

MEMORANDUM

TO: 95-13563

FROM: Daniel A. Nelson, Staff Hydrologist

DATE: March 3, 2016

SUBJECT: Licensing Review Hold

This permit was scheduled for an in-house exam at the state office. I began the review and was ready to proceed with the licensing process until I discovered that permit holders have all filed Coeur D'Alene-Spokane River Basin Adjudication (CSRBA) claims for the exact same uses as described in this permit. The claims filed in the CSRBA are 95-4245 for Mr. Davis, 95-16567 for Mr. and Ms. Williams, and 95-16598 for Mr. and Ms. Jacobs. Whereas this permit has competing claims in the CSRBA, we cannot move forward with licensing until we know what will be decreed to avoid duplication of the recorded water use. This is the standard practice that has been used in the Snake River Basin Adjudication, and I was informed we should continue to follow this practice in the CSRBA.

I have included theoretical calculation spreadsheets and maps with this memo to use proceed with licensing once the CSRBA claims have been decreed.

NENE 1

NWNW 1

Permit 95-13563 -- By Dan Nelson - Field Exam Map

The purple borders show the tax lots. The yellow border show the domestic place of use. The green border is the irrigated ground per the diagram supplied by the owner. The yellow dot is the well location described in the permit.

25

49504 W

30

49503 W

Davis Family Trust Home

Well Location

Fred Harris Home

Mark Williams Home

SENE 1

SWNW 2

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 63-34062
 Reviewer: Dan Nelson
 Date of Review: 2/1/2016

P/D No.:

	Scenario 1	Scenario 2	Scenario 3
PUMP HORSEPOWER	2	7.5	5
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	80	370	117
DISCHARGE PRESSURE	50	50	50
RATE OF FLOW (cfs)	0.06	0.10	0.13
	28	43	59

Average
 0.10
 43.48

The above calculates the formula =
$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.
 No Friction

Examiners Notes:

In Scenario #1, I used the neighbor directly to the south's well driller's report shows a static water level of 70 feet, so I estimated a standard drawdown of 10 feet for a small pump system for a total of 80 feet of lift. This well driller's report says that the well was pumped dry in 2 hrs. The total well depth of the neighbor's well was 164 feet. In Scenario # 2, I used the neighbor's to the north well driller's report that was drilled to 540 feet and had a drawdown of 490 feet with a static water level of 360 feet. In scenario #3, I used the median depth of the well described in scenario #1. I used an average pressure of 50 psi, since most domestic systems operate between 40 and 60 psi. Using the above theoretical calculations, I determined that a diversion rate of 0.10 cfs could be diverted using a fairly large well pump, but all of the well driller's reports suggest that these wells will run dry in a couple of hours with a diversion rate of 0.10. I don't know how deep the well is, or the production capability of the owner's well. However, from the information above, I am assuming that a diversion rate of 0.10 cfs is the maximum that they could pump from ground water in this area without investing in a large well pump and drilling an extremely deep well. Deeper wells also tend to have poorer water quality, so I think limiting them to the 0.10 cfs is reasonable.

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

Office Use Only			
Well ID No. _____			
Inspected by _____			
Twp _____	Rge _____	Sec _____	
1/4 _____	1/4 _____	1/4 _____	
Lat: _____	: _____	Long: _____	: _____

1. WELL TAG NO. D D 0041458
 DRILLING PERMIT NO. 839470
 Water Right or Injection Well No. _____

2. OWNER:
 Name Gregory Wald
 Address 1089 Sleerview Court
 City Hayden State ID Zip 83835

3. LOCATION OF WELL by legal description:
 You must provide address or Lot, Blk, Sub. or Directions to well.
 Twp. 49 North ☒ or South ☐
 Rge. 4 East ☐ or West ☒
 Sec. 25 1/4 NW 1/4 NW 1/4
 Gov't Lot _____ County Kootenai
 Lat: _____ Long: _____
 Address of Well Site 30776 S Ditmore
 City Worley
 (Give at least name of road + Distance to Road or Landmark)
 Lt. _____ Blk. _____ Sub. Name _____

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 Material	From	To	Weight / Volume	Seal Placement Method
<u>Bentonite</u>	<u>0</u>	<u>38</u>	<u>8 SX</u>	<u>Row Around Pipe</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 38'
 Was drive shoe seal tested? ☒ Y ☐ N How? Air

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6"</u>	<u>+2</u>	<u>-38</u>	<u>250</u>	<u>Steel</u>	☒	☐	☒	☐
<u>4"</u>	<u>-12</u>	<u>-490</u>	<u>160</u>	<u>PVC</u>	☐	☒	☐	☐

Length of Headpipe _____ Length of Tailpipe _____
 Packer ☐ Y ☒ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE
 Perforation Method Drill
 Screen Type & Method of Installation

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>-370</u>	<u>-470</u>	<u>3/4"</u>	<u>40</u>	<u>4"</u>	<u>PVC</u>	☐	☒

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
<u>None</u>				

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
360 ft. below ground Artesian pressure _____ lb.
 Depth flow encountered 395 ft. Describe access port or control devices: well cap

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

Yield gal./min.	Drawdown	Pumping Level	Time
<u>6 gpm</u>	<u>Air Lift from 490</u>		

Water Temp. 50° Bottom hole temp. _____
 Water Quality test or comments: Clear

13. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>8</u>	<u>0</u>	<u>8</u>	<u>Clay - tan</u>		
<u>8</u>	<u>26</u>	<u>38</u>	<u>Basalt - Broken</u>		
<u>26</u>	<u>38</u>	<u>293</u>	<u>Basalt - Gray - Hard</u>		
<u>38</u>	<u>293</u>	<u>330</u>	<u>Basalt - Gray - Hard</u>		
<u>293</u>	<u>330</u>	<u>352</u>	<u>Clay - Gray</u>		
<u>330</u>	<u>352</u>	<u>360</u>	<u>Basalt - Gray</u>		
<u>352</u>	<u>360</u>	<u>395</u>	<u>Clay - Gray - Hard w/ Basalt</u>		
<u>360</u>	<u>395</u>	<u>397</u>	<u>Basalt - Gray</u>		
<u>395</u>	<u>397</u>		<u>Basalt - Gray w/ water</u>		
			<u>3 g.p.m.</u>		
<u>397</u>	<u>430</u>		<u>Clay - Yellow</u>		
<u>430</u>	<u>445</u>		<u>Basalt - Gray - Soft</u>		
<u>445</u>	<u>480</u>		<u>Basalt - Red - Gray</u>		
<u>480</u>	<u>482</u>		<u>Basalt - Red - Gray w/ water</u>		
			<u>3 g.p.m.</u>		
<u>482</u>	<u>540</u>		<u>Basalt - Red - Gray</u>		
			<u>Broken</u>		
			<u>Would not stay open</u>		
			<u>Fell in to 490</u>		

RECEIVED
 JUN 28 2006
 IDWR/North

Completed Depth 490 (Measurable)
 Date: Started 5-2-06 Completed 5-9-06

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

Company Name Action Drilling Inc. Firm No. 618
 Principal Driller Alvin Carris Date 6-3-06
 and
 Driller or Operator II _____ Date _____
 Operator I Alvin Carris Date 6-3-06
 Principal Driller and Rig Operator Required.
 Operator I must have signature of Driller/Operator II.

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

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

1. WELL TAG NO. D0013764

DRILLING PERMIT N

Other IDWR No

766845

2. OWNER:

Name **Bill Sutton**

Address 1002 Harvey Road

City Auburn

State WA

Zip 98002

3. LOCATION OF WELL by legal description:

N		Twp 49N	North ☒ or South ☐
Rge 03W		East ☐ or West ☒	
Sec 30		1/4 NW 1/4 SW 1/4	
Gov't Lot		County Kootenai	
Lat		Long	

Address of Well Site: (see next line)

97 South 15 miles Right side of Road

City

Lot Blk

Sub. Name (see next line)

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/Lbs	
Bentonite	0	18	8 sacks	Pour in

Drive Shoe Used? ☐ Y ☒ N Shoe Depth(s)

Drive Shoe Seal Tested? ☐ Y ☒ N How?

8. CASING/LINER

Diam	From	To	Gauge	Material	Casng	Liner	Weld	Thrded
6	1	94	0.250	Steel	☒	☐	☒	☐
4	24	164	0.160	PVC	☐	☒	☐	☐
					☐	☐	☐	☐

Length Headpipe

Length Tailpipe

9. PERFORATIONS/SCREENS

☒ Perforations?

Method Drill

☒ Screens?

Screen Type PVC

From	To	Slot	Nmbr	Diam	Material	Casng	Liner
144	164	.020			PVC	☐	☒
104	144		400	3/8	PVC	☐	☒
						☐	☐

10. STATIC WATER LEVEL or ARTESIAN PRESSURE

70 ft. below ground. Artesian pressure lb.

Depth flow encountered 70 ft. Describe access port or

control devices: Steel cap welded

11. WELL TESTS:

☐ Pump

☐ Bailer

☒ Air

☐ Flowing Artesian

Yield gal./min.	Drawdown	Pump Level	Time
12 GPM	100%	160	2 hrs.

Water Temp. cold

Bottom hole temp. cold

Water Quality test or comments: (below) Depth first Water Encountered 70
cold, no smell

12. LITHOLOGIC LOG (Describe repairs or abandonment)

Bore Diam	From	To	Remarks: Lithology, Water Quality and Temperature	Water	
				Y	N
8	0	12	Fill & basalt boulders	☐	☒
8	12	30	Clay - tan - medium	☐	☒
8	30	50	Clay - dark brown	☐	☒
8	50	58	Sand & silt - brown	☐	☒
6	58	105	Basalt - broken - black - 8 GPM	☒	☐
6	105	115	Basalt - black - hard	☐	☒
6	115	120	Clay - red	☐	☒
6	120	123	Basalt - black - broken	☐	☒
6	123	125	Clay - brown	☐	☒
6	125	150	Basalt & clay - soft	☐	☒
6	150	164	Basalt - black - broken - 4 GPM @ 160'	☒	☐
				☐	☐

RECEIVED
OCT 10 2000
IDWR/North

RECEIVED
OCT 20 2000
Department of Water Resources

Completed Depth

164

(Measurable)

Date: Started

10/3/00

Completed

10/5/00

13. DRILLERS CERTIFICATION

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

Firm United Drilling Inc

Firm No 414

Name

Firm Official

Date 10/5/00

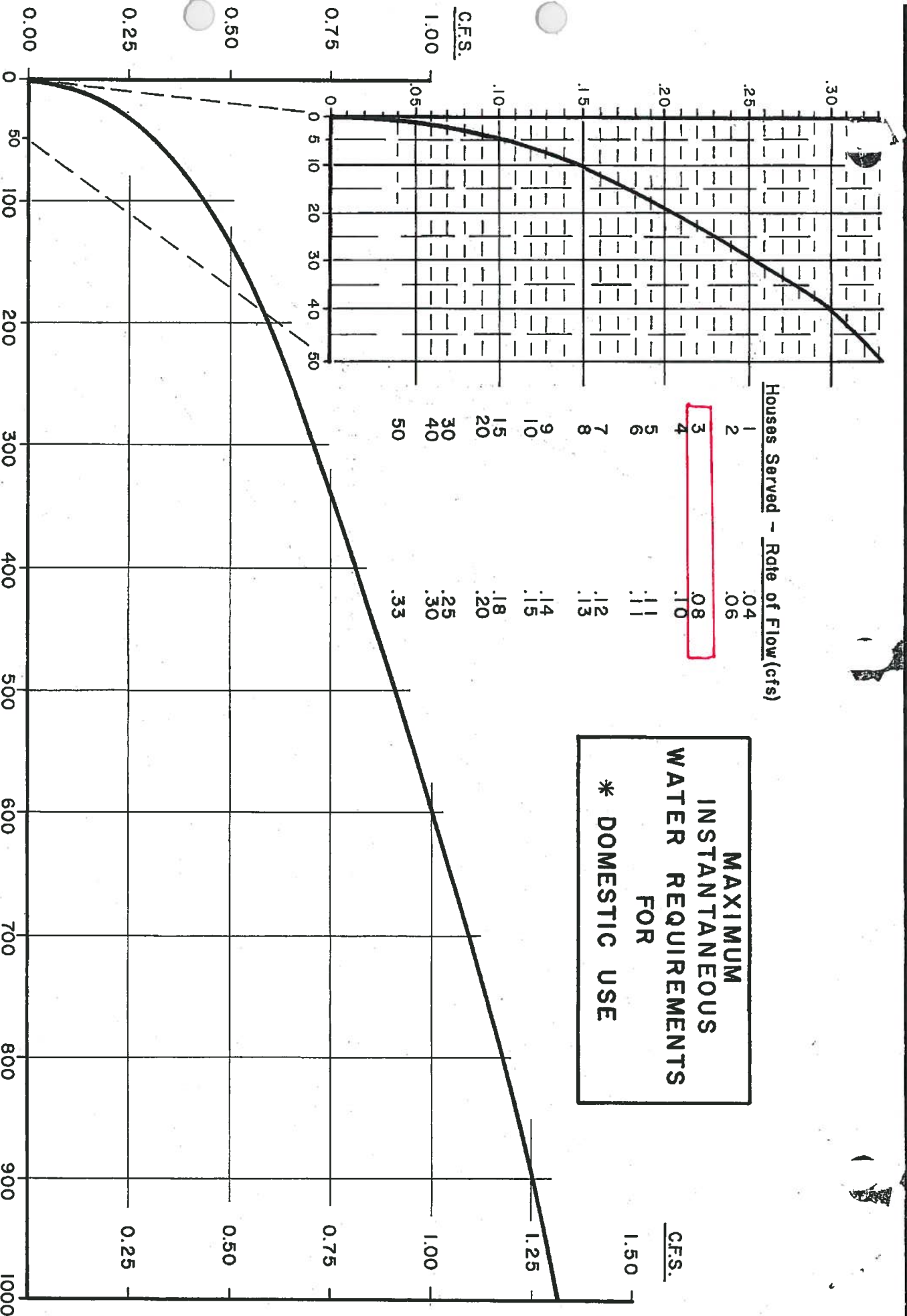
and

Supervisor or Operator Curtis S. Hammond

Date 10/5/00

FORWARD WHITE COPY TO WATER RESOURCES

49N 3W 30



MAXIMUM
INSTANTANEOUS
WATER REQUIREMENTS
FOR
* DOMESTIC USE

FIG. 1.

* From Community Water Systems Source Book, J. Ameen, 1977, Technical Proceedings, North Carolina.)

Nelson, Dan

From: Nelson, Dan
Sent: Thursday, March 03, 2016 9:58 AM
To: 'Mark Williams'
Subject: Permit 95-13563

Dear Mr. Williams,

I received your information, and began working on licensing permit 95-13563. During this review, I discovered that Mr. and Ms. Jacobs, Mr. Davis, and you and Ms. Williams have all filed a claim to a water right in the Coeur D'Alene-Spokane River Basin Adjudication (CSRBA) for the same properties from the same wells. Unfortunately, this prevents us from licensing permit 95-13563 until we know what is going to be allowed by the courts in the CSRBA. To avoid duplicating water right uses, this permit will be placed on hold until the partial decree has been entered. Once the CSRBA decrees have been issued, we can then use this permit to cover any additional use that was not allowed under the decreed rights. This doesn't prevent you from diverting water under this permit, we just can't complete the licensing process for this permit until we know exactly what will be decreed for these same properties.

Unfortunately, I don't know when the CSRBA will decree your claims, so it could be some time before we can issue the license for this permit. If you have any questions, please don't hesitate to contact me.

Thank you for your time and effort, and I will keep the information that you have sent me in the file for further use.

Daniel Nelson
Staff Hydrologist
Idaho Department of Water Resources
Telephone (208) 287-4856
Fax (208) 287-6700 (attn: Dan Nelson)