

January 31, 2004

General Comments

This claim is for in-home domestic use for 6 mobile homes. All irrigation is provided from a ditch pump. The claimed diversion rate is a little lower than the standard for six homes but appears to be in line with the actual historical usage and installed pump.

Ownership

Appears to be correct.

POD

The well is at GPS waypoint 7, location 659,382 E 285,081 N IDTM. The physical address 147 N 3400 W Rigby is the southern most of the six homes. The well is behind the northern most home.

POU

The homes are along the west side of the Lewisville Highway, extending north from 147 N 3400 W.

Overlap

None noted.

Conflict

None noted.

Priority

The 1991 affidavit states "personal knowledge" of use for "over 35 years." That suggests a priority of about 1956. When I interviewed the claimant, he told me he grew up on the property and the well was there "as long as he can remember." He said he's 60 years old. Assuming his memory goes back to age five, this suggests a priority of 1949. I propose a priority of 12/31/1949.

Quantity

The claimed quantity of 0.08 cfs is less than the field examiner's handbook suggests for 6 homes, but it is at the upper limit of the theoretical capacity of the 3/4 hp pump. The depth is 160 feet but it is not clear if this is depth to water, depth to the pump, or depth of the well. The owner says he has installed large pressure tanks to accumulate water during the night and with irrigation from the ditch they "get by." He said the well casing is too small to install a larger pump and he expects not to need more water than currently used. Note also he's not certain about the motor horsepower; it is the biggest that will go into the small casing. Given the uncertainty about depth to water and motor size, I propose recommending the claimed rate even though the theoretical points to a lower value.

The field examiner's handbook suggests 3.6 acre feet/ year for six homes. At approximately 2 acre feet/ day for one cfs, 0.08 cfs can potentially deliver almost 60 acre feet/year (running 24 hours/day). This suggests that the low diversion rate should not limit the annual volume.

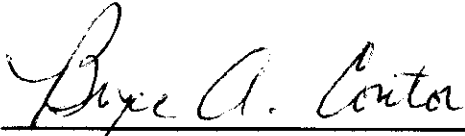
I propose 0.08 cfs and 3.6 acre feet per year.

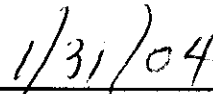
Water Use

The actual use is domestic in six homes. The claim is for domestic and commercial, but the claimed commercial use clearly is intended to describe the use in the other homes. I can't remember the rules for water use in trailer parks.

List of Photos

A25-10298_1.jpg	Looking N at POD
A25-10298_2.jpg	Looking S SE at POU from location of POD. The camper trailer at the right of the photo is just parked, it is not lived in.


Bryce A. Contor


Date

A25-10298 Theoretical Calculations

Data

3/4 horsepower pump

40 psi assumed discharge

160 feet depth reported by

owner. It is unclear

whether this is depth-to-water or depth of well

15 feet assumed friction

60% assumed efficiency.

Formula
$$GPM = \frac{\text{Water HP} \times 3960}{TDH}$$

$$\text{Upper GPM} = \frac{(3/4)(0.60)(3960)}{(40 \times 2.31 + 80 + 15)} = 9.5 \approx 0.021 \text{ cfs}$$

$$\text{Lower GPM} = \frac{(3/4)(0.60)(3960)}{(40 \times 2.31 + 160 + 15)} = 6.7 \approx 0.015 \text{ cfs}$$

A25-10298 Preview/Contract log

1/19/04 Preview

1) Evidence of Priority 1991-35 yrs = 1956

2) Rate/Volume 7 hours $\approx$ 0.12 cfs + irr
per field examiner's handbook -
consider amending claim

Phone book: Scott & Julie Randall 147 N 3400 W
Rigby
754-8813

754-8813 12:20 1/19/04 msg on machine

— Mr. Randall - 1/19/04 - $\frac{3}{4}$ hp motor 160 ft lift -
 $\frac{3}{4}$ hp $\times$ 3960 $\approx$ $\frac{3000}{250} \approx 12$ gpm

160 ft + 40 (2.31) $\approx$ 250

does not plan to increase size of court.

No irrigation; irr is from ditch. 6 units
is court.

2 photos GPS Waypoint 7 6590 659382E
285081N

160 ft the
way to
depth of well -