

IN-OFFICE BENEFICIAL USE FIELD REPORT

Permit No: 65-23474

Examiner: Cody Parker

Date: 12/11/2017

In-office qualification (IDAPA 035.01.r):

- ☐ Irrigation ≤ 5 acres
☐ Stockwater storage ≤ 14.6 af
☒ Total diversion rate ≤ 0.24 cfs and not irrigation or storage

Current Owner Name: Alzar School Inc

Address: PO BOX 1609, CASCADE, ID 83611

Beneficial Use Fee Paid: \$50.00

Receipt: C102744

Source: Groundwater

Source change? ☒ N ☐ Y Change clarifies originally intended source.
If not – void permit.

Point of Diversion			NE				NW				SW				SE			
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE
13N	04E	8						Lot 1										

Method of Determination: Well log and GPS (N 44 28' 53.7" by W 116 00' 53.0")

POD change? ☐ N ☐ Y

Place of Use			NE				NW				SW				SE				Totals
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
13N	04E	8						Lot 1											

Method of Determination: Aerial imagery, tax parcel spatial data, digital PLS map

POU change? ☒ N ☐ Y

Purpose of Use: Domestic

Purpose change? ☒ N ☐ Y

Method of Determination: Domestic-type buildings seen from aerial imagery

Standard Season of Use: 01/01 to 12/31

Update required on license? ☒ N ☐ Y**Overlap Review**POD overlap? ☐ N ☒ Y WR's: Permit 65-23683Analysis Attached ☒ Comments:POU overlap? ☐ N ☒ Y WR's: Permit 65-23683

Comments: Overlapping permit is for the expanded development of the school

Diversion Rate

Permitted Rate: 0.12 cfs

BU Standard Limit: 0.12 cfs

BU Fee Limit: 0.20 cfs

Theoretical (optional): cfs

Recommended Total Div Rate: 0.12 cfs**Annual Volume**

For Irrigation:

cfs x 1.9835 x days = NA af

acres x af/ac (FHR) = NA af

Smaller of two volumes = NA af

For other uses: Domestic: 7.8 afa per Attachment A

IN-OFFICE BENEFICIAL USE FIELD REPORT

Recommended Amounts

Beneficial Use	Season of Use	Diversion Rate (cfs)	Annual Volume (af)
Domestic	01/01 to 12/31	0.12 cfs	7.8

Totals

0.12 cfs

7.8 af

Amendments Required☐ Change P.D.☐ Add P.D☒ None☐ Change P.U.☐ Add P.U.☐ Other:**Conditions:**

Remove 26A, 046, 004, X01

Change 121 to 103

Have conditions of permit been met? ☒ Y ☐ N

Narrative: This permit authorizes the diversion of 0.12 cfs water from a well for domestic use associated with 4 yurts, 1 bath house, and 5 homes which belong to the Alzar School Inc. in Cascade. Proof was submitted for this permit on December 1, 2016, and I completed this in-office exam on December 11, 2017.

The POD for this right is an 8" diameter, 178' deep well. The well log references this water right number (65-23474) and the legal description matches the POD description on the permit. The owner listed on the well log is the same as the permit holder, and the well was drilled during the development period. According to the well log, the metal tag number is D0063770 which matches the tag on the casing. The POD is located in Gov Lot 1 (NWNW) of Section 8, T13N, R04E, Boise Meridian.

The Alzar School can be seen from aerial imagery within tax parcels owned by Alzar School Inc. in the same Gov Lot as the POD described above. Proof was submitted in December of 2016, but the latest available imagery was taken in 2015. I visited the site to confirm the extent of development. Currently there are 8 yurts, 1 bath house, 2 buildings for staff housing with 4 apartments in each, and 2 main school buildings.

According to the school website, the school has 9 full-time teachers and a maximum of 40 students per semester. Using those numbers along with Attachment A included in the file, I determined a total annual diversion volume of 7.8 afa.

The 4 yurts, 5 staff housing units, and the bathhouse all add up to the domestic use associated with 9 households per Admin AP Memo No. 22. The diversion rate required for 9 households is 0.14 cfs. Additionally, the school building has 10 sinks, 4 toilets, a dishwasher, and an ice machine. Assuming all of those were running at once, the maximum diversion rate required for the school building would be 0.08 cfs (Attachment B). The total maximum diversion rate required for the facilities covered by this permit are 0.22 cfs. It's unlikely that the fixtures all run at once. I have recommended the permitted diversion rate (0.12 cfs) for the license.

This license is intended to cover the school building (known as the "Confluence Building"), 4 of the yurts, the bathhouse and 5 staff housing units. A second permit, no. 65-23683 has been authorized to cover the additional development of the school facilities.

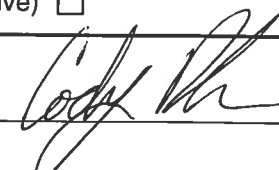
Workflow

Exam Date Entered ☒
 POU/POD shapes ☒
 Combined Rights Entry ☒
 Wild & Scenic Entry ☐
 Draft License and Map ☒
 FE Database (N: drive) ☐

Supporting Documents

Aerial Photograph ☒
 POU/POD Map ☒
 LandSat ☒
 Photographs ☒
 Site Visit Date: 12/11/2017

Well Log ☒
 Diagrams ☐
 Theoretical ☐
 Other: ☐

AuthenticationField Examiner's Name: 

Date: 1-3-18

Reviewer: _____

Date: _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT



Figure 1 The metal tag number D0063770 and a photo of the well head.

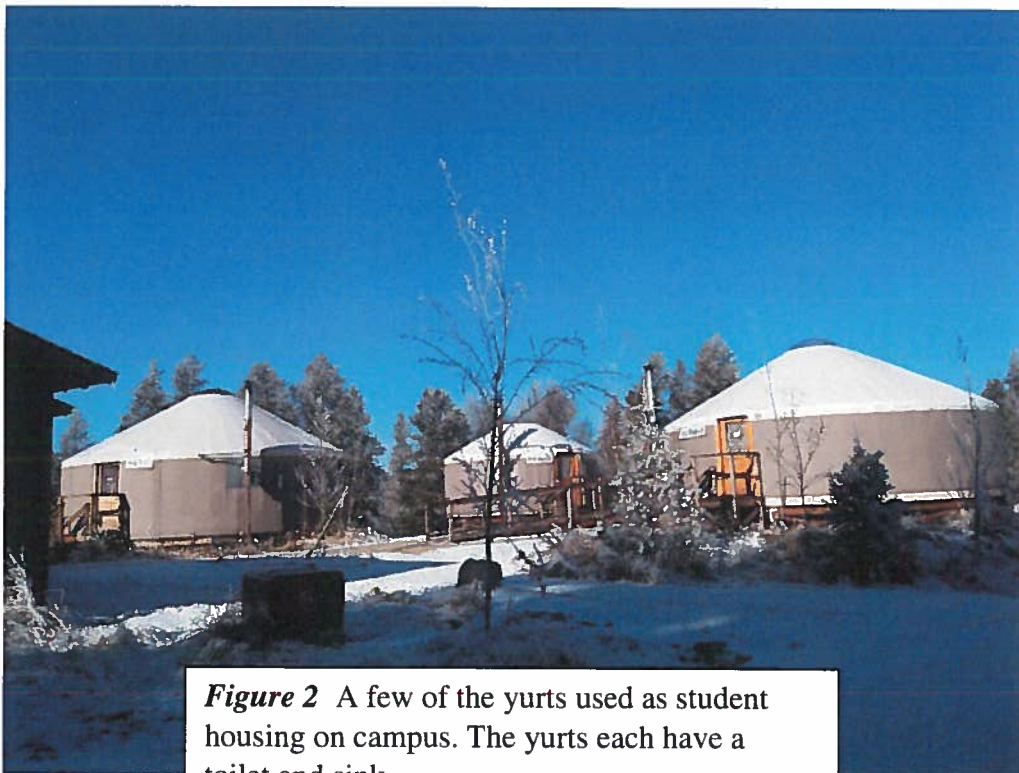


Figure 2 A few of the yurts used as student housing on campus. The yurts each have a toilet and sink.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

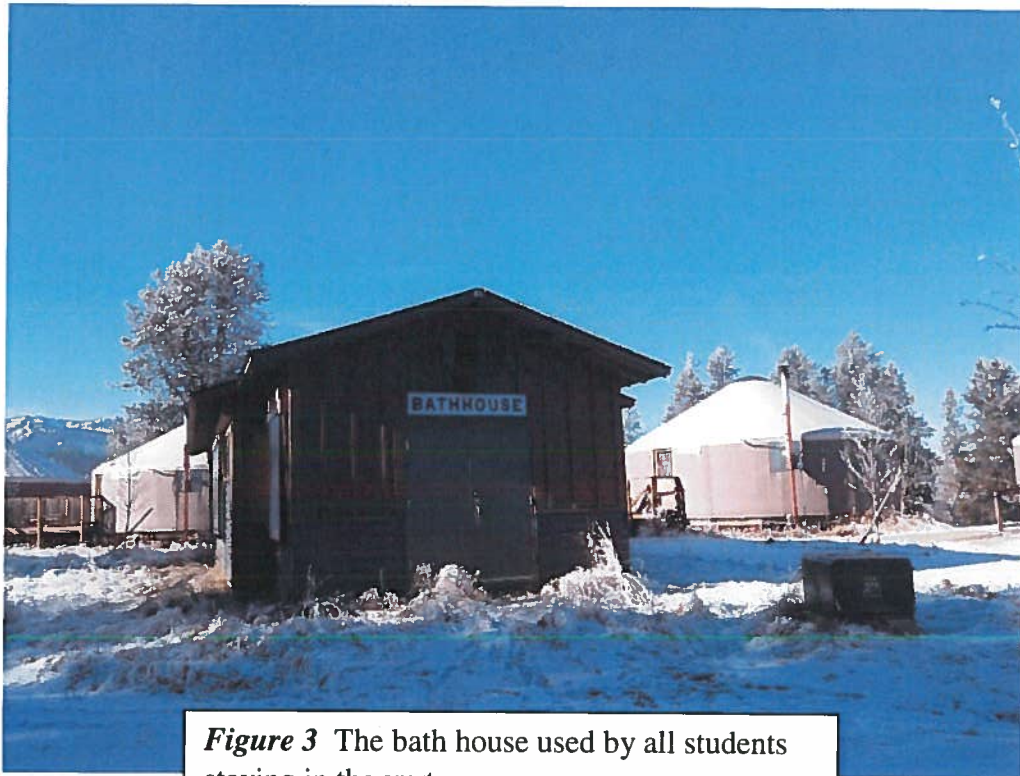


Figure 3 The bath house used by all students staying in the yurts

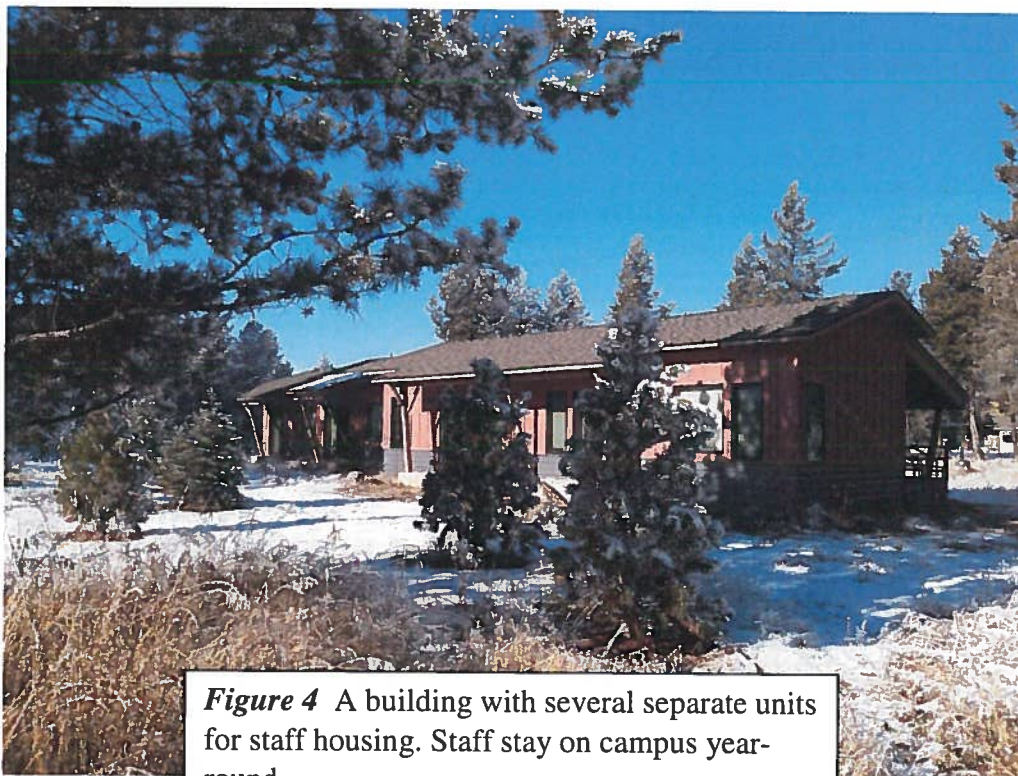


Figure 4 A building with several separate units for staff housing. Staff stay on campus year-round.

State of Idaho
Department of Water Resources
Attachment to Water Right License
65-23474

This map depicts the DOMESTIC place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

04E



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

0 0.035 0.07 0.14 Miles



9 teachers

40 students

ATTACHMENT A

Table 3

NON-IRRIGATION WATER REQUIREMENTS

Types of Establishments	<u>Gallons/day</u>
Airports (per passenger)	3-5
Apartments, multiple family (per resident)	60 x 9 teachers = 540 gpd
Bathhouses (per bather)	10 x 40 students = 400 gpd
Camps:	
Construction, semi-permanent (per worker)	50
Day with no meals served (per camper)	15
Luxury (per camper)	100-150
Resorts, day & night, limited plumbing (per camper)	50
Tourist, central bath & toilet facilities (per person)	35
Cottages with seasonal occupancy (per resident)	50 x 40 students = 2000 gpd
Courts, tourist with individual bath units (per person)	50
Clubs:	
Country (per resident member)	100
Country (per non-resident member)	25
Dwellings:	
Boardinghouses (per boarder)	50
Kitchen requirements (per boarder)	10
Multiple family apartments (per resident)	40
Roominghouses (per resident)	60
Single family (per resident)	50-75
Estates (per resident)	100-150
Hotels:	
With private baths (2 persons/room)	60
Without private baths (per person)	50
Hospitals (per bed)	250-400
Institutions other than hospitals (per person)	75-125
Laundries (per washing/customer)	50

ATTACHMENT A

Livestock (per animal):	
Cattle (range)	12
Cattle (dairy)	35
Goat	2
Hog	4
Horse	12
Mule	12
Sheep	2
Chickens (per 100)	5-10
Turkeys (per 100)	10-18
Motels:	
With bath, toilet & kitchen facilities (per bed)	50
With bed & toilet (per bed)	40
Parks:	
Overnight with flush toilets (per camper)	25
Trailers with individual bath units (per camper)	50
Picnic:	
With bathhouses, showers & flush toilets (per picnicker)	20
With toilet facilities only (per picnicker)	10
Restaurants:	
With toilet facilities (per patron)	7-10
Without toilet facilities (per patron)	3
With bars & cocktail lounge (additional per patron)	2
Schools:	
Boarding (per pupil)	75-100 x 40 = 4000 gpd
Day with cafeteria, gyms & showers (per pupil)	25
Day with cafeteria, no gyms or showers (per pupil)	20
Day without cafeteria, gym or showers (per pupil)	15
Service stations (per vehicle)	10
Stores (per toilet room)	400
Swimming pools (per swimmer)	10
Theaters:	
Drive-in (per car space)	5
Movie (per auditorium seat)	5
Workers:	
Construction (per person/shift)	50
Day (per person/shift)	15

Total = 6940 gpd
= 7.8 afa

Attachment B

Exhibit 13

RURAL AND DOMESTIC WATER USES

Residence - Rural:

Each person per day, for all purposes.....	60 gal.
Each horse, dry cow or beef animal per day.....	12 gal.
Each milking cow per day.....	35 gal.
Each hog per day.....	4 gal.
Each sheep per day	2 gal.
Each 100 chickens per day.....	6 gal.

Residence - Urban:

Drinking fountain, continuously flowing.....	50 to 100 gal. per day.
Each shower bath.....	25 to 60 gal.
To fill a bathtub.....	35 gal.
To flush toilet.....	3 to 7 gal.
To fill lavatory.....	1 to 2 gal.
Dish Washing Machine - per load.....	10 to 20 gal.
Automatic washer - per load.....	30 to 50 gal.

By Fixtures:

Shower.....	4 to 6 gpm
Bathtub.....	4 to 8 gpm
Toilet.....	4 to 5 gpm
Lavatory.....	1 to 4 gpm
Kitchen sink.....	2 to 5 gpm

Confluence Building

$$10 \text{ sinks @ } 2 \text{ gpm} = 20 \text{ gpm}$$

$$4 \text{ toilets @ } 4 \text{ gpm} = 16 \text{ gpm}$$

$$\text{Dishwasher } 3 \text{ loads} = 60 \text{ gallons/day} \times \frac{1 \text{ day}}{1440 \text{ min}} = .04 \text{ gpm}$$

$$\text{Ice Machine} = \text{negligible}$$

$$\text{Total} = 36.04 \text{ gpm} = 0.08 \text{ cfs}$$

POINT OF DIVERSION COMPARISON

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

13N04E8
Basin/Seq Owner Source
65-23474 ALZAR SCH GROUND WATER
65-23683 ALZAR SCH GROUND WATER
65-19703 UNITED ST PAYETTE RIVER
65-2673 BILBAO, FR UNNAMED STREAM
65-2724 BILBAO, FR PAYETTE RIVER
65-3798 E K ALLEN GROUND WATER
65-8576 ALLEN, SYC GROUND WATER

NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE
					X										
					X										
									X	X					
													X		
											X				
X															

POD overlap, permit for expanded development of school

Basin/Sequence	Owner	Source	Use
65-23474	ALZAR SCHOOL	GROUND WATER	DOMESTIC
65-23683	ALZAR SCHOOL	GROUND WATER	DOMESTIC
65-23683	ALZAR SCHOOL	GROUND WATER	IRRIGATION
65-10353	CITY OF CASCADE	SKIN CREEK	MUNICIPAL
65-10354	CITY OF CASCADE	HAZARD CREEK	MUNICIPAL
65-12633	E K ALLEN RANCH	BIG CREEK	IRRIGATION
65-12726	CITY OF CASCADE	GROUND WATER	MUNICIPAL
65-13311	CITY OF CASCADE	GROUND WATER	MUNICIPAL
65-13485	CITY OF CASCADE	GROUND WATER	MUNICIPAL
65-19703	UNITED STATES OF AMERICA	PAYETTE RIVER	STOCKWATER
65-2255	WARNER DITCH	C BIG CREEK	IRRIGATION
65-2274	BILBAO, FRANCIS	PAYETTE RIVER	IRRIGATION
65-31138	CITY OF CASCADE	CAMPBELL CREEK	MUNICIPAL
65-3798	E K ALLEN RANCH	GROUND WATER	DOMESTIC
65-3798	E K ALLEN RANCH	GROUND WATER	STOCKWATER
65-5876	ALLEN, SYDNEY W	GROUND WATER	DOMESTIC

[illegible]

POU overlap, different use

Municipal water rights do not provide water to the school campus

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

803414

1. WELL TAG NO. D 914780-863414Drilling Permit No. DOO 63770Water right or injection well # 65-23474

2. OWNER:

Name Sean Bierle c/o Alcar SchoolAddress Box 1609City Cascade State ID Zip 83611

3. WELL LOCATION:

Twp. 13 North ☒ or South ☐ Rge. 4 East ☒ or West ☐Sec. 8 10 acres 1/4 NW 1/4 NW 1/4Gov't Lot _____ County ValleyLat. 44 ° 28.541 (Deg. and Decimal minutes)Long. 116 ° 05.34 (Deg. and Decimal minutes)Address of Well Site 1.5 mi. southern River viewCity Cascade

(Give at least name of road - distance to Road or Landmark)

Lot _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection☐ Other public supply

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☐ Air Rotary ☒ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method/procedure
<u>Grout</u>	<u>0</u>	<u>158</u>	<u>40 grout</u>	<u>Grout pump</u>
<u>Cement</u>			<u>40 cement</u>	

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
<u>8"</u>	<u>2.5</u>	<u>157.5</u>	<u>332</u>	<u>Steel</u>	☒	☐	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

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

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☐ N Method _____Manufactured screen ☒ Y ☐ N Type JohnsonMethod of installation mud hole

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
<u>158</u>	<u>178</u>	<u>20</u>	<u>40</u>	<u>8"</u>	<u>SS</u>	<u>80</u>

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method
<u>10-20</u>	<u>138</u>	<u>178</u>	<u>3000</u>	<u>grout</u>

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☐ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 158 Static water level (ft) 11

Water temp. (°F) _____ Bottom hole temp. (°F) _____

Describe access port _____

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
<u>32</u>	<u>104</u>	<u>8 hrs</u>	☒	☐	☐	☐

Test method:

Water quality test or comments: clean clear

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
<u>14</u>	<u>0</u>	<u>3</u>	<u>Top soil</u>		
<u>14</u>	<u>3</u>	<u>9</u>	<u>sand</u>		
<u>14</u>	<u>9</u>	<u>11</u>	<u>Blue clay</u>		
<u>14</u>	<u>17</u>	<u>35</u>	<u>white + Red sand</u>		
<u>13.5</u>	<u>35</u>	<u>38</u>	<u>Blue clay + sand</u>		
	<u>38</u>	<u>41</u>	<u>Fine sand clay chunks</u>		
	<u>41</u>	<u>50</u>	<u>coarse sand</u>		
	<u>50</u>	<u>52</u>	<u>Red Brn Clay</u>		
	<u>52</u>	<u>54</u>	<u>white + Red sand</u>		
	<u>54</u>	<u>55</u>	<u>soft Blue Fine sand</u>		
	<u>55</u>	<u>63</u>	<u>white + Red sand Black sand</u>		
	<u>63</u>	<u>64</u>	<u>sand + soft clay</u>		
	<u>64</u>	<u>67</u>	<u>Rd wt sand 1/2 Blk Fines</u>		
	<u>67</u>	<u>70</u>	<u>soft sandy clay</u>		
	<u>70</u>	<u>78</u>	<u>md + coarse sand 1/2 Fine</u>		
	<u>78</u>	<u>81</u>	<u>Fine sand soft Grey</u>		
	<u>81</u>	<u>93</u>	<u>Fine sand</u>		
	<u>93</u>	<u>96</u>	<u>Rd wt Grey sand Black</u>		
	<u>96</u>	<u>98</u>	<u>soft sandy Blue</u>		
	<u>98</u>	<u>102</u>	<u>Rd wt sand</u>		
	<u>102</u>	<u>107</u>	<u>Rd wt Blue pea grav Fine Blk</u>		
	<u>107</u>	<u>116</u>	<u>soft Blu + Fine sand</u>		
	<u>116</u>	<u>125</u>	<u>wt Red sand + 1/2 Fine s</u>		
	<u>125</u>	<u>143</u>	<u>Fine wt + Blk sand</u>		
	<u>143</u>	<u>149</u>	<u>wt + Blk Fines some coarse</u>		
	<u>149</u>	<u>158</u>	<u>sticky Blue</u>		
	<u>158</u>	<u>178</u>	<u>white + Blue uniform X sand small amt of Fines</u>		

Completed Depth (Measurable): 178'Date Started: 5-15-12 Date Completed: 6-11-12

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 Jim Well Drilling Co. No. 623Principal Driller [Signature] Date 6-11-12

Driller _____ Date _____

Operator II _____ Date _____

Operator I _____ Date _____

Signature of Principal Driller and rig operator are required.

RECEIVED
JUN 12 2012
WATER RESOURCES
WESTERN REGION



January 4, 2018

Mr. Parker,

Thank you for your letter requesting additional information about our system. Answers to your questions follow:

1. Are there staff and students living on site year round?
 - a. Staff members do occupy their apartments year round. Students are on campus full time from mid-August (approximately August 10) to late May (approximately May 27). There are breaks when the students are in Chile (mid-October to Thanksgiving and early February to end of March) and for winter (approximately December 20 to January 20). In the summer, the yurts house visitors infrequently.
2. Can you tell me what water is used for in the yurts?
 - a. Inside each yurt, there is a bathroom with sink and toilet. The water services those plumbing fixtures. Students use the toilet, brush their teeth, wash their hands, fill water bottles.
3. Can you describe for me the number of water fixtures that are in use in the school building?
 - a. Inside the Confluence Building, there are 3 toilets, one urinal, five hand sinks, 1 3-basin dish sink, 1 vegetable prep sink, 2 utility sinks, 1 commercial dishwasher, 1 hook-up for a steamer, 1 ice machine, 1 mop sink, and a tank for the fire suppression system.

Please don't hesitate to ask for further information.

S-Resi

Sean Bierle
Head of School
Alzar School
www.alzarschool.org
facebook.com/alzarschool
cell: 208.860.4494



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

December 12, 2017

ATTN SEAN BIERLE
ALZAR SCHOOL INC
PO BOX 1609
CASCADE ID 83611

RE: Water Right Permit No. 65-23474

Mr. Bierle,

I am writing today in regard to the water right permit referenced above, which authorizes the diversion of groundwater for the domestic use associated with the initial phase of development for the Alzar School. I came out to the school yesterday, December 11, to confirm the extent of development of this permit and complete the beneficial use field exam. To complete my field report and recommend a water right license I require some additional information.

First, if I am correct, students are housed in the yurts and staff in the housing to the south. Can you tell me, are there staff and students living on site year round? If not, when do people live at the school? Also, can you tell me what water is used for in the yurts? Finally, can you describe for me the number of water fixtures that are in use at the school building?

Once I receive this information, I will complete my report and recommend a license for your water use. I look forward to your reply within thirty (30) days of the date of this letter. If you do not make a timely reply I will assume that you do not have any further interest in pursuing a water right license and I will take action to void the permit. You may submit your reply in writing at the address listed in the letterhead above. Please contact me at 208-334-2190 with any questions regarding the content of this letter. Thank you for your attention to these matters. I look forward to hearing from you.

Respectfully,

Cody Parker
Water Resource Agent
IDWR Western Region
208.334.2190
cody.parker@idwr.idaho.gov