

## MEMORANDUM

**Date:** December 31, 2013  
**To:** Water Right File 95-9502  
**From:** shemenway  
**Re:** Field Exam Narrative and Licensing Review

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On 11/4/2014, the field exam was conducted by Quantum Engineering, Coeur d' Alene, ID. At the time of the exam, it was confirmed that wells #3 and 4 were the only two points of diversion that were actively used on this distribution (there was no power to well #6, so a new application for permit was submitted for well #6). Additional information on the distribution system, and details about beneficial use were obtained on 12/26/2013 in a phone conversation with Bruce Christensen, manager of the camp, (208)699-7045, email address: [brucech@mivoden.com](mailto:brucech@mivoden.com).

**Well #3** was drilled 11/29/1989 by H2O Well Service #448 (ID Tag #E0005706). It has a 6 inch casing, 350 ft deep, 23 ft static, unknown size discharge and psi, 7 Hp Gould model 7GS10412L submersible pump, discharged to a 2 inch buried PVC line that runs up the hill to a 30,000 gallon concrete storage tank with a 3 Hp Gould submersible pump and Franklin motor SN#B125908, that discharges into an unknown size pipe, that runs up the hill to a 6,000 gallon concrete storage tank. From the 30,000 gallon storage tank, there is a 4 inch and 6 inch buried PVC main that goes to the camp buildings, office and dorms. From the 6,000 gallon concrete storage tank there are two buried lines: a 1-inch buried PVC line, using gravity flow to go to 2 potable hydrants in the horse barn, and a 6-inch buried PVC main that supplies water to one 1 cabin currently, with the intent of supplying additional cabins in the future.

**Well #4** was drilled on 11/30/1989 by H2O Well Service #448, and then deepened on 1/10/1990 and again on 2/11/2002 to its final depth of 400 ft. Well #4 (ID Tag #E0005704) has a 6 inch casing, 22 ft static, unknown size discharge and psi. It has a 10 Hp Gould model 120GS15412 submersible pump, that discharges into a 2 inch buried PVC line that merges and co-mingles with well #3, where they both discharge into the 30,000 concrete storage tank.

**Beneficial Use** was obtained from the website ([mivoden.com/home/about](http://mivoden.com/home/about)), and a phone conversation on 12/26/2013 with Bruce Christensen, manager (208)699-7045, and email address: [brucech@mivoden.com](mailto:brucech@mivoden.com):

Use is for 4 dorms, with each dorm floor having a maximum capacity of 20 individuals, and each dorm floor having 5 rooms and 2 restrooms. Two of the dorms have four

guest rooms on the top floor and shared restrooms. The dorm/cabin capacity is 280 guests, with additional capacity in 3 cabins, an RV areas and year-round staff housing (two houses and one apartment). There is a large dining room, a heated indoor pool, a hot tub, a large meeting room, and smaller break out rooms.

There are water connections to the 4 dorms, 1 of the 3 cabins, the 2 staff houses and 1 apartment, to the barn, and to the dining room building, which includes the hot tub, kitchen, pool, and smaller break-out rooms.

Fixtures include: 75 toilets, 122 sinks and 3 kitchen sinks, 32 showers, 8 wash machines, 2 domestic dishwashers, 1 commercial dishwasher, and 2 drinking fountains.

MiVoden hosts five weeks of children's camps, a Blind Camp, four Family Camps and a national Singles Camp. The camp is also used for retreats, outdoor schools, and training events during the entire year by the Upper Columbia Conference and other community organizations. Annually, there are 25,000 – 28,000 campers/guests.

**POD Overlaps:**

None

**POU Overlaps:**

None. Water rights 95-388 (spring source) and 95-651 (Hayden Lake source) are both for the same domestic use. Water right 95-651 supplies water to a 1.0 million gallon pond for fire protection and irrigation, and water right 95-388 is the standby system. Both are based off of Claim No. 95-4012. Water right 95-9488 (Hayden Lake source) is for irrigation for 2.0 acres.

**CFS:**

**Pump curves** for the 7 Hp pump (10.5 gpm or 0.023 cfs) + 10 Hp pump (16.0 gpm or 0.036 cfs) = 0.06 cfs.

**The Sanitary Survey submitted by IDEQ** indicates well #3 (6 gpm or 0.01338 cfs) + well #4 (15 gpm or 0.03345 cfs) = 0.05 cfs as the capacity of the system.

**RECOMMENDATION:**

Domestic 0.05 cfs (as calculated by IDEQ during their 6/16/2009 Sanitary Survey).

**Volume:**

**From Non irrigation Req. Table 7, Exhibit 13 Rural & Domestic Water Use, Exhibit 14 Public Building Requirements:**

4 Dorms (280 occupants X 50 gpd X 112 days)/325982 = **4.8 af**

3 cabins (2 dry) therefore (1 X 50 gpd X 365 days)/325982 = **0.05 af**

RV Area (dry – no water use there from the system)

2 Staff houses and 1 apartment = (6 year-round X 365 days X 60 gpd)/325982 = **0.40 af**

1 Office (1 X 50 gpd X 365 days)/325982 = **0.05 af**

Dining room and smaller break-out rooms (2 drinking fountain X 365 days X 75gpd)/325982 = **0.16 af**

Pool (68 people per day average per year X 10 gal. per person X 365 days)/325982 = **0.76 af**

Kitchen (sinks, etc listed separately)

Toilets (75 toilets X 7 gallon/toilet X 25,000 campers/year)/325982 = **40.26 AF**

Showers (32 showers X 8 gallons/shower X 25,000 campers/year)/325982 = **19.6 AF**

Sinks (122 sinks X 4 gallons/sink X 25,000 campers/year)/325982 = **37.4 AF**

Kitchen Sinks (3 kitchen sinks X 5 gallons/sink X 3 times/day X 365 days)/325982 = **0.05 AF**

Wash Machines (8 wash machines X 2 X 365 days X 10 gallons/machine)/325982 = **0.18 AF**

Resident dishwashers (2 dishwashers X 10 gallons X 365 days)/325982 = **0.02 AF**

Commercial dishwasher (1 dishwasher X 20 gallons X 3 X 365 days)/325982 = **0.07 AF**

25,000 – 28,000 campers/guests annually X 100 – 150 gpd per camper = **(7.6-8.6 AF) thru (11.5-12.9 AF)**

**Vir Total: 103.8 + (8.1 – 12.2)111.9 – 116.0 AF**

**VOLUME:**

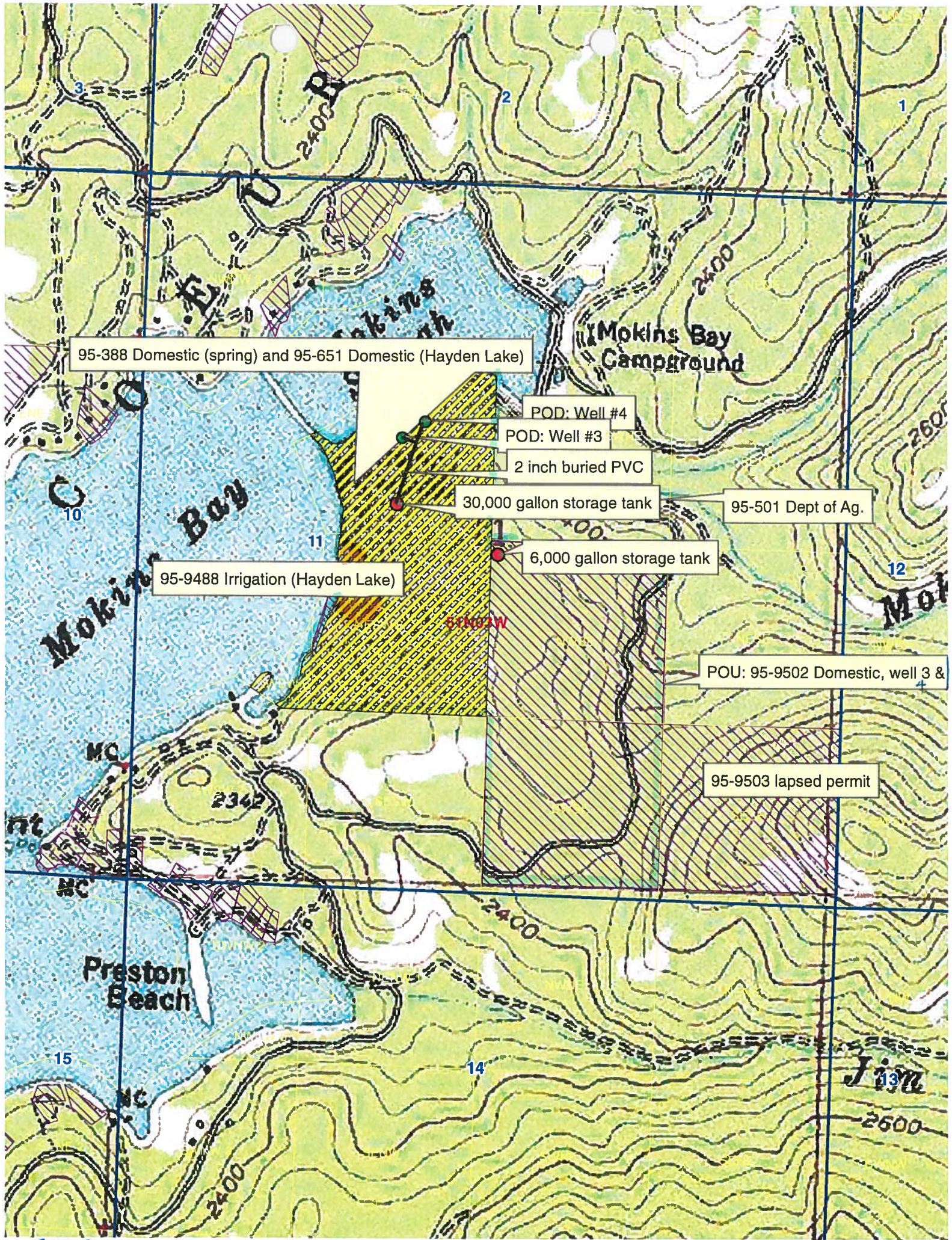
**Vir: 111.9 – 116.0 AF**

**Vdr: (0.05 cfs system capacity X 365 days X 1.9835) = 36.2 AF**

**V: 36.2 AF**

**RECOMMEND:**

**Total Annual Volume: 36.2 AF**



95-388 Domestic (spring) and 95-651 Domestic (Hayden Lake)

POD: Well #4

POD: Well #3

2 inch buried PVC

30,000 gallon storage tank

95-501 Dept of Ag.

6,000 gallon storage tank

95-9488 Irrigation (Hayden Lake)

POU: 95-9502 Domestic, well 3 &

95-9503 lapsed permit

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## About Us

### Camp History

In 1940, the Upper Columbia Conference of Seventh-day Adventists purchased MiVoden for \$1,800. The property included 60 acres and 4900 feet of shoreline on beautiful Hayden Lake. The property previously had been a YWCA camp for 12 years before the conference purchased it. The name MiVoden comes from the 1940's era church youth program called "Missionary Volunteers". For the first few years the camp was referred to as our Missionary Volunteer Camp on Hayden Lake. Thus the name derives from the words "Missionary," "Volunteers," on "Hayden."

In 1987, 480 additional acres were purchased, so that the camp is almost totally surrounded by either Forest Service land or lake frontage. The new property is used for timber management, tree farming, hiking, riding trails, Ropes Challenge Course, Climbing Wall, an Equestrian Center and camping.

### Property and Camp Facilities

In 1970, Camp MiVoden started a ten-year plan to upgrade or replace the existing facilities. Four dorms were built, stair-stepping up the hill with four levels so that each level overlooks the lake. Each dorm floor has a maximum capacity of 20. Each Dorm floor has five rooms and two restrooms,

Two dorms have four guest rooms on the top floor that have queen-size beds and shared restrooms. Camp capacity is 280 guests, with some additional capacity in outpost cabins, RV areas and year round staff housing. A large, beautiful dining room with a breathtaking view of the lake was built capable of accommodating 280 guests or campers. Additionally there is a heated indoor pool area, a hot tub, a large meeting room with digital presentation capabilities and smaller break out rooms.

### Camp Programs and Special Features

With the 540 total camp acres and the Forest Service land, hiking, horseback, and backpacking options are endless. The summer program offers multiple options of classes, recreational activities, uplifting campfires and Camp Councils, Cream of the Crop Staff, and a many opportunities to start life-long friendships.

We also have a new high and low ropes challenge course and a new 40 foot climbing tower. MiVoden hosts five weeks of children's camps, a Blind Camp, four Family Camps, and a national Singles' Camp. Also the camp is used for retreats, outdoor schools, and training events during the year by the Upper Columbia Conference and other community organizations.

### Mission

Mivoden's Mission statement is as follows:

*"Our mission is to connect people with Jesus through Camp MiVoden's unique outdoor setting, positive recreation, personal relationships, and facilities that reflect the creativity and excellence of Christ."*

Camp MiVoden has been of service over the years in many ways and today it continues that tradition of service. Although the needs of our communities have changed over the years the focus of our mission remains the same:

- *Enriching the lives of youth through outdoor recreation.*
- *Supporting the ministries of local churches.*
- *Providing a valuable resource to the communities of our region - especially non-profits and public agencies.*

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- 208-772-3484
- [17415 E. Hayden Lake Road, Hayden Lake, ID 83835 \(/parents/directions\)](#)
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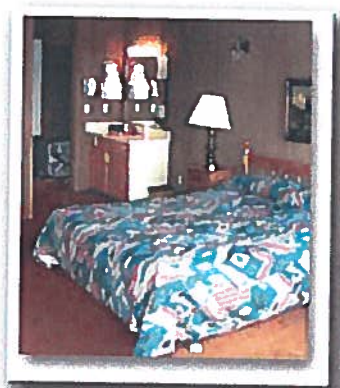
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## Facilities



MiVoden Summer Camp and Retreat Center is nestled at the water's edge of scenic Hayden Lake, Idaho and is surrounded by 540 acres of beautiful forest land. MiVoden is only minutes away from Coeur d'Alene and just 55 miles from Spokane International Airport.

MiVoden Retreat Center is a modern well-kept facility which will cater to your group or individual needs. All rooms are smoke free. MiVoden Retreat Center has many recreational activities, including a ropes challenge course. No matter what your program or price range, we have the facilities to accommodate you and your group.

Email us for Information or Questions. [mivodeninfo@mivoden.com](mailto:mivodeninfo@mivoden.com) (mailto:%20mivodeninfo@mivoden.com)

Guest accommodations capacity is 250 from fall-spring and is 192 in summer.

### Accommodations:

[Cabin Layout \(http://www.mivoden.com/home/cabinlayout\)](http://www.mivoden.com/home/cabinlayout)

- **Lake view apartments;** - 1 queen bed, 2 single beds, - bathroom and kitchen.
- **Guest rooms;** - queen bed, bathroom.
- **Dormitory accommodation;** - 2 bunks per room, - 2 bathrooms per floor.
- **Lakeside rooms;** - bunk beds, use pool bathroom

### Technical Resources:

- microphones
- audio visual equipment
- electric pianos
- sound system in dining hall

## Hemenway, Sandy

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**From:** Jamie Barton [JBarton@phd1.idaho.gov]  
**Sent:** Monday, December 23, 2013 4:15 PM  
**To:** Hemenway, Sandy  
**Subject:** RE: Public Records Request (sanitary survey for Camp MiVoden/Upper Columbia Corp Seventh Day Adventist)

My contacts are Kevin Smith, 772-3484 or Bruce Christensen, ~~772-6612~~ *disc.*

-----Original Message-----

**From:** Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]  
**Sent:** Monday, December 23, 2013 3:13 PM  
**To:** Jamie Barton  
**Subject:** RE: Public Records Request (sanitary survey for Camp MiVoden/Upper Columbia Corp Seventh Day Adventist)

By chance to you have a contact name and phone number for the operator of the water system?

-----Original Message-----

**From:** Jamie Barton [<mailto:JBarton@phd1.idaho.gov>]  
**Sent:** Monday, December 23, 2013 3:49 PM  
**To:** Hemenway, Sandy  
**Subject:** RE: Public Records Request (sanitary survey for Camp MiVoden/Upper Columbia Corp Seventh Day Adventist)

My records show 8 but I'm not sure how current that is.

-----Original Message-----

**From:** Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]  
**Sent:** Monday, December 23, 2013 2:46 PM  
**To:** Jamie Barton  
**Subject:** RE: Public Records Request (sanitary survey for Camp MiVoden/Upper Columbia Corp Seventh Day Adventist)

Jamie,  
Do you happen to know how many connections they have?  
Sandy

-----Original Message-----

**From:** Jamie Barton [<mailto:JBarton@phd1.idaho.gov>]  
**Sent:** Monday, December 23, 2013 2:06 PM  
**To:** Hemenway, Sandy  
**Subject:** RE: Public Records Request (sanitary survey for Camp MiVoden/Upper Columbia Corp Seventh Day Adventist)

Sandy,  
Here is the last sanitary survey for Camp MiVoden. They will be due for another survey this coming June.  
Jamie

Jamie Barton  
Panhandle Health District  
8500 N. Atlas Rd  
Hayden, ID 83835



Public Health  
July 1, 2009

# PANHANDLE HEALTH DISTRICT

*Healthy People in Healthy Communities*

## ENVIRONMENTAL HEALTH

8500 N. ATLAS ROAD  
HAYDEN, IDAHO 83835  
(208) 415-5200  
[www.phd1.idaho.gov](http://www.phd1.idaho.gov)

Kevin Smith  
Camp Mivoden  
17415 E Hayden Lake Rd.  
Hayden Lake, ID 83835

Subject: Sanitary Survey of PWS #1280030 conducted on June 16, 2009

Dear Mr. Smith:

A copy of the Enhanced Sanitary Survey form and the survey photos for Public Water System **#ID1280030** are enclosed with this mailing for your records. Attached, you will find the drinking water supply report for the water system which includes a list of the deficiencies, additional requirements and recommended improvements for your system.

**The water system must respond in writing not later than forty-five (45) days after receipt of the sanitary survey report describing how and on what schedule the system will address significant deficiencies identified in the survey.**

Prior to construction of new public water supply systems or modifications to existing public water supply systems, plans and specifications must be submitted to the DEQ for review, and approved, pursuant to IDAPA 58.01.08.551.04.a.

This system will be in substantial compliance with regulations if the deficiencies of this survey are implemented. Thank you for arranging Bruce Christensen to assist in the completion of this survey. If you have any questions, please contact me at (208) 415-5208.

Sincerely,

Jamie Barton  
Environmental Health Specialist  
Panhandle Health District

**Enclosures:** Enhanced Sanitary Survey Inspection Form  
Survey Photos  
Guidance for the Preparation of a Sampling Site Plan  
Monitoring Schedule  
Chlorine Residual Reporting Form

**Panhandle Health District  
Drinking Water Supply Report**

**System:** Camp Mivoden

**PWS#:** ID1280030

**Date of Survey:** June 16, 2009

**County:** Kootenai

**System Representative Present at Survey:** Bruce Christensen

**Surveyed by:** Jamie Barton, PHD and Suzanne Scheidt, DEQ

**Source:** Groundwater wells

**Population/Connections:** 200/8

**Water System Type:** Transient Non-Community

**Source**

The Camp Mivoden Water System is currently being served by three active wells (3, 4 and 5). All well logs are on file with the Panhandle Health District (PHD).

Well #1: Well #1 was drilled 10/30/1974 to a depth of 500 feet. The well is no longer in use and has been abandoned.

Well #2: Well #2 is a 6-inch cased well drilled 6/17/1987 to a depth of 250 feet. The well was disconnected from the system when well #5 was brought on line and is currently providing water for the horses only. It is recommended that any hydrants off this well be clearly marked as non-potable.

Well #3: Well #3 is a 6-inch cased well drilled 11/29/1989 to a depth of 350 feet. It is located south of the parking lot, approximately 30 feet east of the road. The well casing extends 24 inches above ground, fitted with a watertight vented well cap, to 39 feet below with a bentonite surface seal to 39 feet. The current capacity of the well is 6 gallons per minute (gpm). The flow meter and smooth-nosed sample tap are located in a vault adjacent to the well. A pressure gage and means to flow the well to waste must be installed on the discharge line.

0.01338 cfs

Due to the close proximity of well #3 to a shallow creek, within 50 feet, a microscopic particulate analysis (MPA) must be conducted on the well during peak flow in the spring.



Well #3



Vault with sample tap and flow meter

Well #4: Well #4 is a 6-inch cased well drilled 11/30/1989 to a depth of 50 feet. It is located at the edge of the parking lot, behind the basketball hoop. The well was hydrofractured and deepened on 1/12/1990 to a depth of 100 feet and again on 2/12/2002 to 400 feet. The 6-inch casing extends 19 feet below the surface and is sealed with bentonite to 19 feet. A 4-inch PVC casing extends to 100 feet below the surface. The well casing extends 30 inches above ground and is fitted with a water tight vented well cap. The current capacity of the well is 15 gpm. The flow meter is located in a vault adjacent to the well and a flow to waste is located at the end of the vault. A pressure gage must be installed on the discharge line.

0.03745 cfs

Bonnars Ferry (208) 267-5558, Kellogg (208) 786-7474, Sandpoint (208) 265-6384, St. Maries (208) 245-4556

0.05 cfs  
Total  
stk.

**Reservoir #1:** The main reservoir is concrete and has a capacity of 30,000 gallons. The reservoir was reportedly constructed in the 1970's. The reservoir receives water from wells #3 and #4 from a dedicated line and controls the wells using float switches. Sodium hypochlorite solution is injected in the line prior to entering the reservoir. The reservoir also receives water from the 6000 gallon upper reservoir via gravity feed but is not chlorinated prior to entry.

The reservoir does not have an overflow pipe or a vent. A properly screened overflow pipe must be provided where it drains to daylight in a way that will prevent backflow to the reservoir. A vent must also be provided with the open end at least 24 inches above the roof of the reservoir and screened with 24 mesh non-corrodible screen. This may be accomplished by adding a vent to the reservoir hatch inside the pump house. Currently the reservoir is probably vented through the access lids; however, these lids need to be fitted with gaskets to make them water tight and eliminate insects from getting in the reservoir. Spider webs were observed to be accumulating inside the reservoir hatch as a result of the hatch not being sealed.



Pump house and main reservoir



Paint cans stored on top of reservoir



Access hatch – needs gasket

At the time of the survey many used paint buckets were being stored on top of the reservoir and are considered a potential source of contamination. The buckets must be removed and stored elsewhere. The reservoir roof must be kept clear of any potential sources of contamination and should be inspected regularly for any cracks or defects. Also, it is recommended the reservoir be inspected annually for integrity and silt build up, and cleaned at least every five years.

**Reservoir #2:** The 6,000 gallon concrete reservoir is located at a higher elevation than the main reservoir; receives water from well #5 and drains by gravity to the main reservoir. Floats in the reservoir triggers on the pump for well #5. Discharge to the main reservoir is controlled by a float valve at the main reservoir.



Reservoir lid and valve pit



Valve pit

The reservoir does not have an overflow. A properly screened overflow must be provided where it drains to daylight in a way that will prevent backflow to the reservoir. One hydrant has been installed off of the reservoir and is controlled by a pump and pressure tank located in the valve pit.



Well #4



Vault with flow meter

Well #5: Well #5 is a 6-inch cased well drilled 2/14/2002 to a depth of 280 feet. It is located approximately 200 feet east of Hayden Lake Road in a grassy area. The well casing extends 24 inches above the ground; fitted with a watertight vented well cap, to 37 feet below with a bentonite surface seal also to 37 feet. A 4-inch PVC liner extends to 280 feet below the surface. The well is equipped with a 1-horsepower submersible pump and the current capacity is 12 gpm. Located adjacent to the well is the pump controls, flow to waste line, frost free hydrant, and a vault containing the flow meter and smooth-nosed sample tap. A pressure gage must be installed on the discharge line.

At the time of the survey, the pump was making an unusual sound and shiny particles were present in the water from the hydrant. It is important the water system have the well and pump examined to ensure it is operating properly.



Well #5



Pump controls



Vault with flow meter and sample tap

Well #6: Well #6 is a 6-inch cased well drilled 2/15/2002 to a depth of 300 feet. It is located east of Hayden Lake Road and approximately 55 feet from Mokins Creek overflow. The well casing extends 24 inches above the ground to 39 feet below with a surface seal also to 39 feet. A 4-inch PVC liner extends to 160 feet below the surface. This well is currently not connected; however, the system has plans to connect it to the system in the near future.

Before the well may be connected to the system the following must be completed: 1) 12 hour pump test at 125% of maximum pumping capacity. 2) Initial monitoring on the well including total coliform, nitrate, nitrite, iron, manganese, and corrosivity. 3) MPA prior to June 30, 2009. Note: an additional MPA would also be required in the fall prior to November 30, 2009. A flow meter, pressure gage, means to flow to waste and a raw water sample tap must also be provided on the well.

### Storage

The water system has a total storage capacity of 36,000 gallons from two reservoirs which ride on the system. The water system has plans to install a new reservoir in the future. The installation of a new reservoir will first require plans and specifications by an engineer be submitted to DEQ for review and approval.

## Pump House

The pump house is a wood framed house that sits atop the main reservoir and contains the main reservoir access and the chlorinator. The pump house can be locked and has adequate light, heat and ventilation. A properly screened floor drain must be provided where it drains to daylight.



Pump House



Reservoir access and chlorinator

NSF approved sodium hypochlorite solution is fed to the water line from wells #3 and #4, prior to the reservoir, via a Pulsatron electronic metering pump (max 150 psi) that is controlled by a flow sensing device on the water line. The metering pump should be lowered to eliminate potential air lock in the tubing line. Because water from the upper reservoir enters the main reservoir through a line that is separate from the solution injection line, a flow proportional solution dose cannot be achieved. Flow received from the upper reservoir is minimal, reportedly 3000 gallons per day during peak use. In order to determine whether the water system is maintaining consistent free chlorine residuals, daily monitoring must be done in a designated location in distribution.

The sodium hypochlorite is mixed in a solution tank, using 2 gallons of sodium hypochlorite and filled with water. In order to prevent the tank from collapsing and corrosion of water system components, a vent (which may consist of tubing material) must be installed from the solution tank to the outside atmosphere.

## Distribution

The distribution system is comprised of 4-inch and 6-inch PVC and is not looped. There are service connections at each of the dead end lines that utilize enough flow to keep the lines flushed, when in use. There are 6 fire hydrants off the 6-inch main. Additional fire suppression can be provided from a hydrant installed at the lakes edge, drawing water from the lake. Irrigation is provided by a separate system which draws water from the lake and stores it in an above ground poly storage tank. The irrigation system is tied to the potable distribution system; should the irrigation system ever be utilized PHD must be contacted to provide provisions for adequately disinfecting the mains prior to reuse for potable purposes.

## Monitoring Requirements

The water system is required to monitor for total coliform bacteria on a quarterly basis. A total coliform sample site plan must be developed that represents the entire distribution system. The water system sample schedule has been adjusted to reflect the use of well #5. A nitrate sample is required annually and nitrite once every nine years from the manifold for well #3 and #4, and from well #5. A nitrate sample from well #5 is still due for 2009.

### Deficiencies

The following deficiencies were found during the course of the survey and must be addressed. A plan of correction that outlines the timeline in which these deficiencies will be addressed must be submitted to PHD within 45 days of receipt of this letter.

1. A pressure gage must be provided on the discharge line from each well.
2. Well #3 must have a means to pump the well to waste at the design capacity of the well via an approved air gap.
3. An overflow that discharges to daylight must be provided on both reservoirs in a way that will prevent backflow to the reservoir.
4. The main reservoir access lids must be provided with gaskets to make them water tight and eliminate insects from entering the reservoir.
5. The used paint buckets must be removed from the top of the main reservoir.
6. A vent must be provided on the main reservoir with the open end of the vent screened and turned downward at least 24 inches above the roof of the reservoir.
7. A written total coliform rule sample site plan that represents the entire distribution system must be developed and submitted to PHD. See enclosed guidance.
8. A vent must be provided from the sodium hypochlorite solution tank to the outside atmosphere.

### Additional Requirements

The water system must begin to meet the following requirements of the Idaho Rules for Public Drinking Water Systems.

1. An operation and maintenance manual must be provided for the water system.
2. Free chlorine residuals from a designated location must be monitored and recorded daily. A copy of the report must be submitted to PHD on a monthly basis.
3. Well #3 must have a MPA conducted on it during peak flow in the spring.

### Recommendations

The following are recommendations for the system:

1. It is recommended the water system have the storage tanks inspected annually for integrity and silt build up, and cleaned at least every five years.
2. It is recommended all valves be exercised regularly.
3. It is recommended the system flush all main lines at least annually.
4. It is recommended that all non-potable mains, hydrants, and appurtenances be easily identified as non-potable.



*Jamie Barton, Sr. Environmental Health Specialist*

July 1, 2009

*Date*