

**APPENDIX B**  
**Hydraulic Conductivity Zones by Model Layer**

**Table B.1 Calibrated Hydraulic Conductivity Zone Values for Hydrostratigraphic Units**

| Model Layer | Hydrostratigraphic Unit                       | Hydraulic Conductivity Zone | Description                                                    | Hydraulic Conductivity (ft/day) |                      |
|-------------|-----------------------------------------------|-----------------------------|----------------------------------------------------------------|---------------------------------|----------------------|
|             |                                               |                             |                                                                | Horizontal                      | Vertical             |
| 1           | San Jose Formation                            | Tsj                         | Basin-wide                                                     | 0.5                             | 0.002                |
| 2           | Animas and Nacimiento Fms                     | Tka                         | Basin-wide                                                     | 0.01                            | 0.0001               |
| 3           | Ojo Alamo Sandstone                           | Toa                         | Basin-wide                                                     | 0.3                             | 0.001                |
|             | Kirtland and Fruitland Fms                    | Kkf                         |                                                                |                                 |                      |
|             | Pictured Cliffs Sandstone                     | Kpc                         |                                                                |                                 |                      |
| 4           | Lewis Shale                                   | Kls                         | Basin-wide                                                     | $5 \times 10^{-5}$              | $2.5 \times 10^{-6}$ |
| 5           | Cliff House Sandstone                         | Kch                         | Basin-wide                                                     | 0.05                            | 0.0003               |
|             | Menefee Formation                             | Kmf                         |                                                                |                                 |                      |
|             | Point Lookout Sandstone                       | Kpl                         |                                                                |                                 |                      |
|             | Crevasse Canyon Formation                     | Kcc                         |                                                                |                                 |                      |
| 6           | Mancos Shale                                  | Km1                         | Basin margin                                                   | $1 \times 10^{-4}$              | $1 \times 10^{-4}$   |
|             |                                               | Km2                         | Upper Mancos                                                   | $3 \times 10^{-3}$              | $5 \times 10^{-6}$   |
|             |                                               | Km3                         | Lower Mancos                                                   | $5 \times 10^{-5}$              | $2.5 \times 10^{-6}$ |
| 7           | Gallup Sandstone                              | Kg1                         | Southern basin                                                 | 0.25                            | 0.0025               |
|             |                                               | Kg2                         | Roca Honda permit area based on RHR pump test                  | 1.5                             | 0.002                |
| 8           | Dakota Sandstone                              | Kd1                         | Basin-wide                                                     | 0.1                             | 0.0001               |
|             |                                               | Kd2                         | Ambrosia Lake sub-district                                     | 0.1                             | 0.002                |
| 9           | Brushy Basin Member of Morrison Formation     | Jmbb                        | Basin-wide                                                     | $3 \times 10^{-3}$              | $5 \times 10^{-6}$   |
| 10          | Westwater Canyon Member of Morrison Formation | Jmw1                        | Northern basin                                                 | 0.02                            | 0.0002               |
|             |                                               | Jmw2                        | Southern basin                                                 | 1.25                            | 0.00125              |
|             |                                               | Jmw3                        | Ambrosia Lake sub-district                                     | 1.6                             | 0.002                |
|             |                                               | Jmw4                        | Roca Honda permit area based on RHR pump test                  | 0.5                             | 0.001                |
|             |                                               | Jmw5                        | Gulf Mt. Taylor mine area based on historical dewatering rates | 3                               | 0.003                |
| 6 to 10     | Mt. Taylor volcanic rocks                     | Tnv                         | Volcanics                                                      | $1 \times 10^{-4}$              | $5 \times 10^{-6}$   |
|             |                                               | Tmv                         | Basalt and andesite flows                                      |                                 |                      |

Note: This table is the same as Table 4.1







































