawdown than pumping wells 3, 4, 5, and 6 in Cluster A.