

MEMORANDUM

Date: March 30, 2011
To: Water Right File 21-7588
From: cpadilla
Re: Licensing Memo

POU

This license covers lots 14-17, Blk 1 of North Fork Highlands Subdivision #1. Rights 21-2102, 21-2104, 21-4025, 21-7075, 21-7076, 21-12538, and 12-12539 cover portions of Lots 14, 15, and 16. The rights are from surface water and all have been decreed in the SRBA. It seems as if the Department should allow 1/2 acre of irrigation under 21-7588 because the permit did not exclude the irrigation of lawns. 21-2045

PD

The PD is located in Lot 15.

Rate

The field examiner recommended the diversion rate of 0.08 cfs based on the hp equation. However, the field examiner transposed some of his numbers in the equation. I have re-calculated the hp equation as follows:

$$3 \text{ hp} \times 8.8 \times 0.7/116 + (20 \times 2.31) = 0.11 \text{ cfs}$$

See that attached well log. Notice the static water level input should have been 108 ft with a 8 ft drawdown.

Volume

Since I recommend that we allow the irrigation of 1/2 acre per lot, the volume should be 4.8 af.

IDAHO DEPARTMENT OF WATER RESOURCES

RECEIVED

WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Office Use Only
Inspected by: _____
Twp _____ Rgc _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat. _____ Long. _____

1. DRILLING PERMIT NO. 21-99-E-0027
Other IDWR No. Tag #: D0011016

2. OWNER:
Name: Hal Christensen
Address: 918 Wilshire Court
City: Farmington State: Utah Zip: 84025

3. LOCATION OF WELL by legal description:
N
TWP. 9 North ☒ Or South ☐
Rge. 43 East ☒ Or West ☐
Sec. 11 1/4, NW 1/4, NW 1/4
Gov't Lot _____ County: Fremont
Lat: _____ Long: _____
S
Address of Well Site: Warm River Area
City: _____
(Give at least name of Road + Distance to Road or Landmark)
Lot No. 1 Block No. _____ Subd. Name: North Fork Highlands, Div. 1

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other: _____

5. TYPE OF WORK: check all that apply (Replacement, etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other: _____

6. DRILL METHOD:
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other: _____

7. SEALING PROCEDURES:

SEAL/FILTER PACK			AMOUNT	Method
Material	From	To	Sacks/Pounds	
Bentonite	0	38	800#	Overbore

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Dia	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8"	+2	38	250	Steel	☒	☐	☒	☐
6"	+1.5	360	250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐

Length of Headpipe: _____ Length of Tailpipe: _____

9. PERFORATIONS/SCREENS:

☒ Perforations Method: _____
☐ Screens Screen Type: _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☒	☐
See page 2 under Lithologic Log for perf. info						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
108 ft below ground Artesian Pressure: _____ lb
Depth flow encountered: _____ ft Describe access port or control devices: Well Cap

OCT 07 1999 058334

11. WELL TESTS:
☒ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
40GPM	8	116	4hr

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encountered: 129 ft.

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10	0	18	Top Soil/Pumice		X
	18	38	Soft pumice, Red & Brownish Gray		X
8	38	78	Soft pumice, Red & Brownish Gray		X
	78	129	Med Hard Pumice		X
	129	139	Med Hard Pumice, Light Brown	X	
	139	159	Med Hrd Pumice, w/Brn & Wht Clay		X
	159	179	Pumice w/some hard red rhyolite		X
	179	219	Pumice and Rhyolite		X
	219	245	Pumice & Gray Rhyolite w/white clay	X	
	245	255	Broken gray rhyolite & Pumice		X
	255	259	Pumice w/rhyolite	X	
	259	279	Pumice w/white & brown clay		X
	279	299	Pumice and brown clay		X
	299	339	Pumice & Brown Clay w/Basalt		X
	339	359	Pumice w/broken basalt	X	
	359	379	Broken Basalt	X	
6	379	395	Broken Gray Basalt		X
	395	396	Brown Clay		X
	396	401	Gray Basalt		X
	401	410	Broken Gray Basalt		X
	410	421	Brown & Gray Rhyolite		X
	421	441	Hard Broken Basalt and Rhyolite	X	
	441	451	Hard Fractured Red Rhyolite		X

Completed Depth: 315 Ft. (Measurable)
Date Started: 7/26/99 Completed: 8/14/99

13. DRILLER'S CERTIFICATION:

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm: ANDREW WELL DRILLING SERVICES, INC. Firm: #5
Firm Official: Andrew Christensen Date: 9/22/99
and
Supervisor/Operator: Paul E. Knight Date: 9/22/99
Sign once if Firm Official & Operator

Andrew

IDAHO DEPARTMENT OF WATER RESOURCES

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Other IDWR No. Tag #: D0011016

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058935

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City: Farmington State: Utah Zip: 84025

3. LOCATION OF WELL by legal description:

A 4x4 grid with 'N' above the top row and 'E' to the left of the leftmost column.

TWP. 9 North ☒ Or South ☐
Rge. 43 East ☒ Or West ☐
Sec. 11, 1/4, NW 1/4, NW 1/4
10Acres 40 Acres 160 Acres
Gov't Lot _____ County: Fremont
Lat: : : Long: : : :

S

Address of Well Site: Warm River Area
City: _____

(Give at least name of Road + Distance to Road or Landmark)

Lot No. 1 Block No. Subd. Name: North Fork Highlands, Div. 1

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[illegible]

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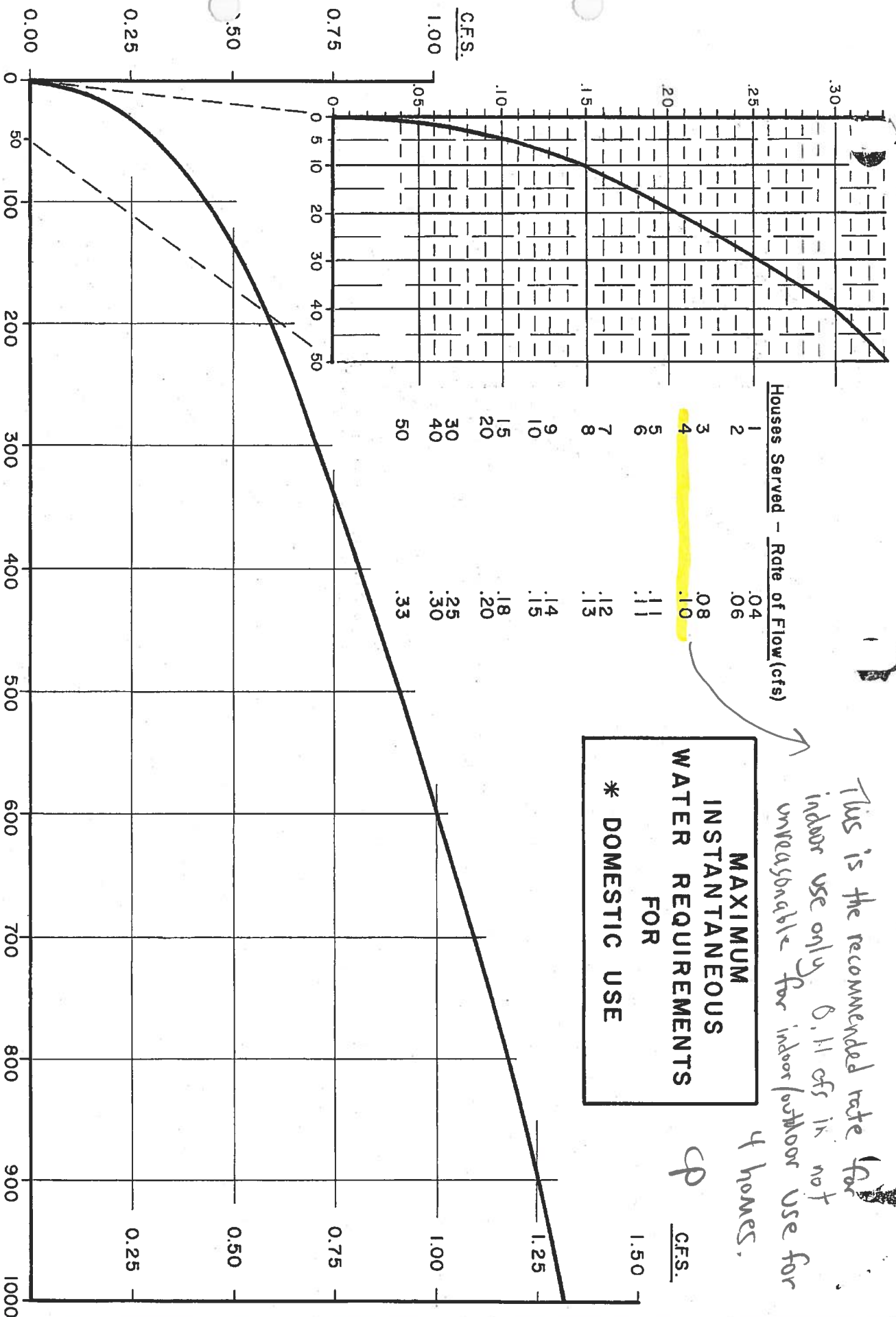
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I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm: ANDREW WELL DRILLING SERVICES, INC. Firm: #5
Firm Official: _____ Date: 9/22/99

Supervisor/Operator: _____ Date: 9/22/99

Sign once if Firm Official & Operator



**MAXIMUM
INSTANTANEOUS
WATER REQUIREMENTS
FOR
* DOMESTIC USE**

4

C.F.S.

houses.

This is the recommended rate for indoor use only. 8.11 cfs is not unreasonable for indoor/outdoor use for 4 homes.

FIG. 1.