

Bromley District Water Providers, LLC – Bell Mountain

Water wells Bell Mountain Den-1, Da-1, and A-1 were drilled and completed during the period of March 24, 2003 through July 18, 2003 for the purpose of supplying ground water to Bromley District Water Providers, LLC (“Bromley”) for municipal, irrigation, and augmentation purposes. The wells were drilled into the Dawson, Denver, and Arapahoe aquifers in the Denver Basin near the Town of Castle Rock in Douglas County, Colorado.

As part of this project, Martin and Wood personnel designed aquifer tests to determine the potential production of each well and to aid in the final pump specifications and settings. In cooperation with a pump contractor, a preliminary 8-hour step drawdown test was con-

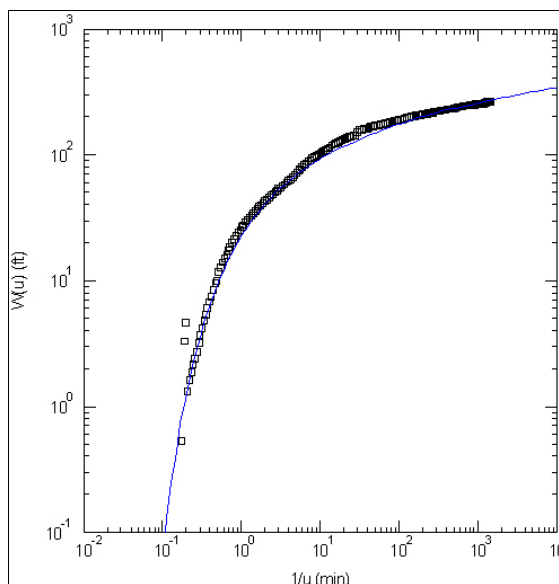
ducted at four different pump rates at two-hour intervals. The results from the 8-hour step drawdown test were used to determine an acceptable pump rate in which to run a 24-hour pump test. In addition, a 24-hour recovery test was conducted on each well. The pump test data were recorded by a submersible pressure transducer and an electronic data logger. The pump test and recovery data were analyzed using the Theis Drawdown, Cooper-Jacob Drawdown, and Theis Recovery methods to determine the hydrogeologic characteristics of the aquifer, such as saturated thickness, hydraulic conductivity, transmissivity, and specific capacity, as well as to ascertain the eventual long-term production pumping capability of the well.

Denver Wells, LLC - Walestone Wells

Denver Wells, LLC owns four historical pre-Senate Bill 213 wells: Webber #1 Well, Webber #3 Well, Ideal Well, and SEC Well, collectively referred to as the “Walestone” Wells.

Martin and Wood personnel designed pump tests for these old structures, then used these data to design new structures. After the new wells were constructed, Martin and Wood designed aquifer tests, including step, 24-hour, and recovery tests, to determine the potential production of each well and to aid in the final pump specifications and settings.

The pump test and recovery data were analyzed using the Theis Drawdown, Cooper-Jacob Drawdown, and Theis Recovery methods to determine the hydrogeologic characteristics of the aquifer, and to ascertain the eventual long-term production pumping capability of each well.



Drawdown vs. Time Plot - Theis Analysis