

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 97-7368
Exam Date: 08/08/2001

1. Current Owner:
MARVIN ESTATES WATER 27914 HIGHWAY 57 PRIEST LAKE ID 83856-9640
2. Accompanied by: Marvin family member
Relationship to permit Holder: Family member

3. **SOURCE:**
GROUND WATER

Method of Determination: Arcmap and DRG

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

2. Other water rights with the same point-of-diversion: None

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SW¼ NE¼, Sec. 36, Twp 60N, Rge 05W, B.M. BONNER County
GROUND WATER SW¼ NE¼, Sec. 36, Twp 60N, Rge 05W, B.M. BONNER County

Method of Determination: Maps and GPS. PODs located at
Well 1 - (97-96-N-0001) -116° 55.508, 48° 30.650, given IDWR tag A0020108
Well 2 - (97-96-N-0046) -116° 55.517, 48° 30.650, given IDWR tag A0020109

PLACE OF USE: DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
60N	05W	36	X		X	X													

Method of Determination: Google Earth, Arcmap, and Plat map

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

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
97-96-N-0001	FRANKLIN	10			
97-96-N-0046	FRANKLIN	10			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
FLOWMETER						

2. Measurements: Measurement was taken during original exam using flowmeter on system. System was not running at time of 2nd exam. DEQ report also confirms 100 gpm per well.

Measurement of 100gpm per well = 200 gpm or 0.45 cfs

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: Domestic and up to ½ acre of irrigation per lot.

106 LOTS X 1.2 AF = 127.2, rounded down to 127.0 AF (Application Processing Memo No. 6)

G. NARRATIVE/REMARKS/COMMENTS

Northern Region was tasked with licensing permits that had been examined during the late 1990's and early 2000's. This file required a 2nd field exam to try and verify the points of diversion, place of use, and if lots were stubbed in or not. The original field exam was performed on 8/8/2001 and was conducted by Wayne Baldwin.

The 2nd field exam was performed on 7/10/2019 with a member of the Marvin family. I had not scheduled an exam, but had stopped by the local store which they owned to try and get contact information for Mr. Marvin. The family member then took me over to see the water system. The exam showed two wells serving a subdivision, Marvin Estates, with domestic and irrigation water. The wells were both similar in depth and both had 10hp Franklin pumps. During the exam, the system was not running because of the 120,000 gallon reservoir serving the community. Because it was an impromptu exam I did not push for the system to be turned on. Mr. Baldwin's previous exam said each well produced 100 gpm for a total diversion rate of 200 gpm or 0.45 cfs. I received information about the system from DEQ whose report also confirmed each well was able to produce 100 gpm. The license will be based upon the previous examiners recommendation as well as DEQ's evaluation of the system. The license will be issued for a diversion rate of 0.45 cfs.

The main reason for the 2nd exam was to try and confirm what the original examiner had recommended which was for the license to be issued for municipal. Mr. Baldwin did not recommend an annual volume or note the number of homes built or irrigation occurring. It was clear from aerial photography that the system was put in during the development period of the permit. Review of home built dates showed there had been only 1 home constructed when beneficial use was submitted. Back in the 90's, we did not offer domestic with up to ½ acre of irrigation per home. You had to apply for a domestic and irrigation component instead of just applying for domestic in a subdivision. In this case, the applicant had applied for more than enough irrigation to cover up to ½ acre of irrigation per lot. Because this is a named subdivision and all of the lots were stubbed in during the development period, credit will be given for all 106 lots. The irrigation component will be removed from the license and a condition will be added limiting the irrigation to ½ acre per lot. It was debated whether we should amend the license to or municipal or not. In the end we decided that the system had been the same for the last 25 years and there might not be a reason to amend it to municipal. We decided to keep it as domestic and list the number of homes served with an annual volume. The applicant can always claim a municipal use in the upcoming adjudication of that basin. The license will be issued with an annual volume of 127.0 acre-feet for domestic use.

Condition 01M will be the only one that remains on the license from the permit. Conditions 26A, 46B, 046, and 03A will be removed from the license. Conditions X04 will be added to list the number of homes served under this right. Condition 187 will be added to limit the irrigation up to ½ acre per lot. Condition X59 and X60 will be added to describe the well lot in the subdivision and to list out all lot and block numbers that are served water. There are no overlap concerns.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
DOMESTIC	01/01 to 12/31	0.45 CFS	127.0 AF

Totals: 0.45 CFS 127.0 AF

2. Recommended Amendments

 Change P.D. as reflected above Add P.D. as reflected above X None

 Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION

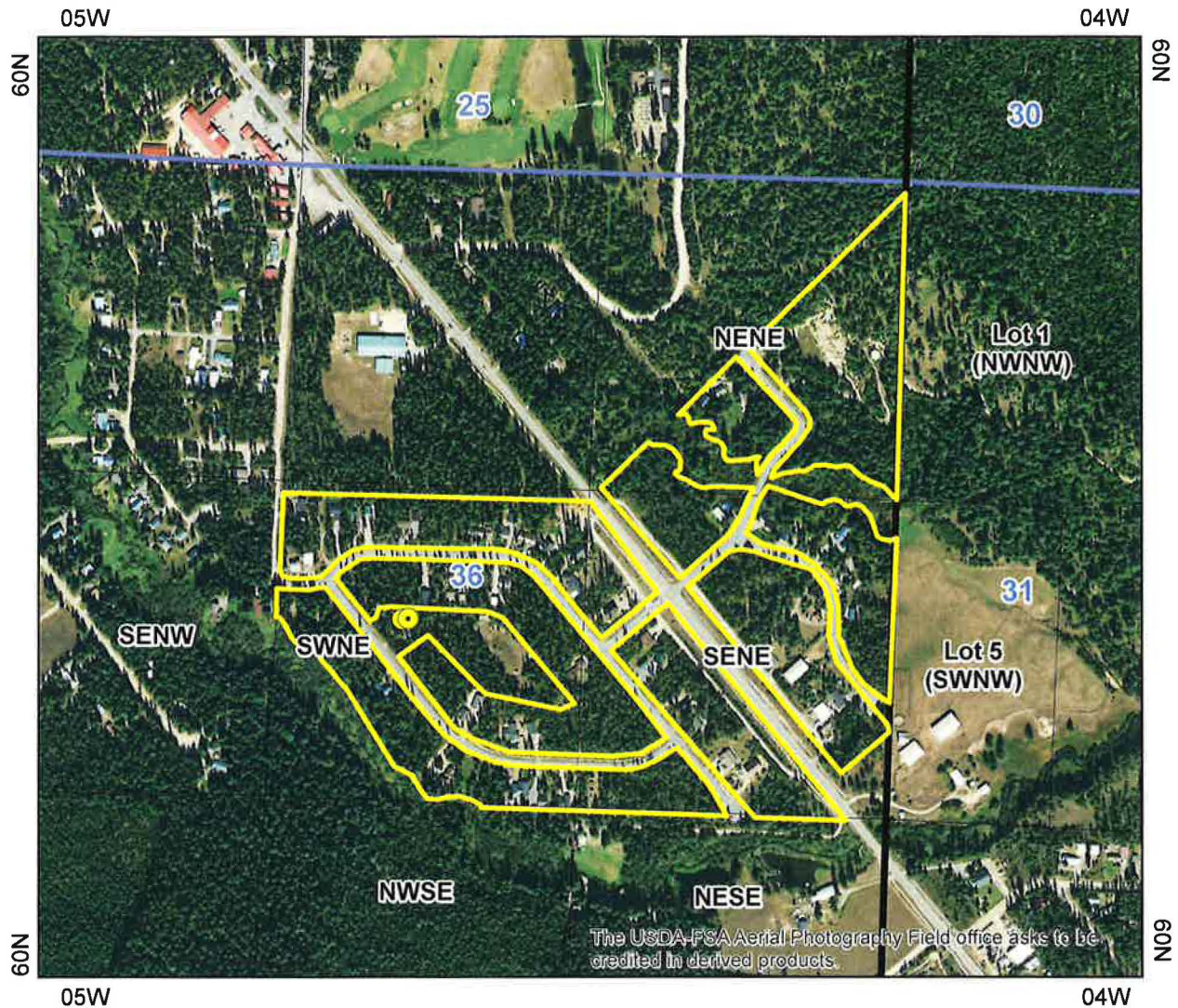
Adam Frederick - Water Resource Agent, Senior

Field Examiner's Name Adam Frederick Date 10/10/2019

Reviewer Douglas Jones P.E. Date 12/30/2019

State of Idaho
Department of Water Resources
Attachment to Field Exam
97-7368

DOMESTIC



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

0 0.075 0.15 0.3 Miles



PROPOSED UTILITY
LAYOUT AREA
FOR LAYOUT OF 10
METER AIRCRAFT
VOLUME 10/10/10



James A. Sewell and Associates

CONSULTING ENGINEERS
NEWPORT WASHINGTON 98564

WASHINGTON
2007-2008

GENERAL SITE LAYOUT
COMMUNITY WATER SYSTEM
MAGNIN LAKE ESTATES SUBDIVISION
PROJECT (AT POWERS COUNTY ROAD)

RECEIVED

Form 238-7
7/94

JAN 25 1996

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUse Typewriter
or
Ball Point Pen

097621

1. DRILLING PERMIT NO. 97 - 96-N-0001

Other IDWR No. 97-07368

2. OWNER:

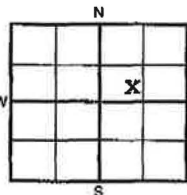
Name Larry B. Marvin

Address HCR 5 Box 150-A

City Priest Lake State ID Zip 83856

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.



Twp. 60 North ☒ or South ☐
 Rge. 05 East ☐ or West ☒
 Sec. 36 1/4 SW 1/4 NE 1/4
 Gov't Lot _____ County Bonner

Address of Well Site Highway 57 behind
 Tamrack Shopping Center City Priest Lake
 (Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name Marvin Lake
 Estates

4. PROPOSED USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other SUBDIVISION

5. TYPE OF WORK

107 homes/well #1 of 2

☒ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD

☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT Sacks or Pounds	METHOD
Material	From	To		
Bentonite	0	19	4sacks	Overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8"	+1	172	250	steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☐ Perforations Method _____
☒ Screens Screen Type Houston/telescoping

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
168	178	20		8"	stainless	☐	☐
(10 ft of screen set)						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

12 ft. below ground Artesian pressure _____ lb.

Depth flow encountered 12 ft. Describe access port or
 control devices:

SWNE 36 60N 5W

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
100+gpm		178'	1 hr.

Water Temp. 51°F Bottom hole temp. _____

Water Quality test or comments: clear

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10	0	19	Sand & gravel	x	
8	19	28	Sand & gravel	x	
8	28	172	Fine sand w/clay lenses	x	
8	172	178	Coarse sand & gravel	x	

Completed Depth 178' (Measurable)

Date: Started 1-2-96 Completed 1-10-96

13. DRILLER'S CERTIFICATION

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

Firm Name Intermountain Drilling Firm No. 513

Firm Official _____ Date 1-19-96

and _____

Supervisor or Operator same Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

well 1

48° 30.650, -116° 55.508

Frederick, Adam

From: Jim.Williamson@deq.idaho.gov
Sent: Wednesday, July 17, 2019 11:02 AM
To: Frederick, Adam
Cc: Anna.Moody@deq.idaho.gov
Subject: RE: ID1090229 Marvin Lakes Population and Connections as of 2000
Attachments: 2019ACA4784 ID1090229 MARVIN LAKES ESTATES - Fees 1999(2).pdf; 2010ACA2986 ID1090229 MARVIN LAKES ESTATES - ESS Narrative - FY11 - 07-29-10.pdf

Adam-

I reviewed the files for information relevant to connections or population as of 2000. It appears the Marvin Lakes Estates constructed its sources and distribution improvements in 1996, but it was not an actively regulated public drinking water system until 2010 in our database. The first sanitary survey record is from 2010. Engineering correspondence indicates record drawings were approved 10/16/1997, and it was originally designed for 107 lots. DEQ files include an engineering design report that indicates the development was designed for 107 residential lots, a population of 268, a peak hourly demand of 174 gpm, and an average daily demand of 86,500 gpd (or 60 gpm at 800 gpd/lot). I did not locate any correspondence to indicate how DEQ was notified of the system's build out in 2010.

The only relevant records I could find indicate:

- 1) PWS drinking water connection and fee assessment as of 6/13/1998 was corrected by the system owner for zero connections (see attached).
- 2) Sanitary survey report as of 7/29/2010 documents 23 connections and a population of 57 (see attached).

I hope this helps you in your inquiry. Please contact me if you need additional information.

Thanks,

Jim



Jim Williamson | Drinking Water Compliance Officer

Idaho Department of Environmental Quality

2110 Ironwood Parkway, Coeur d'Alene, ID 83814

Office: 208.769.1422

Direct: 208.666.4628

Jim.Williamson@deq.idaho.gov

<http://www.deq.idaho.gov/>

Our mission is to protect human health and the quality of Idaho's air, land, and water.

From: Anna Moody
Sent: Thursday, July 11, 2019 8:39 AM
To: Frederick, Adam (Adam.Frederick@idwr.idaho.gov)
Cc: Jim Williamson
Subject: Marvin Lakes RE: Voice message: from "Unknown"

Good morning Adam,

For Marvin Lakes Estates and their population back in the 2000's I think we could deduce a good estimate from past sanitary surveys. As I won't be able to get to the files very soon, I have copied Jim for when he returns to the office next week.

Drinking Water Supply Report Idaho Department of Environmental Quality

System: Marvin Lakes Estates

County: Bonner

PWS #: ID1090229

Date of Survey: July 29, 2010

System Representatives Present at Survey: Larry Marvin

Surveyed by: Troy Wassink and Matt Plaisted

Available Sources: 2 Wells

Primary Source: Ground Water

Water System Type: Non Transient Non Community

Population: 57

Service Connections: 23

Marvin Lakes Estates

Marvin Lakes Estates is located south of Priest Lake. There are two wells that Marvin Lakes Estates uses to supply water to the water system. A GWUDI analysis was completed on both wells on July 29, 2010 and it was determined that both wells are supplied by ground water. A Source Water Assessment needs to be conducted on both of the wells.

Sources

Drinking water for Marvin Lakes Estates is supplied by two wells. Well #1 has a 10 hp submersible pump and was drilled on January 2, 1996 to a depth of 178 feet with a static water depth of 12 feet below ground surface, and there is a surface seal to 19 feet. Well #1 produces 100 gpm and is located near the well house.



Well #1



Well #2

Well #2 has a 10 hp submersible pump and was drilled on August 15, 1996 to a depth of 184 feet with a static water depth of 12 feet below ground surface and there is a surface seal to 19 feet. Well #2 produces 100 gpm and is located near the well house. Both wells are properly vented and screened. Marvin Lake Estates alternates the use of their wells to ensure that both wells are used on a regular basis.



Pumphouse

The pump house consists of a flow meter, pressure gauge, air vacuum relief valve, raw water sample tap and two small bladder tanks to reduce water hammer.

Storage

Marvin Lake Estates has a 120,000 gallon concrete finished water reservoir. The water level in the reservoir is controlled by a series of floats that signal the well pumps to turn on and off in a lead lag situation. The reservoir has a shared drain and overflow that the department was not able to locate at the time of the survey. The drain/overflow needs to be located and a 24 mesh screen needs to be placed on the end, if it does not already have one to prevent contaminants from entering the reservoir. It is required that reservoir hatches have rubber gaskets installed to prevent insects and other contaminants from entering the reservoir. The Department recommends the storage tank be inspected and cleaned every 5 years.



Reservoir

Distribution

The Marvin Lakes Estates serves water to 23 connections, all of which are metered. Marvin Lakes Estates has 8-inch PVC mains. Marvin Lakes Estates has 11 fire hydrants on the water system. All dead end lines must be flushed at a velocity of 2.5 ft/sec every 6 months. Marvin Lakes Estates must have all testable backflow assemblies inspected on an annual basis by a certified backflow tester. The Department recommends that all valves be exercised on an annual basis.

Monitoring

Marvin Lakes Estates is a newly regulated water system so they will be required to collect all of initial monitoring for new water systems. Marvin Lakes Estates may qualify for an SOC waiver which will have to be renewed in 2011. If Marvin Lakes Estates wants to apply for a waiver, please fill out the attached waiver application to the department. Marvin Lakes Estates is required to collect Total Coliform samples monthly. It is a requirement for water systems to have a Total Coliform sampling plan. If you need help developing the Total Coliform Sampling plan, contact our office for help. After reviewing the well logs and historic sample results, the Department has determined that Well #1 and Well #2 are classified as a well field. This means that Marvin Lakes Estates is only required to collect a single sample from one of the two wells that will represent the source. The first sample required to be collected for Marvin Lakes Estates will be due on October 30, 2010. Marvin Lakes Estates can access their monitoring schedule at http://www.deq.idaho.gov/Applications/SDWISReports/Output/M1/Pre_M1_Report.cfm. The table below shows the frequency of the current sampling requirements for Marvin Lakes Estates.

Sample Type	Frequency	Sample Location
Total coliform	1 every month	Distribution
Nitrate	1 every year	Wellfield
Nitrite	1 every 9 years	Wellfield
Fluoride	1 every 9 years	Wellfield
Sodium	1 every 3 years	Wellfield
VOCs	1 every quarter	Wellfield
Arsenic	1 every 3 years	Wellfield
Lead and Copper	5 every 6 months	Distribution
IOC	1 every 3 years	Wellfield
SOC	Waiver application	Wellfield

Financial & Management Capacity

Marvin Lakes Estates owned and operated by Larry Marvin. Larry Marvin has a Distribution Class 1 certification.

Conclusion

At the time of the survey it was evident that Marvin Lakes Estates takes the responsibility of providing adequately treated water to the users seriously; their efforts are appreciated by DEQ. The water system was found to be mostly in compliance with the Idaho Rules for Public Drinking Water Systems.

Listed below is a summary of issues identified during the survey inspection. Please consult with DEQ staff within 30 days of receipt of this report on the water system's plan to correct the issues below. A written plan of correction will be required to be submitted to the Department within 120 days of receipt of this report.

Significant Deficiencies

There were no significant deficiencies during this survey.

Additional Requirements

1. All dead end lines must be flushed at a velocity of 2.5 ft/sec every 6 months.
2. It is a requirement for water systems to have a Total Coliform sampling plan.
3. The drain/overflow needs to be located and a 24 mesh screen needs to be placed on the end, if it does not already have one to prevent contaminants from entering the reservoir.
4. It is required that reservoir hatches have rubber gaskets installed to prevent insects and other contaminants from entering the reservoir.

Recommendations

1. DEQ recommends all valves be exercised on an annual basis.
2. DEQ recommends the reservoir is cleaned and inspected every five years.



Troy Wassink, Drinking Water Analyst

07/29/2010

Date

Public Drinking Water Connection and Fee Assessment Review Sheet

Date Issued: 06/04/98

SYSTEM NAME: MARVIN LAKES ESTATES

PWSNO: 1090229

Please review the information below and make any necessary changes or corrections, then return the form to the Division of Environmental Quality using the enclosed pre-addressed, postage-paid envelope. Returned forms must be postmarked no later than July 28, 1998. You do not have to return the review sheet if there are no changes or corrections.

SYSTEM CONTACT: LARRY MARVIN

SYSTEM OWNER: LARRY MARVIN

SYSTEM ADDRESS: RT 5, BOX 150-A 27914 HWY 57

OWNER ADDRESS: RT 5, BOX 150-A 27914 HWY 57

CITY: PRIEST RIVER, ID Zip: 83856

CITY: PRIEST RIVER, ID Zip: 83856

CONTACT TELEPHONE (W): (208) 443-2328

OWNER TELEPHONE (W): (208) 443-2328

CONTACT TELEPHONE (H): _____

OWNER TELEPHONE (H): _____

SYSTEM TYPE: COMMUNITY

CURRENT STATUS: UNREGULATED

POPULATION SERVED: 1

ACTUAL NUMBER OF CONNECTIONS*: 1

Is this figure correct? ____ Yes ☒ No

If No, indicate the correct number of connections: - 0 -

* **Connection Definition:** Each structure, facility, or single family residence connected to a water system, and which is or could be used for domestic water purposes, is considered a single connection. Multi-family dwellings and apartments, condominiums, and office complexes are considered single connections unless individual units are billed separately for water by the water utility, in which case each such unit shall be considered a single connection.

Based on the number of connections shown above, your FFY 1999 Annual Fee Assessment is:

FFY 1999 Annual Fee Assessment: \$0.00

Annual fee assessment notices will be mailed by September 1, 1998 and are due by October 1, 1998. If your system has 250 connections or more, you may pay on an annual, quarterly, or monthly basis. If the form is not returned, the system's annual fee assessment billing will be based on the number of connections shown above.

Signature: Larry Marvin

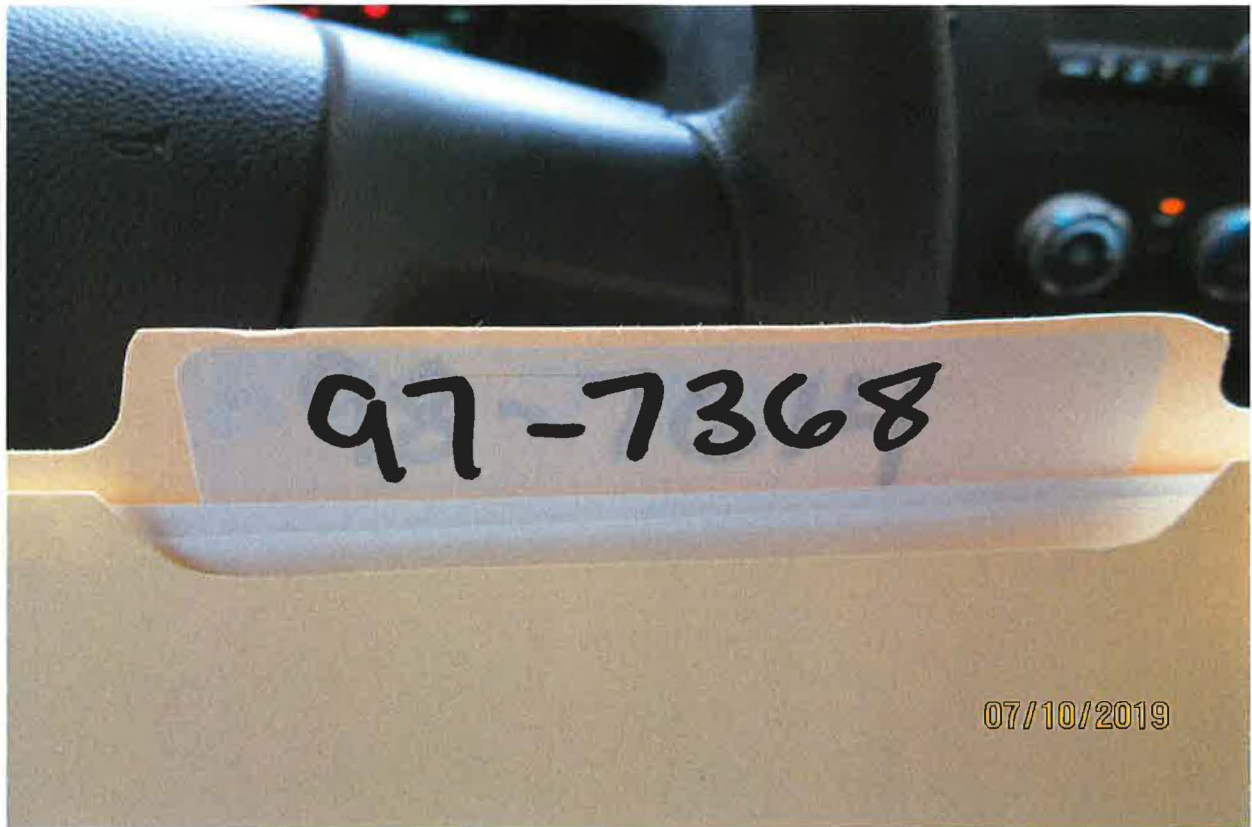
Title: OWNER

Date: 6-13-98

For more information, contact:

DEQ, North Idaho Regional Office
Telephone: (208) 769-1422

This is not a request for payment



Well 1, log 97-96-N0001. 10hp pump.



Well 2, log 97-96-N-0046. 10hp pump.



10hp pump electrical boxes.



Domestic POU.





Domestic POJ.





Domestic POU.



Stub-ins