

Related Project Experience - The Sanberg Group, Inc.

PROJECT TITLE AND LOCATION:

Primrose Lane Apartments Aquifer Test; Bishop, California

YEAR(S) PROFESSIONAL SERVICES PROVIDED:

October to December 2005

BRIEF DESCRIPTION OF PROJECT:

TSG was retained by a local environmental engineering firm to perform an aquifer test for a safe yield evaluation of a recently installed water supply well. A six (6)-hour constant-discharge aquifer test was performed in compliance with County of Inyo - Department of Environmental Health Services (Environmental Health) requirements to evaluate the safe yield for the new well (Well #2) as defined by Environmental Health. Well No.2 was installed as a backup to the existing well (Well No. 1) currently used for potable water supply to the apartment complex. Water from Well No. 2 will be used in combination with Well No. 1 to provide a supplemental potable water supply for domestic purposes and limited irrigation for landscape maintenance. The test was performed at Well No. 2 and manual water level measurements were recorded; Well No.2 was pumped at a constant rate of 28 gallons per minute (gpm) with a total volume of approximately 10,000 gallons of water pumped during the test. Well recovery was monitored after pump shut-off until water level recovery returned to within 0.18 feet of the pre-test water level. The Theis (1935) solution method for confined aquifer conditions was selected as best representative of the site conditions. The saturated thickness of the aquifer in the vicinity of Well No.2 is



unknown but was initially assumed to be 175.3 feet, which represents the saturated thickness penetrated by the well. A saturated thickness of 300 feet was later selected because the observed data best fit the type curves for this solution and potentially represents a conservative value. The specific capacity and well efficiency were calculated. The results of the test indicated that Well #2 fulfilled the safe yield requirements as established by Environmental Health.

