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Water Resources

April 2, 2001

Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore Street, Suite 200
Twin Falls, ID 83301

RECEIVED
MAY 11 2001
Department of Water Resources
Southern Region

Re: Transfer Application – Avelar's Dairy / 47-04287
Project No. 431-01-2000

Dear Mr. Merritt:

Enclosed is a transfer application submitted on behalf of Avelar's Dairy. The transfer proposes to move a portion of groundwater right 47-04287 from land west of Filer to the Avelar's Dairy south of Buhl. The Filer property is located in T. 10 S., R. 15 E., Section 1. This property was recently sold by Joe Avelar to SeaPac of Idaho, Inc., but Mr. Avelar retained the groundwater right with the requirement that it be transferred off the property. Both the groundwater right and Twin Falls Canal Company shares are appurtenant to and have been used for irrigation of this land.

The dairy is located in T. 10 S., R. 14 E., Section 15. It is currently supplied by groundwater license 47-08241, which allows 44.6 ac-ft per year for stockwater and commercial purposes. Current expansion plans will increase the water usage to a maximum of 120 ac-ft per year, based on 2000 milking cows. Therefore, $120 - 44.6 = 75.4$ ac-ft needs to be transferred to the dairy. Enclosed with this letter is a water usage worksheet justifying the requested volume.

Right 47-04287 allows 2.0 cfs for irrigation of 128 acres. Based on IDWR's currently policy of allowing 3.0 ac-ft/ac to be transferred to a dairy, the total irrigated area must be reduced by $75.4 / 3.0 = 25.1$ acres to ensure that consumptive use does not increase.

Because the groundwater right is supplemental to TFCC shares, an analysis of historical pumping volume was made to determine the volume available for transfer. The well pump is a 5HP vertical turbine, delivering water through a short 8-inch steel pipe under free discharge conditions to a CMP standpipe. The TFCC shares are also delivered to this standpipe. From there, water is directed to two irrigation storage ponds, from which it is pumped to a center pivot and hand lines. There is no flow meter on the well, so volume was

CHARLES E.
BROCKWAY,
PH.D., P.E.

CHARLES G.
BROCKWAY,
PH.D., P.E.

2016 NORTH
WASHINGTON
STREET • SUITE 4

TWIN FALLS,
IDAHO 83301

208•736•8543

FAX: 736•8506

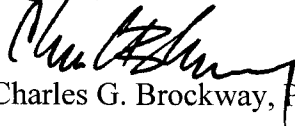
estimated using Idaho Power Co. records obtained by the owner for the years 1993 through 2000.

A pumping test of the well was conducted on May 2, 2001 to determine a relationship between power consumption and volume pumped. The pump is a fixed-speed unit and always operates in one condition, so the power-volume relationship should be very straightforward. The attached spreadsheet shows the test data and the computed power consumption coefficient (PCC). The test could only be run for a short time due to the potential impact on the Peavey springs and a water right held by SeaPac of Idaho, Inc. However, the flow was reasonably stable during the test period, so the results should be accurate. Using the measured PCC with power records obtained by the owner from Idaho Power, the maximum justifiable annual pumping volume for the past five years is 122.7 acre-feet. Therefore, the 75.4 ac-ft being transferred represents 61.45% of the groundwater right.

Note that 61.45% of the 2.0 cfs flow rate on the right is 1.23 cfs. This rate is much larger than needed to operate the dairy. Therefore, it is proposed to transfer only 1.01 cfs, leaving 0.99 cfs or 0.02 cfs/acre on the remaining 49.3 acres, i.e. the per-acre rate on the irrigation portion left on the right would be increased to the allowable 0.02 cfs/acre and the remaining flow rate transferred to the dairy.

Please do not hesitate to call if you have any questions.

Regards,



Charles G. Brockway, P.E.

Enc: Application for Transfer and supporting docs
 LCO Water Usage Worksheet
 Well pumping test results and PCC calculation
 Idaho Power Co. records

cc: Joe Avelar