

February 12, 2009

Mr. Ernest Carlsen
Idaho Department of Water Resources
900 N. Skyline Drive, Suite A
Idaho Falls, ID 83402-1718

Re: Charles B Isom's Water Rights 34-2459, 34-2460, 34-2461, 34-2462 and
34-10925

Dear Ernie:

This letter is a follow up to our telephone conversations regarding the use of the 4 wells used to supply Mr. Isom's above referenced water rights. For convenience the older wells near the airport will be referred to as the **airport wells** and the newer wells that pump into the Island Canal will be referred to as the **island wells**.

As of 2007 the airport wells were equipped with a 125 hp pump and a 200 hp pump. The first record of the 200 hp pump being in place is 2001 when a new pole number was assigned. The new pole number could mean the electrical service was changed, perhaps to supply power to a larger pump. The original horsepower prior to 2001 has not been confirmed.

As of 2007 the island wells were equipped with a 200 hp pump and a 250 hp pump. There is no indication the horsepower of either of these wells has been changed.

Power records for 1984 through 1987 when Bells owned the property were obtained and power records for 1998 through 2007 when Isoms owned the property were obtained. Obtaining the old records is more difficult because of the effort required by the Lost River Electric staff. In retrospect the years 1984 through 1987 were not particularly good years for analysis because of the availability of surface water. The records indicate no ground water was pumped in 1984 and only a small amount was pumped in 1986.

Figure 1 is a monthly comparison of the airport wells and island wells use based upon the average monthly power consumption for the period 1984 through 1987. The figure shows the continuing use of the island wells later into the season and a higher rate of use for the airport wells earlier in the season. Of the period 1984 through 1987 the last year, 1987, showed the largest use of ground water. Figure 2 is a comparison of the average power use by month comparing the airport wells to the island wells. The peak use of the airport wells occurred in May and the peak use of the island wells was in July and August. The island wells continued to be used later in the season than the airport wells, apparently as the airport well supply diminished.

Figure 3 is the monthly comparison of the airport wells and island wells based upon the average monthly power consumption for the period 1998 through 2007. The figure

shows the airport well use peaks in July but the island well peak is not until September after the airport well use has reduced significantly. Figure 3 shows notably higher power consumption than either Figures 1 or 2. Information is not currently available to know if that increased power use translates into more water being diverted or increased pumping levels and the increased energy required to maintain the same water supply. Likewise, the power use comparison between the sets of wells is instructive to show when each set is used most heavily during the year but the comparison of the values between the 2 sets is not necessarily a comparison of the relative amount of water pumped from each set of wells.

All 3 figures show the use of the island wells later in the season than the airport wells indicating the airport well supply is likely diminished toward the end of the season. Even though both sets of wells are used to meet the typical July peak water requirement, the 2 sets of wells do not peak simultaneously except in Figure 1 and I am not sure the Figure 1 averages are representative because of the short record and some years without any or only limited ground water use.

I hope this information helps resolve the issue of the island wells be alternate points of diversion for the airport wells. If you have any questions or need additional information, please let me know.

Yours truly,

David B. Shaw

Enc.

cc: Charles B. Isom

Figure 1

Airport Wells Diversions Compared to Island Wells Diversions 1984 - 1987

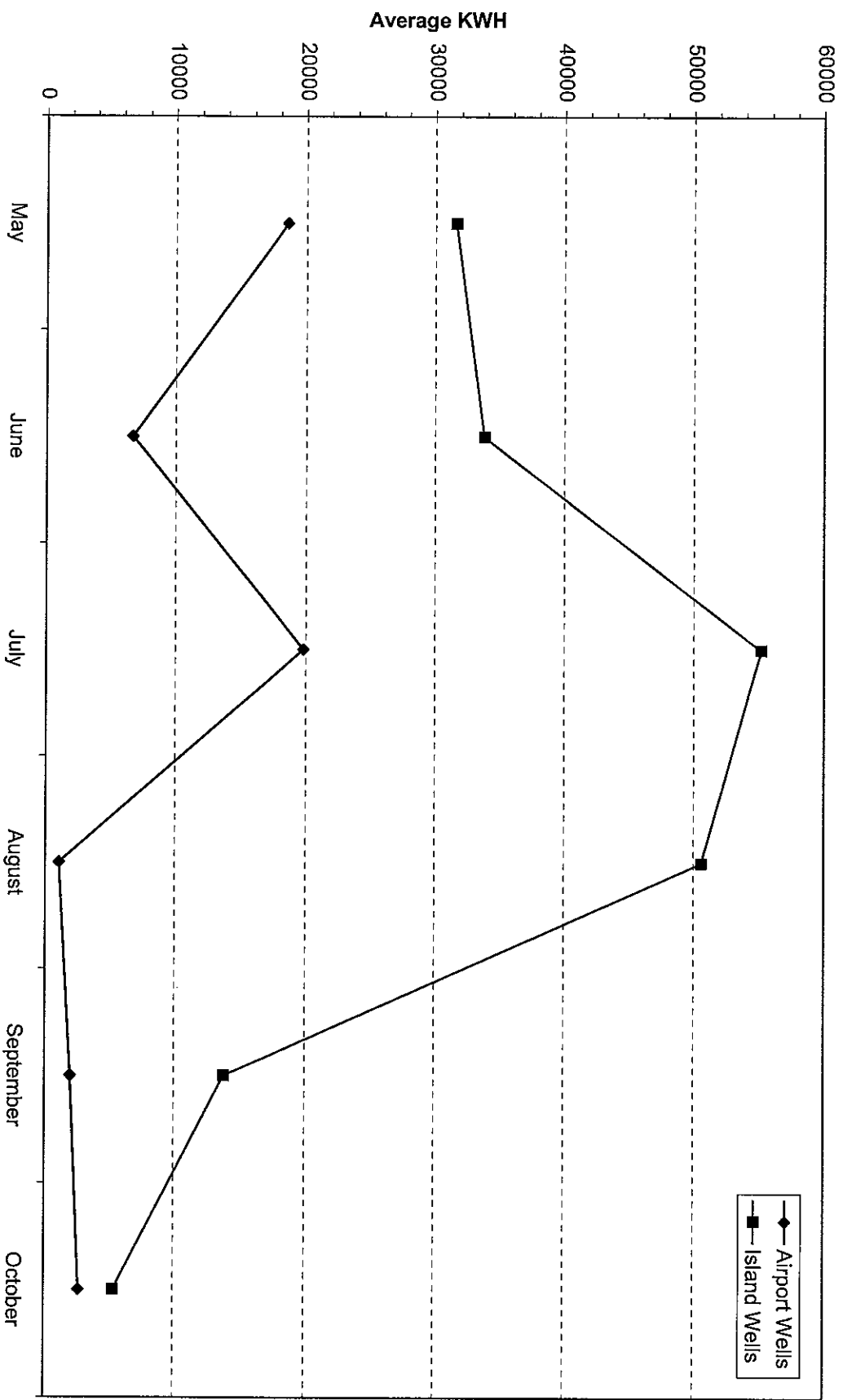


Figure 2

Airport Wells Diversions Compared to Island Wells Diversions 1987

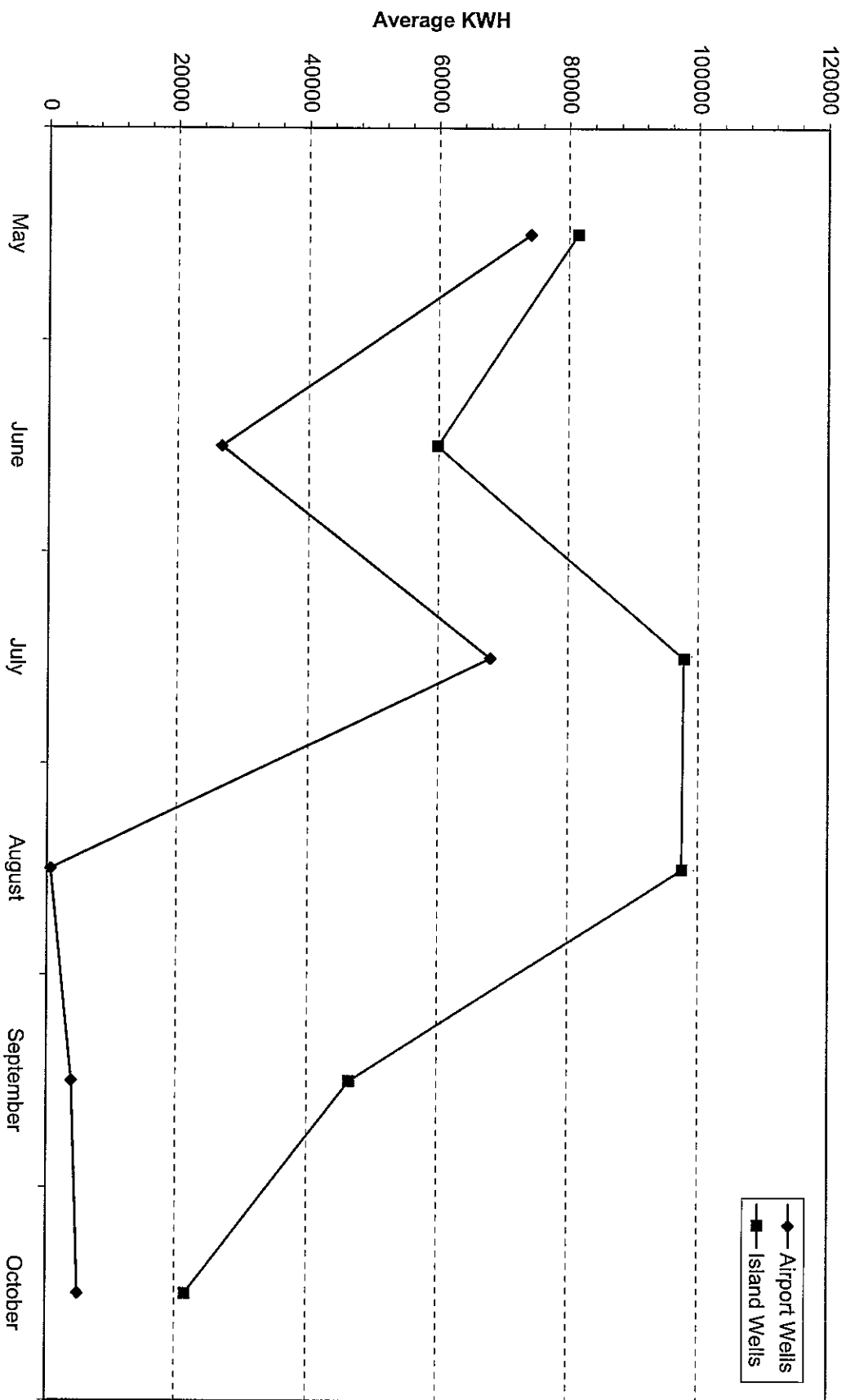


Figure 3

Airport Wells Diversions Compared to Island Wells Diversions 1998 - 2007

