

Mike Monnie
Edwards Greenhouses
4106 Sand Creek
Boise, Idaho 83703



June 5, 1994

Dear Mike:

I have reviewed the data provided by the State of Idaho as part of the record for Water District No. 63-S (Stewart Gulch) hearing. I have reduced the March 26, 1994 data to a set of graphs. As you know, I was not at the hearing and was unable to review the hearing tapes. Nevertheless, I have provided the following comments and recommendations regarding the data I reviewed.

The tests conducted withdrew water from the Quail Hollow and Terteling Windsock well. No apparent effects on the Terteling Springs or Terteling Motorcycle Club well were noted. The other wells examined (Edwards Greenhouses, Flora Greenhouses, Hillside Jr. High, and Terteling Pool wells) appear to be affected by the Quail Hollow and Terteling Windsock Wells (figure 1).

The initial conclusion would be that the wells to the southwest of Terteling Springs do not interfere with Terteling Springs and Terteling Motorcycle Club well. However, one cannot conclude, based only on the data I reviewed, that water removal from the Terteling Springs and Terteling Motorcycle Club wells would not affect the wells to the southwest. Based on the estimated piezometric surfaces (see figure 2), the Terteling Motorcycle Club well could be in part of the system that supplies the other wells if there are significant differences in aquifer properties and/or supply. If this is the case, it would explain why the Terteling Motorcycle club well was unaffected by the wells used in the pumping test. In other words, the wells to the southwest may be supplied by the same source as the Terteling Motorcycle Club well, but there may be some major differences, such as a leaky boundary, separating the areas. In this case, a drawdown in the supply-limited area would not affect the other area. Conceptually, the situation would be akin to a pressure reducing valve in a pipeline, or a control gate in a reservoir system.

I would recommend doing some well tests using the Terteling Motorcycle Club well as the pumped well and using the other wells as observation wells. Also, water quality analyses

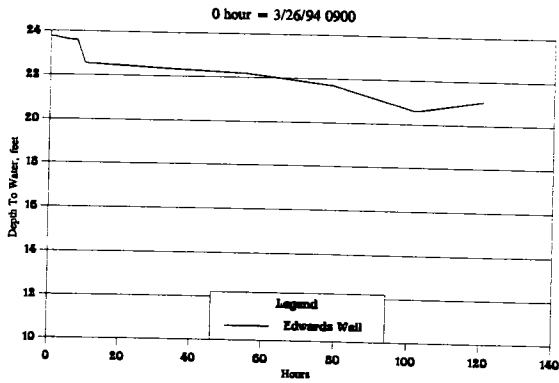
might be useful to help confirm the sources are similar.

Please understand that my analysis is based on limited information and I am giving you the best recommendations based on what I was given. If you receive additional information or would like me to discuss my concerns with the Department of Water Resources, please let me know.

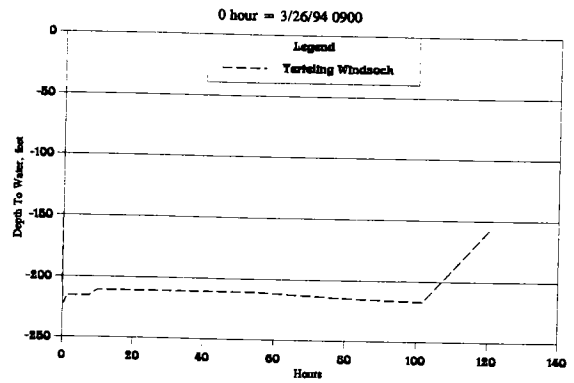
Sincerely,

Karl Gebhardt, P.E., P.H.
Hydrologist/Environmental Engineer

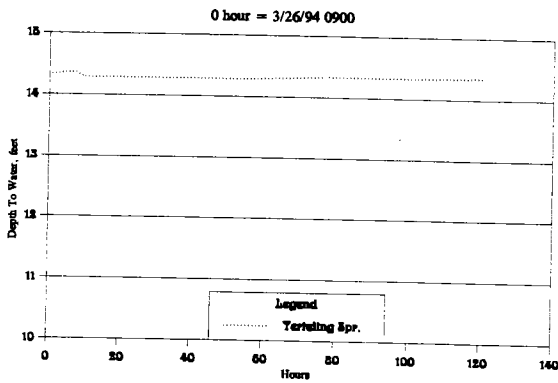
Ground Water Levels



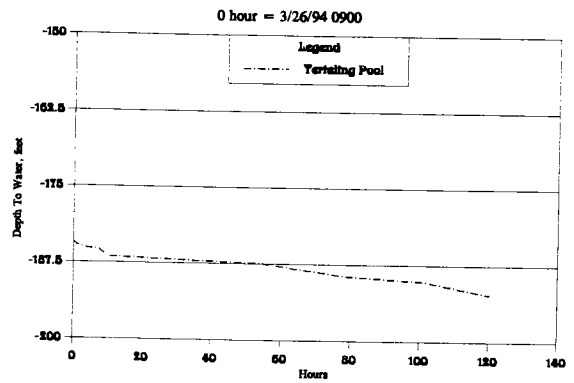
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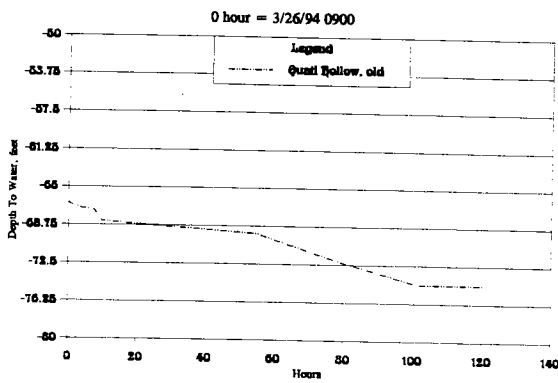
Ground Water Levels



Ground Water Levels



Ground Water Levels



Ground Water Levels

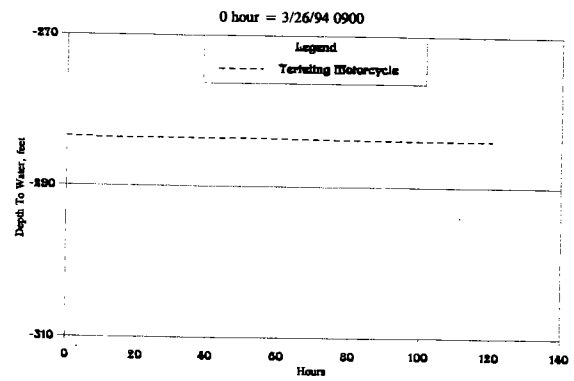


Figure 1

Estimated Piezometric Surfaces

Stewart Gulch Area

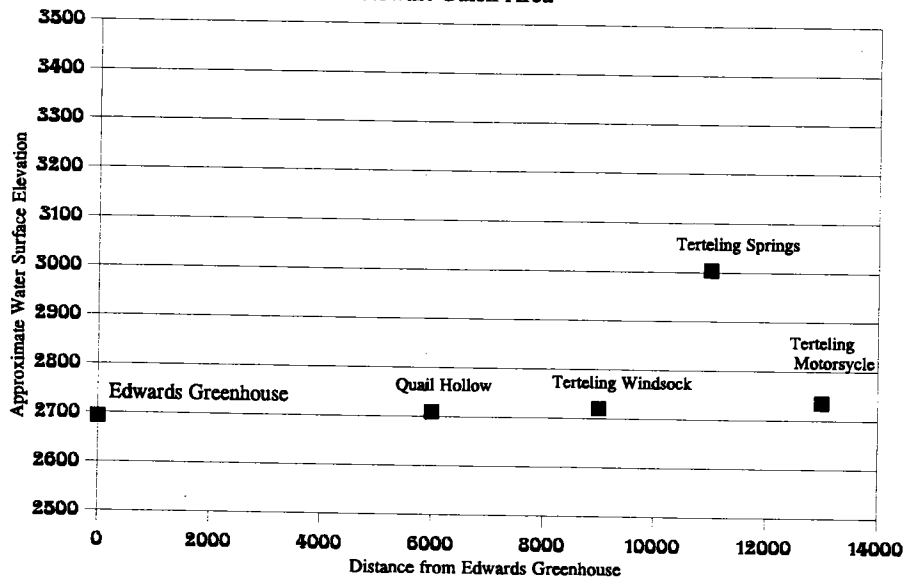


Figure 2