

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONPermit No: ~~95-8687~~ 95-8867

Exam Date: 10/26/2007

1. Current Owner: AVONDALE IRRIGATION DIST
PO BOX 81
HAYDEN LAKE ID 83835
(208)772-5657
2. Accompanied by: Chad Coy
Phone No: (208)772.5657, (208)704.5726
Address: Same As Above
Relationship to Permit Holder: Manager

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. ~~Other~~ water rights with the same place of use: 95-7558, 95-8144, 95-8321, 95-8909
95-465, 95-465A, 95-465B, 95-8774, 95-8867,
2. ~~Other~~ water rights with the same point of diversion: 95-8774, ~~95-8867~~, 95-8909, 95-7558
95-8144, 95-8321, 95-8867

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER

SW1/4SW1/4

Sec. 24, Twp 51N, Rge 04W, B.M.

KOOTENAI County

Method of Determination: USGS 7.5' Quadrangles 'Coeur d'Alene,' 'Hayden,'
Garmin GPS Receiver

2.

PLACE OF USE: WITHIN SERVICE AREA OF AVONDALE AIRRIGATION DISTRICT

Twp	Rge	Sec	NE				NW				SW				SE				Totals
Permit No: 95-8687			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Page 2

Method of Determination:

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

95-8867

4.

Well or DiversionPump Serial No. or Discharge

<u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Size</u>
<u>Finucane</u>		<u>75</u>			
<u>Miles #1</u>	<u>Westinghouse</u>	<u>350</u>	<u>2S-77</u>	<u>Peerless</u>	<u>76F66724 (Motor) #20954</u>
<u>Miles #2</u>	<u>U.S.E.M.</u>	<u>200</u>	<u>AA-71</u>	<u>Peerless</u>	
<u>Miles #3</u>	<u>Westinghouse</u>	<u>350</u>	<u>1F-77</u>	<u>Peerless</u>	<u>USW 1</u>
<u>Airport #1</u>	<u>GE</u>	<u>200</u>			<u>5K44DP (Partly Visible)</u>
<u>Airport #2</u>	<u>U.S.E.M.</u>	<u>250</u>			<u>7250/POIN 322DR067R/1</u>

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
<u>Watch</u>	<u>Wrist</u>	<u>Remington</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
<u>Flowmeters</u>	<u>(SEE BELOW)</u>					

2. Measurements:

<u>Water</u>	<u>Right</u>	<u>No.</u>	<u>95-</u>	<u>Finucane Well</u>		
		<u>HP</u>	<u>H in feet</u>	<u>Efficiency as a decimal</u>	<u>Pumping lift in feet</u>	<u>System pressure in PSI</u>
<u>Q =</u>	<u>HP*8.8*Eff/H</u>	<u>75</u>	<u>406.4628</u>	<u>0.819</u>	<u>270</u>	<u>59</u>
<u>Q =</u>	<u>1.332</u>	<u>CFS</u>	<u>=</u>	<u>597.843 GPM</u>		

~~95-8867~~

Flowmeter reading 500 GPM = 1.1 CFS

<u>Water</u>	<u>Right</u>	<u>No.</u>	<u>95-</u>	<u>Miles AVE Well 1</u>		
		<u>HP</u>	<u>H in feet</u>	<u>Efficiency as a decimal</u>	<u>Pumping lift in feet</u>	<u>System pressure in PSI</u>
<u>Q =</u>	<u>HP*8.8*Eff/H</u>	<u>350</u>	<u>601.2925</u>	<u>.85</u>	<u>370</u>	<u>100</u>
<u>Q =</u>	<u>4.361</u>	<u>CFS</u>	<u>=</u>	<u>1957.353 GPM</u>		

Flowmeter 913958.0
913957.0 $1.0 \times 1000 = 1000 \text{ Gallons/min} = 1000 \text{ GPM} = 2.22 \text{ CFS}$

<u>Water</u>	<u>Right</u>	<u>No.</u>	<u>95-</u>	<u>Miles AVE Well 2</u>		
		<u>HP</u>	<u>H in feet</u>	<u>Efficiency as a decimal</u>	<u>Pumping lift in feet</u>	<u>System pressure in PSI</u>
<u>Q =</u>	<u>HP*8.8*Eff/H</u>	<u>200</u>	<u>571.2925</u>	<u>.85</u>	<u>340</u>	<u>100</u>
<u>Q =</u>	<u>2.623</u>	<u>CFS</u>	<u>=</u>	<u>177.284 GPM</u>		

Flowmeter 913959.0
913958.0 $1.0 \times 1000 = 1000 \text{ Gallons/min} = 1000 \text{ GPM} = 2.22 \text{ CFS}$

<u>Water</u>	<u>Right</u>	<u>No.</u>	<u>95-</u>	<u>Miles AVE Well 3</u>		
		<u>HP</u>	<u>H in feet</u>	<u>Efficiency as a decimal</u>	<u>Pumping lift in feet</u>	<u>System pressure in PSI</u>
<u>Q =</u>	<u>HP*8.8*Eff/H</u>	<u>350</u>		<u>.85</u>	<u>340</u>	<u>100</u>
<u>Q =</u>	<u>4.590</u>	<u>CFS</u>	<u>=</u>	<u>2060.135 GPM</u>		

Flowmeter 913960.0
913959.0 $1.0 \times 1000 \text{ Gallons/min} = 1000 \text{ GPM} = 2.22 \text{ CFS}$

95-8867

Water	Right	No.	95-	Airport Well 1	95-8774	
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	200	575.292517	.9	344	100
Q =	2.758	CFS	=	1237.876	GPM	

Flowmeter showing 1250 - 1275 GPM in real time

$$1275 \text{ GPM} = 2.84 \text{ CFS}$$

Water	Right	No.	95-	Airport Well 2	95-8909	
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	250	581.292517	0.9	350	100
Q =	3.412	CFS	=	1531.412	GPM	

Acuwell International Flowmeter 227,387,000
227,384,000

$$3,000 \div 2 \text{ MIN} = 1500 \text{ GPM}$$

$$1500 \text{ GPM} = 3.34 \text{ CFS}$$

E. FLOW CALCULATIONS

Measured Method:

(See Above)

Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses:

~~$$(2.0 \text{ CFS}) \times (365) \times (1.9835) = 1448.0 \text{ AF}$$~~

water Right began as Municipal
No Maximum Diversion Volume

95-8867

G. NARRATIVE/REMARKS/COMMENTS

Well logs are with W.R 95-8867 Field Exam. Flow calculations for POD well in NWSWSW, S.24, T51N, R04W indicate 500 GPM. GPS Coordinates indicate this well is located just inside the SW SW T51NR04W instead of the NWSW T51NR04W indicated on Permit 95-8867.

Avondale Irrigation District built a pumping station on Hayden Lake to withdraw water from the Lake. It is no longer in use and has not been operated for this exam and is covered by separate Water Rights.

District facilities include a 50,000 Gallon reservoir located on a hill immediately West of the Hayden Lake pumping station and a main distribution line which that runs West along Miles Avenue, past the three District wells at the Miles Avenue site, to the Coeur d Alene Airport (Pappy Boyington Field). Two District operated wells are located at the Airport on either side of a square concrete reservoir that was formerly operated by Kootenai County. Lines connect to the Finucane well (operates nearly continuously) and to a large new 675,000 Gallon reservoir in the Whispering Pines area.

Amendment(s) are to add all District wells as PODs (6 wells total) and correct well locations. The District has 21.12 CFS of groundwater water right diversion capacity. The District will have licensed simultaneous diversion capacity of 13.94 CFS upon completion of amendments at licensing.

The maximum diversion capacity for water rights 95-8687, 95-8774, and 95-8909 at licensing was calculated using (maximum diversion rate CFS) x (365 days) x (1.9835). Water Right 95-8867 began as a municipal only permit.

The combined use condition for 95-8687, 95-8774, 95-8867 and 95-8909 was determined by using the sum of the measured CFS for each right plus the CFS from previously licensed rights 95-7558, 95-8321, and 95-8144. The total measured CFS from these rights is 13.94 CFS. The combined use maximum diversion volume was determined by $(13.94 \text{ CFS}) \times (365 \text{ days}) \times (1.9835) = 10092.2 \text{ AF}$

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
MUNICIPAL	1/01 to 12/31	2.0 ~~4.316~~ CFS	
		Totals: 2.0	1310 CFS

2. Recommended Amendments

☒ Change P.D. as reflected above ☒ Add P.D. as reflected above ☐ None
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name

Sharon M. Mager

Date

3/3/09

Reviewer

Keith Frankel

Date

3/4/09

95-8867

INSTALLATION REPORT

DICKERSON PUMP & IRRIGATION CO., INC.
SPOKANE, WASHINGTON

DATE 6/29/70 1970

WELL DATA

*FINUCANE GOV'T
WAY WELL*

CUSTOMER'S NAME Lockhaven Farms

WELL LOCATION _____

WELL NO. _____

Depth 298' 6" Where } Casing Top? XX

From } Ground Level? _____

Date Drilled _____ Standing Water Level 246'

Size 12" I D Amount of Casing All

Driller Dishman

Size Reductions and Where Well Screen
at 273'

ADDRESS _____

Pump House XX Fit. Open Other

WATER: Clear _____ Sandy _____ Rusty _____

Other _____

OTHER FACTS: _____

Bowl Lat 1"

Regal Foil _____

CREW Garrison - Chambers

OUR HOIST No. 5 CRANE BY _____

NEW PUMP DATA

Make Peerless Model _____

Type Turbine Serial No. 222704

MOTOR: Make U.S. H.P. 75 Phase 3 Speed 1800

3-2842-01-270D

Model _____ Serial No. 32025156

Frame 365 TP Amps 193.6/91.8 Volts 440/220 Ratchet? Yes

Base Type 6x8x16.5 Set On 9" Ch Grouted? Yes

Tank Size _____ Switch Set _____ Where? _____

Size of Shaft, Tube or Cable 1.5" Ft. 265

Size of Drop Pipe or Column 6" Ft. 265'

Unit Type 10 MA No. Stages 12

Length of Unit 9' Tailpipe: Ft. _____ Size _____

Strainer Size 6" Type Cone Length 1' TOTAL SETTING 275'

Type Lube: Auto _____ Man. X Oil _____ Water X

Probe Control Setting: Upper _____ Color _____

(Ft. from top of casing) Lower _____ Color _____

Air Line Length 265' Size 3/4"

STARTER: Make _____ Size _____

Heater Size _____ Amps _____ Fuse Type _____ Size _____

OLD PUMP & REPAIR PUMP DATA

Make _____ Model _____

Type _____ Serial No. _____

MOTOR: Make _____ H.P. _____ Phase _____ Speed _____

Model _____ Serial No. _____

Frame _____ Amps _____ Volts _____ Ratchet? _____

Base Type _____ Set On _____ Grouted? _____

Tank Size _____ Switch Set _____ Where? _____

Size of Shaft, Tube or Cable _____ Ft. _____

Size of Drop Pipe or Column _____ Ft. _____

Unit Type _____ No. Stages _____

Length of Unit _____ Tailpipe: Ft. _____ Size _____

Strainer Size _____ Type _____ Length _____ TOTAL SETTING _____

Type Lube: Auto _____ Man. _____ Oil _____ Water _____

Probe Control Setting: Upper _____ Color _____

(Ft. from top of casing) Lower _____ Color _____

Air Line Length _____ Size _____

STARTER: Make _____ Size _____

Heater Size _____ Amps _____ Fuse Type _____ Size _____

Date Original Installation _____ By _____

JUL 16 1971

See "Remarks" other side

95-8867

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

JUN 8 1977

Department of Water Resources
Northern District Office

Miles
= 1

1. WELL OWNER

Name Aron Lake Irrigation Dist.

Address Hwy 100 E. Aron Lake Id.

Owner's Permit No. 95-7558 WR

2. NATURE OF WORK 95-77-N-80

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Other specify type

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 16 inches Total depth 417 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>.775</u> inches	<u>16.25</u> inches	<u>4"</u>	<u>320</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☒ Yes ☐ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ No

Manufacturer's name UOP Johnson

Type Shanklin Steel Model No. 304H

Diameter 2 1/2 inch Slot size 30 Set from 280 feet to 385 feet

Diameter 2 1/2 inch Slot size 10 Set from 385 feet to 417 feet

5' of 1/2" sand packing below screen bottom 10' 4" in "OD"

Gravel packed? ☐ Yes ☐ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface test depth 40 Material used in seal: ☒ Cement grout ☐ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.

Subdivision Name _____

Lot No. _____ Block No. _____

County Kootenai

NW 1/4 Sec 14 T. 51 N. R. 4 WR

7. WATER LEVEL

Static water level 292 feet below land surface

Flowing? ☐ Yes ☐ No G.P.M. flow _____

Temperature _____ ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☒ Pump ☐ Bailor ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>1000</u>	<u>14'</u>	<u>4</u>
_____	_____	_____
_____	_____	_____

9. LITHOLOGIC LOG

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
<u>22</u>	<u>0</u>	<u>25</u>	<u>Dark tan soil</u>		/
<u>22</u>	<u>1</u>	<u>20</u>	<u>Coarse sand w/ pebbles</u>		/
<u>16</u>	<u>20</u>	<u>51</u>	<u>Coarse sand fine</u>		/
<u>16</u>	<u>51</u>	<u>704</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>704</u>	<u>799</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>799</u>	<u>812</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>812</u>	<u>891</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>891</u>	<u>892</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>892</u>	<u>908</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>908</u>	<u>914</u>	<u>Sand & fine gravel</u>		/
<u>16</u>	<u>914</u>	<u>918</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>918</u>	<u>935</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>935</u>	<u>936</u>	<u>Coarse sand fine to med</u>		/
<u>16</u>	<u>936</u>	<u>978</u>	<u>Sand coarse & some gravel</u>		/
<u>16</u>	<u>978</u>	<u>979</u>	<u>Sand & fine gravel</u>		/
<u>16</u>	<u>979</u>	<u>982</u>	<u>Sand & fine gravel</u>		/
<u>16</u>	<u>982</u>	<u>409</u>	<u>Sand & fine gravel</u>		/
<u>16</u>	<u>409</u>	<u>414</u>	<u>Sand coarse & gravel</u>		/
<u>16</u>	<u>414</u>	<u>416</u>	<u>Sand fine</u>		/
<u>16</u>	<u>416</u>	<u>417</u>	<u>Clay clay</u>		/

10. Work started Apr 28 - 74 finished Jun 27 - 1977

11. DRILLERS CERTIFICATION

Firm Name E.H. Hakman Drilling Co Firm No. 105

Address 601 S. Pine Rd Date 4/16/77

Signed by (Firm Official) [Signature]

Operator [Signature]

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Resources

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

RECEIVED
JUN 6 1977

1. WELL OWNER

Name Wendell Engstrom Dist.
Address Hyden Ave. Hayden Lake, ID
Owner's Permit No. 95-7558 WR

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Other (specify type)
☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 30 inches Total depth 388 feet
Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>37.5</u> inches	<u>30" x 40"</u> inches	<u>4</u> feet	<u>340</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☒ Yes ☐ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

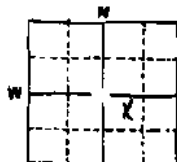
Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ No
Manufacturer's name Wap Johnson
Type Stainless Steel Model No. 304
Diameter 30 inch Set from 283 feet to 353 feet
Diameter 24 inch Set from 353 feet to 388 feet
5' dia. 18" o.d. casing with platform bottom.
10' of riser with X Pack on top of screen.
Gravel packed? ☐ Yes ☒ No Size of gravel _____
Placed from _____ feet to _____ feet

Surface seal depth 40 Material used in seal ☒ Cement grout
☒ Padding clay ☐ Wall cuttings
Sealing pressure used ☐ Slurry pit ☒ Temporary surface casing
☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County Kootenai

NW 1/4 SE 1/4 Sec. 14 T. 51 N. R. 4 E/W

7. WATER LEVEL

Static water level 289 feet below land surface
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>3700</u>	<u>9</u>	<u>1</u>

9. LITHOLOGIC LOG

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
<u>34</u>	<u>0</u>	<u>1</u>	<u>TOP SOIL</u>		
<u>1</u>	<u>1</u>	<u>10</u>	<u>Gravel & sand & silt</u>		
<u>16</u>	<u>10</u>	<u>18</u>	<u>Gravel & sand & silt</u>		
<u>24</u>	<u>18</u>	<u>27</u>	<u>Gravel & sand & silt</u>		
<u>30</u>	<u>27</u>	<u>34</u>	<u>Gravel & sand & silt</u>		
<u>34</u>	<u>34</u>	<u>41</u>	<u>Gravel & sand & silt</u>		
<u>41</u>	<u>41</u>	<u>47</u>	<u>Gravel & sand & silt</u>		
<u>47</u>	<u>47</u>	<u>57</u>	<u>Gravel & sand & silt</u>		
<u>57</u>	<u>57</u>	<u>61</u>	<u>Gravel & sand & silt</u>		
<u>61</u>	<u>61</u>	<u>67</u>	<u>Gravel & sand & silt</u>		
<u>67</u>	<u>67</u>	<u>77</u>	<u>Gravel & sand & silt</u>		
<u>77</u>	<u>77</u>	<u>89</u>	<u>Gravel & sand & silt</u>		
<u>89</u>	<u>89</u>	<u>91</u>	<u>Gravel & sand & silt</u>		
<u>91</u>	<u>91</u>	<u>94</u>	<u>Gravel & sand & silt</u>		
<u>94</u>	<u>94</u>	<u>97</u>	<u>Gravel & sand & silt</u>		
<u>97</u>	<u>97</u>	<u>98</u>	<u>Gravel & sand & silt</u>		

012393

10.

Work started Nov 28-77 finished Jan 31-77

11. DRILLER'S CERTIFICATION

Firm Name E.D. Holman Drilling Co. Firm No. 105

Address 401 S. River Rd. Hayden, ID

Signed by (Firm Official) [Signature]

and [Signature]

(Operator) DOD KACH

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Resources

ENT'D

RECEIVED
JUN 8 1977

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

Department of Water Resources
Bozeman District Office

1. WELL OWNER

Name Arundale Irrigation Dist. Inc.
Address Hayden Ave. Hayden Lake Idaho
Owner's Permit No. 95-7558 W R

7. WATER LEVEL

Static water level 293 feet below land surface
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

2. NATURE OF WORK

95-77-N-78

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

8. WELL TEST DATA

☐ Pump ☐ Bailor ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>7700</u>	<u>12</u>	<u>7</u>

3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Other (specify type)
☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

9. LITHOLOGIC LOG

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
<u>24</u>	<u>0</u>	<u>1</u>	<u>Top Soil</u>		
	<u>1</u>	<u>5</u>	<u>Gravel & Sand Silt</u>		
	<u>5</u>	<u>8.0</u>	<u>Sand & Gravel & Silt</u>		
<u>24</u>	<u>20</u>	<u>22</u>	<u>Sand</u>		
<u>20</u>	<u>22</u>	<u>37</u>	<u>Sand & Gravel</u>		
	<u>37</u>	<u>54</u>	<u>Gravel 4" max</u>		
	<u>54</u>	<u>84</u>	<u>Gravel 4" max</u>		
	<u>84</u>	<u>114</u>	<u>Gravel 4" max</u>		
	<u>114</u>	<u>148</u>	<u>Gravel</u>		
	<u>148</u>	<u>266</u>	<u>Gravel & Sand</u>		
	<u>266</u>	<u>283</u>	<u>Gravel & Sand & Gravel</u>		
	<u>283</u>	<u>305</u>	<u>Sand & Gravel</u>		
	<u>305</u>	<u>348</u>	<u>Sand & Gravel</u>		
	<u>348</u>	<u>444</u>	<u>Sand & Gravel</u>		
	<u>444</u>	<u>548</u>	<u>Sand & Gravel</u>		
	<u>548</u>	<u>644</u>	<u>Gravel 1 1/2" max</u>		
	<u>644</u>	<u>766</u>	<u>Gravel 1 1/2" max</u>		
	<u>766</u>	<u>868</u>	<u>Gravel & Sand</u>		
	<u>868</u>	<u>968</u>	<u>Gravel 4" max</u>		

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 20 inches Total depth 968 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>3.75</u> inches	<u>20</u> inches	<u>4</u> feet	<u>340</u> feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☒ Yes ☐ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number _____ From _____ To _____

_____ perforations _____ feet _____ feet

_____ perforations _____ feet _____ feet

_____ perforations _____ feet _____ feet

Well screen installed? ☒ Yes ☐ No

Manufacturer's name Waf Johnson

Type Stainless Steel Model No. 304

Diameter 20 inch size 20 Set from 345 feet to 355 feet

Diameter 20 inch size 20 Set from 355 feet to 968 feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 20 Material used in seal ☒ Cement grout

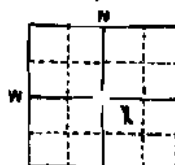
☒ Pudding clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing

☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County Kootenai

NW x SE x Sec 14 T. 51 N. R. 4 E/W

10.

Work started 2/4/77 finished 3/21/77

11. DRILLERS CERTIFICATION

Firm Name E. H. Johnson Drilling Co. Firm No. 125

Address 601 S. Main St. Hayden, Idaho Date 2/4/77

Signed by (Firm Official) E. H. Johnson

and A. E. Johnson

(Operator) A. E. Johnson

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

miles
#3

012392

95-8867

RECEIVED

FEB 07 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESUSE TYPEWRITER OR
BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

Airport

1. WELL OWNER

Name AYONDALE IRRIGATION DIST
Address P.O. Box 81
HAIDEN LAKE ID. 83835
Owner's Permit No. 95-93-C-0038000
WR # 95-08777

7. WATER LEVEL

Static water level 301 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow NOT TESTED
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 47 °F. Quality Good
Describe artesian or temperature zones below _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as
materials, plug depths, etc. in lithologic log)

8. WELL TEST DATA

TO BE TESTED BY OTHERS
☐ Pump ☐ Bailor ☐ Air ☐ Other _____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

9. LITHOLOGIC LOG

89563

Bore Diam.	Depth		Material	Water	
	From	To		Yes	No
24	0	20	GRAVEL 3" MINUS		X
16	20	98	GRAVEL 3" MINUS		X
16	98	121	GRAVEL + SAND CEMENTED		X
16	121	185	GRAVEL + SAND 3" MINUS		X
16	185	214	GRAVEL + SAND 1" MINUS		X
16	214	247	GRAVEL + SAND 2" MINUS		X
16	247	283	GRAVEL + SAND 1" MINUS		X
16	283	308	FINE SAND		X
16	308	382	GRAVEL + SAND 1" MINUS	X	

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____
Thickness _____ Diameter _____ From _____ To _____
Inches _____ inches _____ feet _____ feet
Inches _____ inches _____ feet _____ feet
Inches _____ inches _____ feet _____ feet
Inches _____ inches _____ feet _____ feetWas casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches
Number _____ From _____ To __________ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feetWell screen installed? ☒ Yes ☐ No
Manufacturer's name JOHNSONType STAINLESS STEEL Model No. TELESCOPEDiameter 16 Slot size 1/8" Set from 342 feet to 382 feet

Diameter _____ Slot size _____ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ feet

Placed from _____ feet to _____ feet

Surface seal depth 20 FT Material used in seal: ☒ Cement grout
☐ Bentonite ☐ Pudding clay ☐ _____Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☐ Overbore to seal depth ☐ Welded ☐ Solvent
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent
Weld _____Describe access port 2" pipe + 2" plug

6. LOCATION OF WELL

Sketch map location must agree with written location.

N

W E

S

Subdivision Name _____

Lot No. _____ Block No. _____

County KOOTENAINE 1/4 NE 1/4 Sec. 15, T. 51 N., R. 4 E

10.

Work started OCT 15/93 finished DEC 23/93

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were
complied with at the time the rig was removed.Firm Name HOLMAN DRILLING CORP Firm No. 108Address E3410 9TH AVE Date 1/14/94
SPOKANE WA 99202Signed by (Firm Official) Arnold E. Holmanand
(Operator) Shirley

Form 238 7
9/87

RECEIVED

APR 22 1996

REGION
IDWRSTATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

754915

USE TYPEWRITER OR
BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name AVONDALE IRRIGATION DISTRICTAddress P.O. BOX 81 HAYDEN LAKE ID.
83835-0081Owner's Permit No. 95-08909
95-96-N-3

7. WATER LEVEL

Static water level 303 feet below land surface.Flowing? ☐ Yes ☒ No G.P.M. flow _____

Artesian closed-in pressure _____ p.s.i.

Controlled by: ☐ Valve ☐ Cap ☐ PlugTemperature 48 °F. Quality GOOD

Describe aeration or temperature zones below

2. NATURE OF WORK

- ☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

8. WELL TEST DATA N/A☐ Pump ☐ Bailor ☐ Air ☐ Other _____

Discharge G.P.M.

Pumping Level

Hours Pumped

NO TEST MADE

3. PROPOSED USE

- ☐ Domestic ☐ Irrigation ☐ Test ☒ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

- ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
<u>375</u> inches	<u>16</u> inches	<u>4</u> feet	<u>350</u> feet
<u>375</u> inches	<u>14</u> inches	<u>348</u> feet	<u>350</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ NoWas a packer or seal used? ☒ Yes ☐ NoPerforated? ☐ Yes ☒ NoHow perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ NoManufacturer's name HALLIBURTONType STAINLESS STEEL Model No. TELESCOPEDiameter 16 Slot size 100 Set from 350 feet to 355 feetDiameter 16 Slot size 150 Set from 355 feet to 390 feetGravel packed? ☐ Yes ☒ No ☐ Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 20 FT Material used in seal: ☒ Cement grout☐ Bentonite ☐ Puddling clay ☐ _____Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing☐ Overbore to seal depthMethod of joining casing: ☐ Threaded ☒ Welded ☐ Solvent

Weld

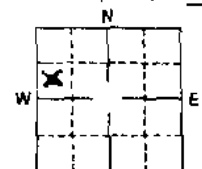
☐ Cemented between strataDescribe access port 2" PIPE WITH THREADED CAP

10.

Work started 2-19-96 finished April 9-96

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County MONTANASW 1/4 NW 1/4 Sec. 15, T. 51 N, R. 4 E

11. DRILLERS CERTIFICATION

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

Firm Name HOLMAN DRILL CORP Firm No. 108Address 3410 E 9TH AVE
SPokane WA 99202 Date 4-17-96Signed by (Firm Official) Arnold E. Holman

and

Shirley Phoney

USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT

95-88167

Site Provided by...
governmax.com T1.14

Parcel

Parcel Number
1 of 1

Property Info**Parcel**

Print View

Parcel Map →

Searches

Address

Parcel Number

Owner

AIN

Functions

Home

Department Index

Assessor Home

Treasurer Home

Welcome Page

Login / Logout

Property Search

Printing Parcel Maps

Help

Contact Us

Subscriptions

Treasurer Search

Parcel Number

H00000245800

AIN

206974

Situs Address

8410 N GOVERNMENT WAY, HAYDEN

Current Total Value

\$99,150

Owner Information

Owner Name

AVONDALE IRRIGATION DISTRICT

Owner Address

PO BOX 81
HAYDEN LAKE ID 83835

Transfer Date

Location / Description

Tax Authority Group

004000

Legal Desc.

TX #17151 [IN W2-SW, WELL SITE]
EXEMPT HAYDEN URD BASE YEAR
2005 24 51N 04W

Situs Address

8410 N GOVERNMENT WAY, HAYDEN

Acreage

.9180

Parcel Type

Property Class Code

541- Imp res lot/tract in city

Neighborhood Code

3290 AVONDALE IRRIGATED TRACTS

Assessment Information

Appraisal Date

01-01- Current Year - 2008
2008

Prior Year - 2007

Market Value Land

\$93,600 Homeowners Eligible Amt Land

\$0 Homeowners Eligible Amt Land

\$0

95-8867



95-08867

CD



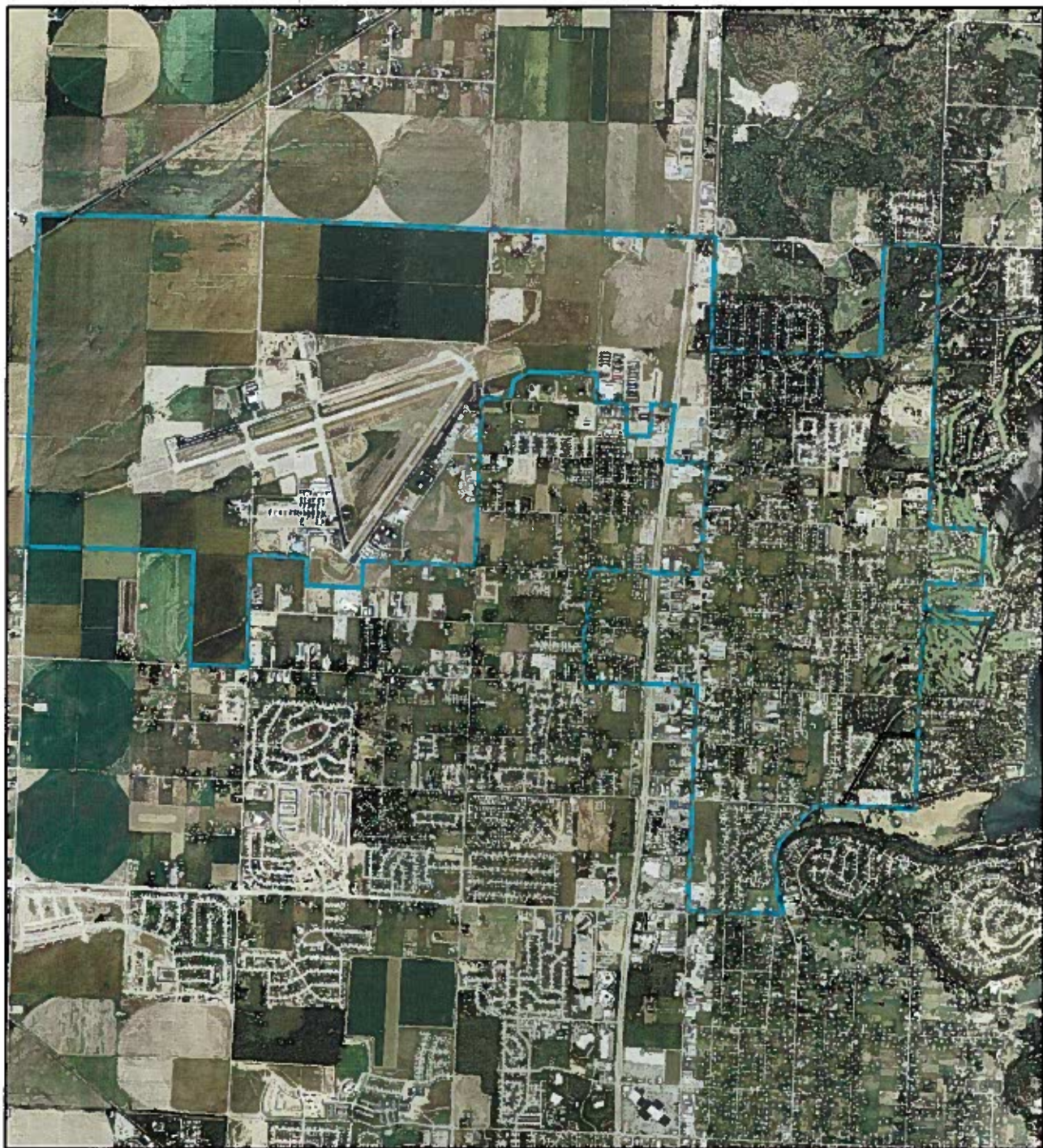
CD



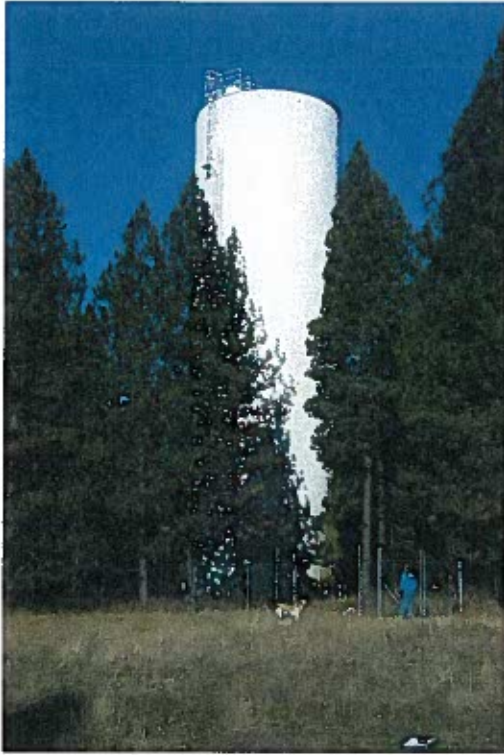
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CD

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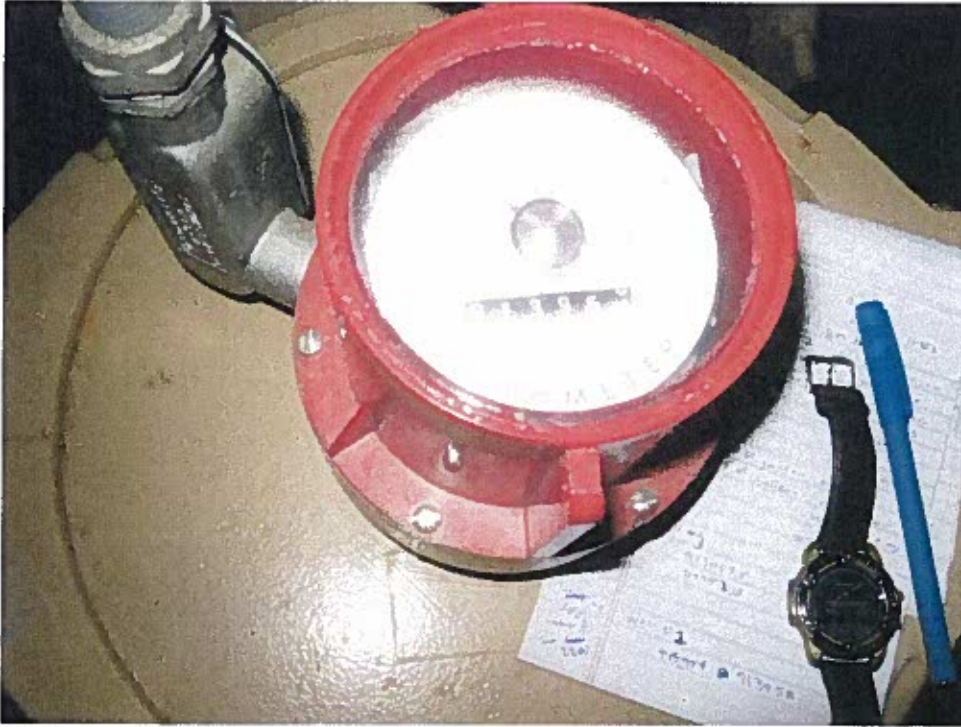


New Avondale Reservoir



Miles AVE Well Site Control BLDG

95-8867

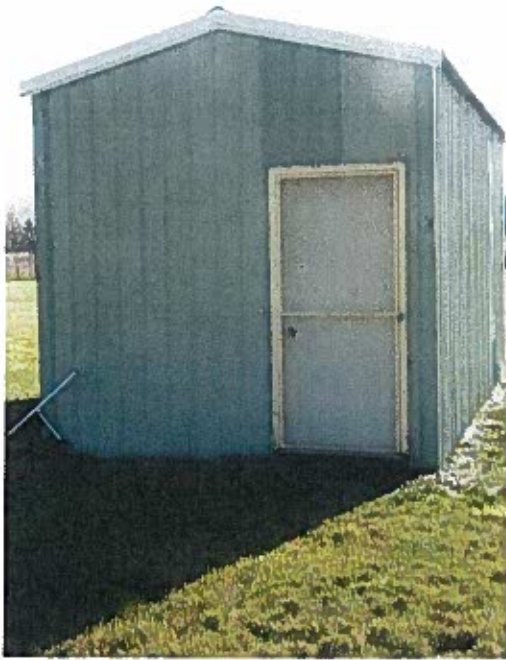


Miles Control BLDG Flowmeter Wells 1-3

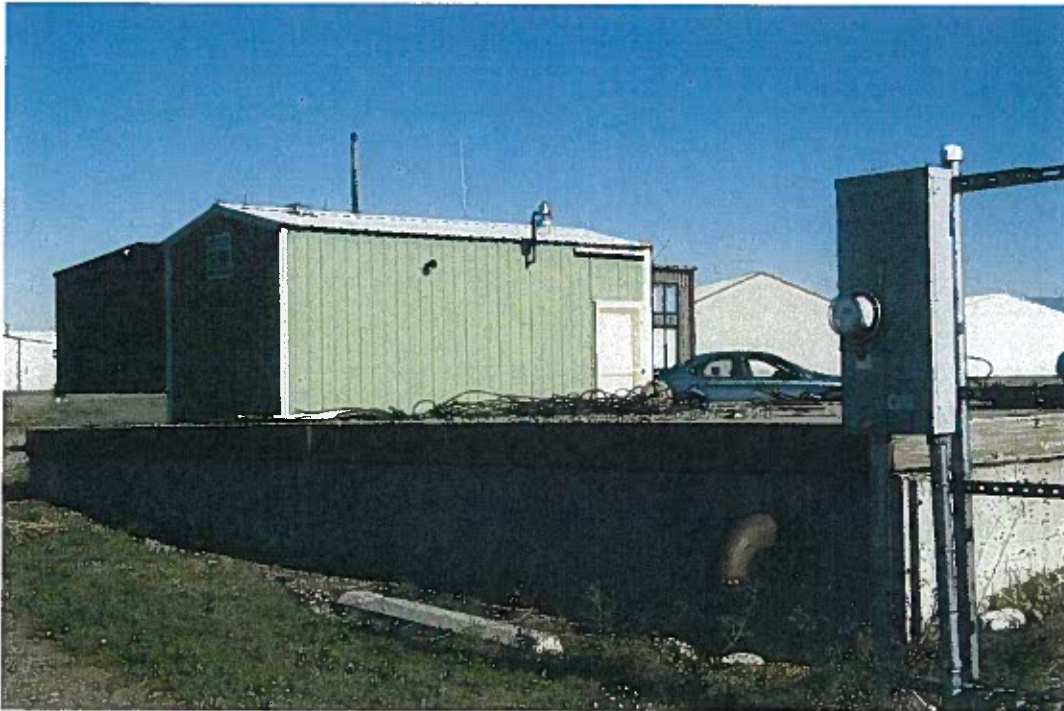


Miles AVE Baldor 3 HP Booster Pump

95-8867



Well 3 Miles AVE



Airport Well 1, POU & Unused Reservoir

95-8867



Airport Well 2 Flowmeter



Finucane 75 HP Well Interior

95-8867

from 2005

95-8867 Field Exam

#1 65-80 psi

80 psi ↔

1300 gal/min.

G.E. Model

Code G

Model 5K445DP6005D

No. NH632020

Volts 460

Amp 236

LOWER END

95BC0213

BRG AFBMA

Upper

235A2534AAD1

95-8867

Peerless

Serial 9360025

Model 10x10x16.5

RPM 1760

GPM 1300

Dec. 24

LLA-VAL CO

Lat. # CSM 11-A2-2

Volt c/c. 115/60

Amp. 5.1/.575

Peerless discharge

3x8x16.5

Serial 222704

100 PSI 95-110

45-8867

Ho 110 shaft 75 hp
TYPE R4

Model R-2842-01-270-D
R. 2025156

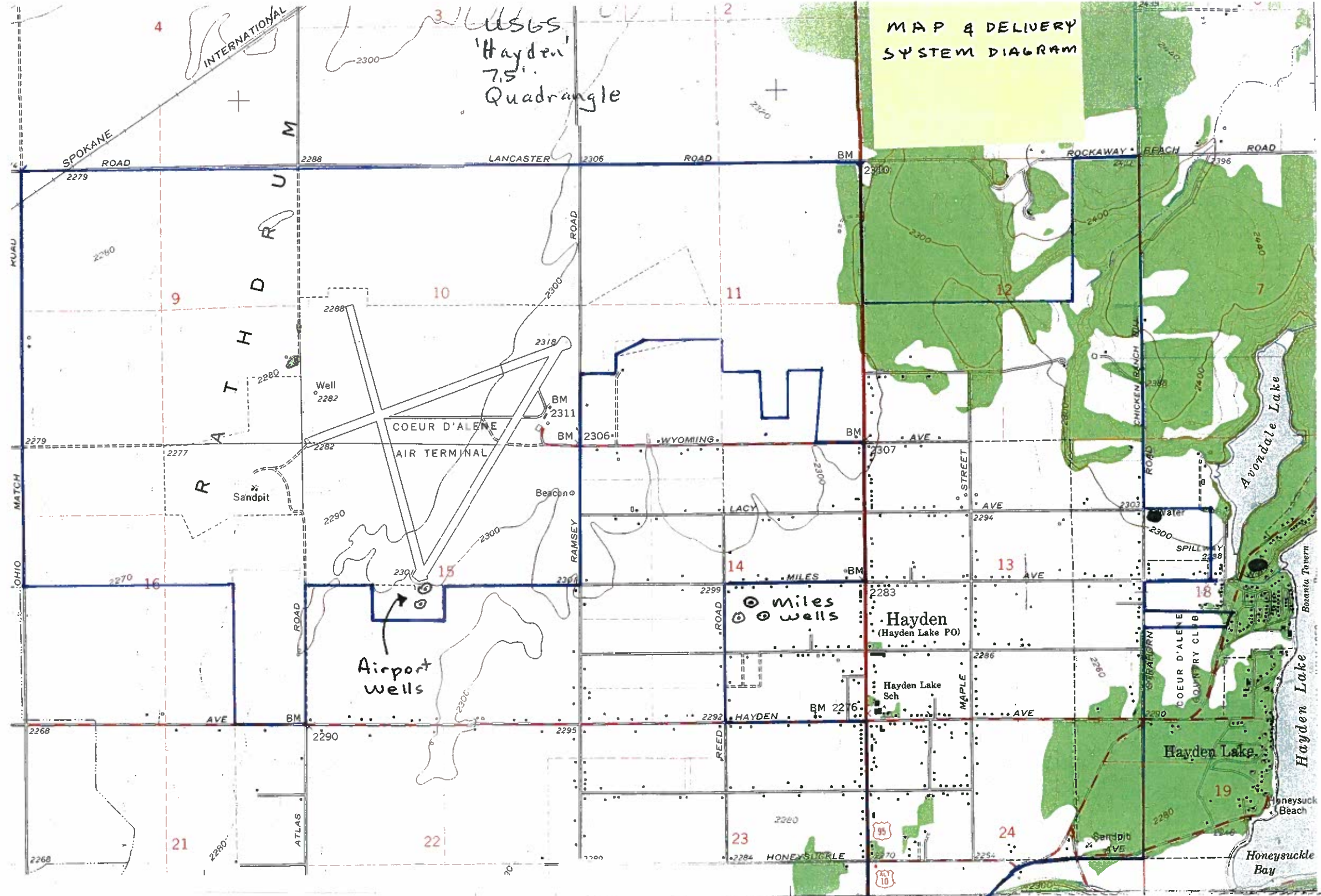
1. ID. # of USER
A.C.
HOME
BUSIN.

① HE will get info to us.

Uses outside dist.
① HE will get info to us.

CAN they supply info
of proof of use?

95-8867



MAP & DELIVERY
SYSTEM DIAGRAM

D'ALENE 1:62 50
SCALE 1:24 000
R INTERVAL 20
REPRESENT 10-FOOT
IS MEAN SEA LEV

USGS
Coeur d'Alene
7.5' Quadrangle

95-8867

- Well
- Reservoir Tower
- Service Area Boundary