

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34924
Exam Date: 03/21/2025

1. Current Owner:
FRYSLAN DAIRY LLC 8222 DESERT DR MARSING ID 83639-8264
2. Accompanied by: Dale Van Es
Phone No: (208) 250-0478
Address: 7122 Happy Valley Rd. Kuna, ID
Relationship to permit Holder: Owner of Frysylan Dairy LLC

3. SOURCE:
GROUND WATER

Method of Determination: Proof of Beneficial Use, AcrMap aerial imagery, in-person field examination

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-21894	Groundwater	Domestic & Stockwater (0.19cfs)	Decreed

Comments: Boise Project Board of Control, Boise Kuna Irrigation District, and American Ditch Company own irrigation rights that WR 63-34924 fall within the place of use boundary. These do not interfere as the purpose of use differs. License 63-21894 POD and POU lie within SWSW 02N01W S25 with a centroid point for the POD. A notice of change in water right ownership has been submitted to the department, as Dale Van Es has purchased the land which WR 63-21894 is appurtenant to.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
63-34746	Groundwater	Stockwater	Permit

Comments: WR 63-34746 is owned by Frysylan Dairy LLC and accounts for stockwater provided to the same business as this water right. No other overlapping permits or licenses currently exist for WR 63-34924.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:****Well 1 (Metal Tag D0012041)**

GROUND WATER L4 (SW $\frac{1}{4}$ SW $\frac{1}{4}$), Sec. 30, Twp 02N, Rge 01W, B.M. CANYON County
43.47436 -116.51152

Well 2 (Metal Tag D0031467)

GROUND WATER L4 (SW $\frac{1}{4}$ SW $\frac{1}{4}$), Sec. 30, Twp 02N, Rge 01W, B.M. CANYON County
43.47401 -116.51242

Well 3:

GROUND WATER L4 (SW $\frac{1}{4}$ SW $\frac{1}{4}$), Sec. 30, Twp 02N, Rge 01W, B.M. CANYON County
43.47568 -116.51298

Well 4:

GROUND WATER L4 (SW $\frac{1}{4}$ SW $\frac{1}{4}$), Sec. 30, Twp 02N, Rge 01W, B.M. CANYON County
43.47568 -116.51298

Method of Determination: Proof of Beneficial Use, ArcMap aerial imagery, in-person field examination, OnX GPS.

PLACE OF USE: COMMERCIAL

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	30											X L4						

Method of Determination: In-person field exam, ArcMap 2023 aerial imagery.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X 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

X 1:24,000 or greater.

N/A Aerial Photo Attached (required for irrigation of 10+ acres).

X 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
Well 1: D0012041	Grundfos MS4000	5	00226643	Franklin Electric 60FH5S4-PE	24C14-21-05387A
Well 2: D0031467	Franklin Electric SD 50	5	5870205503C	Franklin Electric	Unknown
Well 3	Grundfos CU 301	2.5	Unknown	Grundfos SQE 3-120	93001424
Well 4	Yaskawa P1000	15	1W2439065380038	Unknown	Unknown

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flow Meter	Closed Conduit	Panametrics	PT878	305120	2" Diameter PVC	April 2, 2025

2. Measurements: A closed conduit flow measurement was collected at the location where used plate cooler water is diverted into the storage tank. The storage tank provides water to the remainder of the system including the milking bay.

Table 1 Ten-minute flow measurement featuring average velocity in feet per second and flow rate in gallons per minute.

Closed Conduit Flow Measurement		
Time	Velocity ft/s	Volume GPM
12:27	0.74	5.5
12:28	0.66	4.9
12:29	0.65	4.9
12:30	0.69	5.2
12:31	0.68	5.1
12:32	0.7	5.3
12:33	0.78	5.8
12:34	0.74	5.6
12:35	0.74	5.5
12:36	0.7	5.2
12:37	0.74	5.6
Avg.	0.71	5.3

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method:

Theoretical flows:

Well 1: $(8.8 * 5 \text{ hp} * 0.67) / [(168' + (65 \text{ psi} * 2.31))] = 29.48 / 318.15 = 0.09 \text{ cfs}$

Adequate information for theoretical flow calculation was only available for Well 1. Theoretical flow shows a higher capacity than the flow capacity of commercial use, proving the system capability of delivering necessary rate for the system of this permit.

A standard industrial sink will produce 3 gallons per minute. Since there is one sink located in the dairy building that utilizes water straight from the wells, it is appropriate to add an additional rate of 0.01 cfs, rounded up from the calculation below.

$$3\text{gpm} * 0.00223 = 0.0067 \text{ cfs}$$

F. VOLUME CALCULATIONS

Volume Calculations Commercial Use:

The dairy uses a plate cooling unit from BouMatic that includes a closed system using glycol and well water to cool milk rapidly. Water used for other components of the dairy is pulled from a storage tank that stores water that has been through the plate coolers. A closed conduit measurement was collected from the pipe that diverts water into the storage tank from the plate cooler. The owner had confirmed that the dairy runs for 22 hours per day, 365 days per year. Values from the panametric measurement and the annual hours of operation were used to derive the commercial volume.

$$\frac{5.3 \text{ GPM} * 60 \text{ minutes} * 22 \text{ hours} * 365 \text{ days}}{325,850 \text{ gallons}} = 7.8 \text{ AFA}$$

A Non-irrigation Water Requirements table in the old Field Examiner's Handbook estimates a non-construction employee uses 15 gallons per shift. This is applied to the dairy employing two people per shift, with two shifts per day for the use of a hand washing sink, located in the milk processing room, upstream of the plate cooling unit. It was concluded that water used by this sink is separate from the plate cooling system and storage tank.

$$\frac{15 \text{ gallons} * 2 \text{ employees} * 2 \text{ shifts} * 365 \text{ days}}{325,850 \text{ gallons}} = 0.07 \text{ AFA or } 0.1 \text{ AFA}$$

$$7.8 \text{ AFA} + 0.07 \text{ AFA} = 7.87 \text{ AFA or } \mathbf{7.9 \text{ AFA}}$$

G. NARRATIVE/REMARKS/COMMENTS

A permit for 0.27cfs for commercial use was approved on September 14, 2020 for Frysland Dairy LLC. The proof of beneficial use was submitted to the department on January 29, 2025 and a field exam was conducted on March 21, 2025. The field exam was accompanied by the owner of Frysland Dairy LLC, Dale Van Es. Condition X02 was placed on the permit stating that the commercial use is for 1000 dairy cattle. During the development period, the dairy had a maximum of 1800 dairy cattle.

Permit number 63-34924 for commercial use is used alongside permit number 63-34746 for stockwater under Frysland Dairy LLC. Both permits had five wells listed as points of diversion and overlap with WR 63-21894 for domestic and stockwater. The overlapping well for WR 63-21894 located in SESE of 02N 02W S 25 only supplies water to a single domestic household and pasture, as well as some stockwater tanks on Frysland Dairy. Since that well is not connected to the commercial system and all stockwater is accounted for by permit 63-34746, this point of diversion will be removed from this license. Four well driller's reports were submitted by SPF Engineering with the application for permit 63-34924. The ownership of the well drillers reports is consistent with historical landownership to the property, so it is feasible that they are operating points of diversion for rights 63-34924 and 63-34746, although only two of the wells can be determined with certainty which well they belong. The two remaining wells were not assigned a metal tag number, or accurate coordinates were not recorded by the driller.

The commercial aspect of Frysland Dairy includes a simple system of one hand-washing sink, a BouMatic plate cooling system, a 1200 gallon storage tank, and two fire hoses used in the milking bay. The dual coolant plate cooling unit from BouMatic utilizes both glycol and well water to cool milk rapidly. Glycol remains in the system and allows the unit to reduce water use. Once well water has been used by the plate cooler, it is diverted to a 1200-gallon storage tank where water is stored to be reused for dairy operations within the milking bay. This is where a flow measurement was collected as water was diverted from the plate coolant unit to the storage tank. Water used for other components of the dairy, such as the two fire hoses in the milking bay, is pulled from the storage tank that stores water that has been through the plate coolers. The owner had confirmed that the dairy runs for 22 hours per day, 365 days per year. Values from the panametric measurement and the annual hours of operation were used to derive the commercial volume. The employee hand washing sink does not use water from the storage tank but rather directly from the wells, so a separate volume from the sink was included in Items E and F, as well as the licensed diversion rate and volume. The field examiner's handbook estimates a non-construction employee uses 15 gallons of water per shift. This was applied to the two employees per shift, with two shifts per day, every day of the year.

Conditions X02 and 106 were removed from the license and condition 121 was replaced with 103 as per department standards. The flow rate was reduced to ~~0.01~~ ^{0.02 cfs} cfs in accordance with the flow measurement collected during the field exam, no longer requiring condition 01M. A volume of 7.9 AFA was licensed to include the annual use of water for the plate cooling system and hand washing sink.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Volume</u>
COMMERCIAL	01/01 to 12/31	0.02 CFS	7.9 AFA

Totals: 0.02 CFS 7.9 AFA

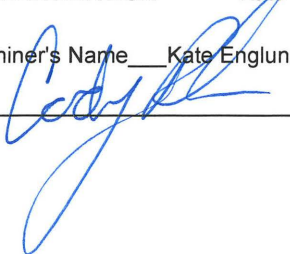
2. Recommended Amendments

☐ 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 ☒ None

I. AUTHENTICATION Kate Englund - Water Resource Agent

Field Examiner's Name Kate Englund Date April 18, 2025

Reviewer  Date 07/24/2025

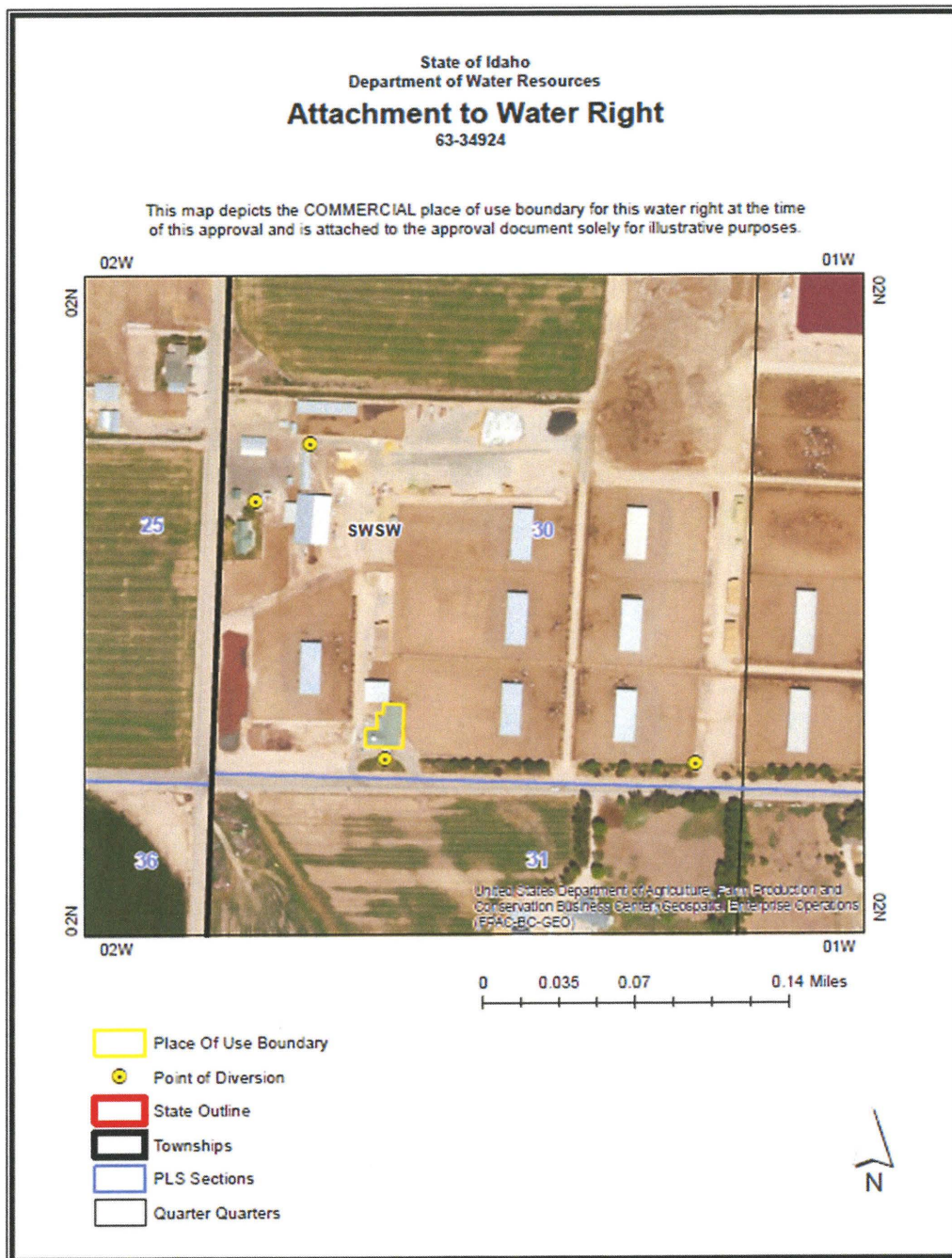


Figure 1 Map depicting points of diversion and place of use for commercial water right 63-34924.



Figure 2 System diagram showing the points of diversion locations and commercial place of use. Main lines are not included since they are buried and exact locations are unknown.

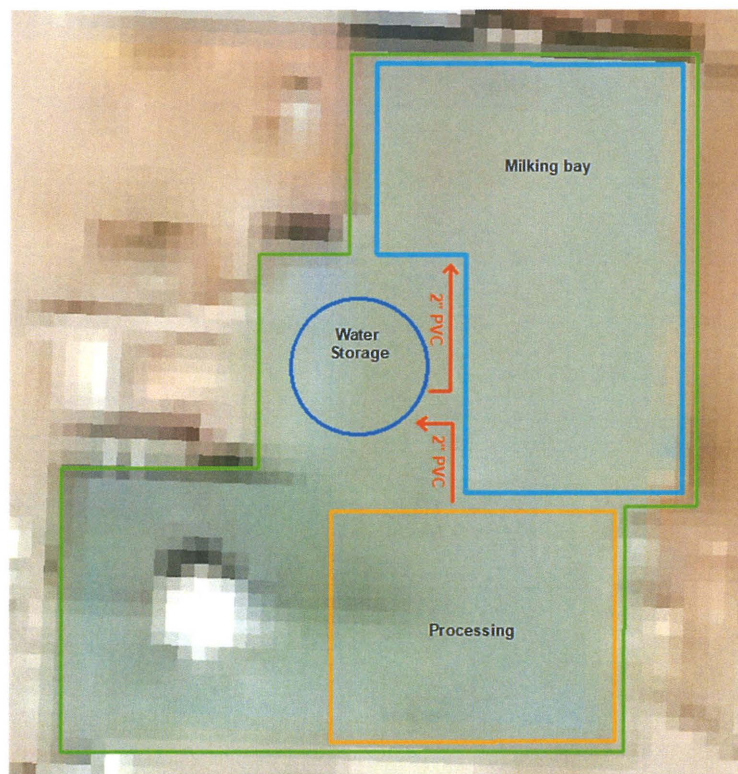


Figure 3 Diagram of commercial place of use. Photo includes the main components of the commercial building associated with the dairy.



Figure 6 Control panel for Well 1.

Ratings

HP	5 hp
Frequency	60 Hz
Basic Model	60S4
PEI #	0.94
Maximum Flow Rate - 60 Hz	75 gpm
Minimum Flow Rate - 60 Hz	40 gpm
Flow	60 gpm
Shut Off 60 Hz	485 ft
Stages	16
Pump Efficiency	67.0 %
Temperature Rating	120 °F

Figure 7 Ratings from Franklin Electric for submersible pump 60FH5S4-PE, used in Well 1.



Figure 8 Metal tag for Well 2 with identification number D0031467.



Figure 9 Well head for Well 2, or D0031467.



Figure 10 Franklin Electric SD50 Subdrive Connect control panel showing 61PSI for well D0031467.

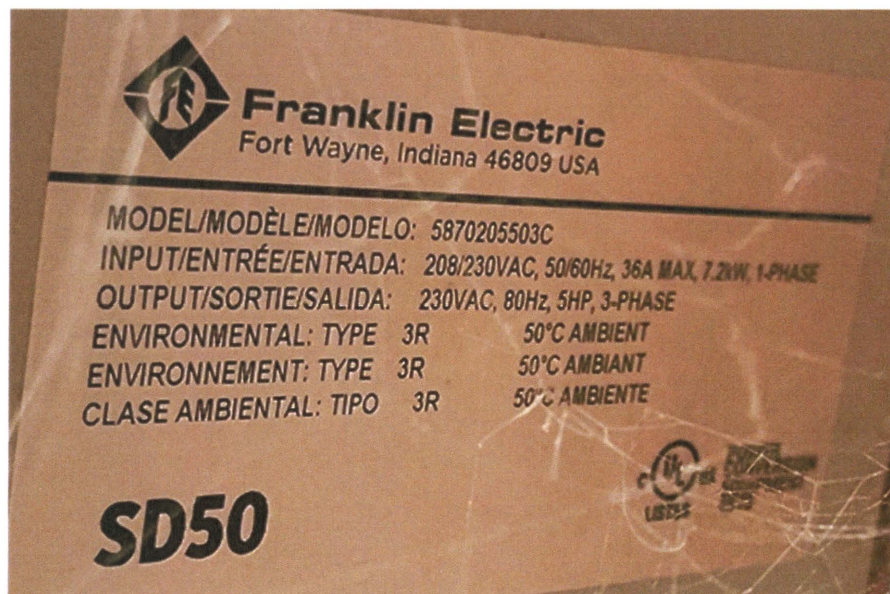


Figure 11 Specification tag for Franklin Electric Subdrive 50 pump motor panel. Tag specifies motor model number and 5hp pump.



Figure 12 Well 3 with no identification tag.



Figure 13 Grundfos CU 301 pressure control panel showing 70 psi for Well 3.



Figure 14 Well 4.



Figure 15 Yaskawa P1000 control panel showing 60 psi for Well 4.

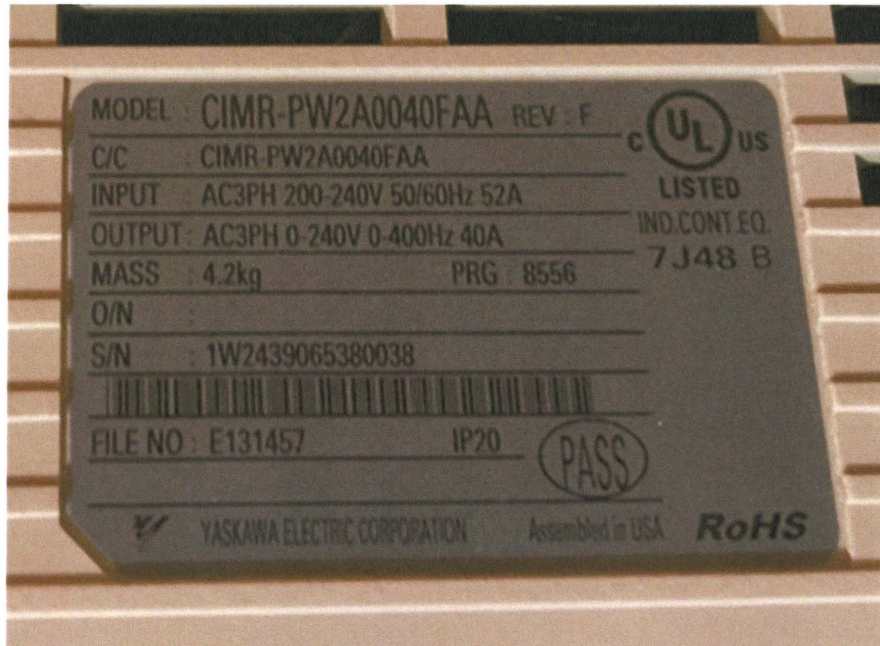


Figure 16 Pump motor specification tag for Well 4 showing serial number and model identification number.

Drive Model Number		Rated Output Current (Amps)	Nominal HP
Standard ¹	Flange ^{2, 3}		
CIMR-PW2A0004FAA	CIMR-PW2A0004UAA	3.5	3/4
CIMR-PW2A0006FAA	CIMR-PW2A0006UAA	6	1
CIMR-PW2A0008FAA	CIMR-PW2A0008UAA	8	2
CIMR-PW2A0010FAA	CIMR-PW2A0010UAA	9.6	2
CIMR-PW2A0012FAA	CIMR-PW2A0012UAA	12	3
CIMR-PW2A0018FAA	CIMR-PW2A0018UAA	17.5	5
CIMR-PW2A0021FAA	CIMR-PW2A0021UAA	21	7.5
CIMR-PW2A0030FAA	CIMR-PW2A0030UAA	30	10
CIMR-PW2A0040FAA	CIMR-PW2A0040UAA	40	15
CIMR-PW2A0056FAA	CIMR-PW2A0056UAA	56	20

Figure 17 Yaskawa Electric pump model numbers correlating nominal horsepower. This table was used to determine the horsepower of the pump in well 4.

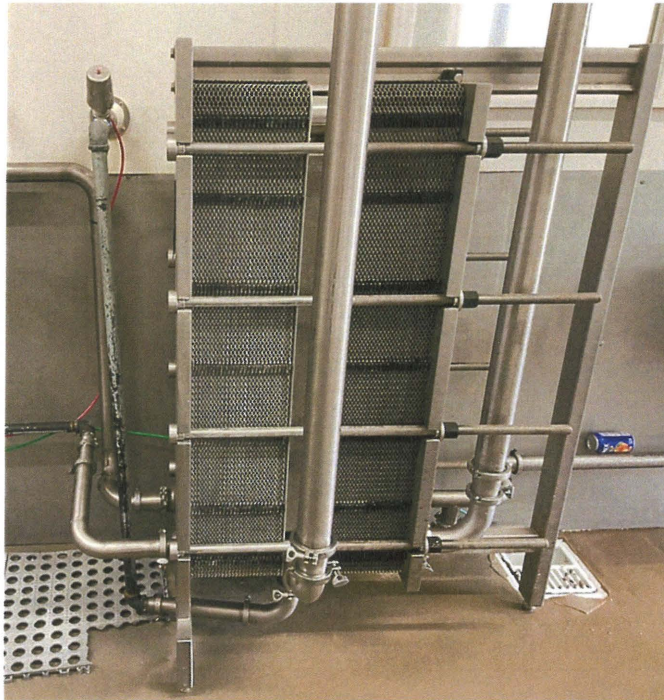


Figure 18 Dual coolant plate cooling system used to cool milk.

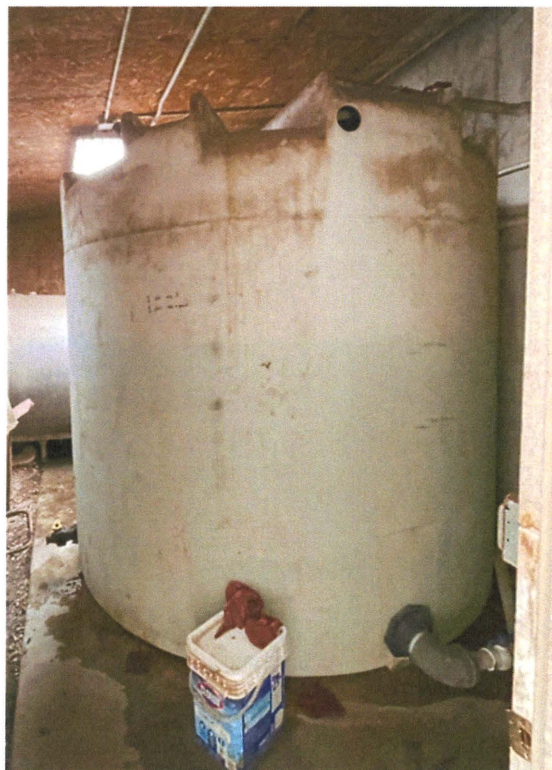


Figure 19 1200-gallon storage tank used to store water used by plate coolers. This water is used intermittently by two fire hoses in the milking bay.

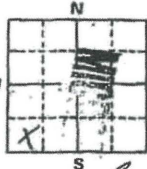


Figure 20 Hand washing sink used intermittently by four employees per day.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

USE TYPEWRITER OR
BALLPOINT PEN

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 <u>Mike Thiel</u> Address <u>Happy Valley Rd. Pampa, Id.</u> Owner's Permit No. _____	7. WATER LEVEL Static water level <u>120</u> feet below land surface. Flowing? ☐ Yes ☐ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ °F. Quality _____																																														
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____	8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td><u>30</u></td> <td><u>120</u></td> <td><u>2</u></td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>30</u>	<u>120</u>	<u>2</u>																																								
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG 85854 <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Hole Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td><u>9</u></td> <td><u>0</u></td> <td><u>1</u></td> <td><u>top soil</u></td> <td></td> <td>☒</td> </tr> <tr> <td><u>9</u></td> <td><u>1</u></td> <td><u>7</u></td> <td><u>slightly sandy gravel</u></td> <td></td> <td>☒</td> </tr> <tr> <td><u>9</u></td> <td><u>7</u></td> <td><u>18</u></td> <td><u>black lava rock</u></td> <td></td> <td>☒</td> </tr> <tr> <td><u>6</u></td> <td><u>18</u></td> <td><u>45</u></td> <td><u>red sand</u></td> <td></td> <td>☒</td> </tr> <tr> <td><u>6</u></td> <td><u>45</u></td> <td><u>50</u></td> <td><u>black lava rock</u></td> <td></td> <td>☒</td> </tr> <tr> <td><u>6</u></td> <td><u>50</u></td> <td><u>175</u></td> <td><u>black lava rock</u></td> <td></td> <td>☒</td> </tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	<u>9</u>	<u>0</u>	<u>1</u>	<u>top soil</u>		☒	<u>9</u>	<u>1</u>	<u>7</u>	<u>slightly sandy gravel</u>		☒	<u>9</u>	<u>7</u>	<u>18</u>	<u>black lava rock</u>		☒	<u>6</u>	<u>18</u>	<u>45</u>	<u>red sand</u>		☒	<u>6</u>	<u>45</u>	<u>50</u>	<u>black lava rock</u>		☒	<u>6</u>	<u>50</u>	<u>175</u>	<u>black lava rock</u>		☒
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4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____	10. Work started <u>Feb 20, 1981</u> finished <u>Feb 20, 1981</u>																																														
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>2.50</u> inches</td> <td><u>6"</u> inches</td> <td><u>1</u> feet</td> <td><u>175</u> feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> 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 <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>18 ft.</u> Material used in seal: ☐ Cement grout ☒ Pudding clay ☐ Well cuttings Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld Describe access port <u>3/4" Cemented between strata pipe thread</u>	Thickness	Diameter	From	To	<u>2.50</u> inches	<u>6"</u> inches	<u>1</u> feet	<u>175</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	11. DRILLERS CERTIFICATION <u>DL</u> I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Can Ada Well</u> Firm No. <u>304</u> Address <u>Box 328 Pampa, Id.</u> Date <u>6/5/82</u> Signed by (Firm Official) <u>Earl Skinner</u> and _____ (Operator)														
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Pampa</u> <u>SW</u> 1/4 <u>SW</u> 1/4 Sec. <u>20</u>, T. <u>2</u> N., R. <u>1</u> W.	USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT																																														

Well 3

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 <u>Mike Thiel</u> Address <u>Happy valley Rd - Nampa</u> Owner's Permit No. <u>63-89-W-154-000</u>	7. WATER LEVEL Static water level <u>112</u> feet below land surface. Flowing? ☐ Yes ☐ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ °F. Quality _____ <i>Describe artesian or temperature zones below.</i>																																																																			
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 ☐ Pump ☐ Bailer ☐ Air ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">30</td> <td style="text-align: center;">165'</td> <td style="text-align: center;">1</td> </tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	30	165'	1																																																													
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Bore Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th rowspan="2">Water Yes No</th> </tr> <tr> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>0</td> <td>1</td> <td>Top Soil</td> <td></td> </tr> <tr> <td></td> <td>1</td> <td>7</td> <td>Brown Clay - Dirt</td> <td></td> </tr> <tr> <td></td> <td>7</td> <td>12</td> <td>Broken Rock</td> <td></td> </tr> <tr> <td></td> <td>12</td> <td>21</td> <td>LAUA Rock - BASALT</td> <td></td> </tr> <tr> <td></td> <td>21</td> <td>63</td> <td>BASALT - Solid</td> <td></td> </tr> <tr> <td></td> <td>63</td> <td>65</td> <td>Red cinders</td> <td></td> </tr> <tr> <td></td> <td>65</td> <td>90</td> <td>BASALT Rock</td> <td></td> </tr> <tr> <td></td> <td>90</td> <td>91</td> <td>Cinders - Red</td> <td></td> </tr> <tr> <td></td> <td>91</td> <td>120</td> <td>BASALT Rock</td> <td></td> </tr> <tr> <td></td> <td>120</td> <td>130</td> <td>BASALT Rock</td> <td></td> </tr> <tr> <td></td> <td>130</td> <td>165</td> <td>BASALT Rock</td> <td></td> </tr> <tr> <td></td> <td>165</td> <td>190</td> <td>Hard BASALT Rock</td> <td></td> </tr> </tbody> </table>	Bore Diam.	Depth		Material	Water Yes No	From	To	6	0	1	Top Soil			1	7	Brown Clay - Dirt			7	12	Broken Rock			12	21	LAUA Rock - BASALT			21	63	BASALT - Solid			63	65	Red cinders			65	90	BASALT Rock			90	91	Cinders - Red			91	120	BASALT Rock			120	130	BASALT Rock			130	165	BASALT Rock			165	190	Hard BASALT Rock	
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5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>250 inches</td> <td>6 inches</td> <td>1 feet</td> <td>21 feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> 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 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>21</u> Material used in seal: ☐ Cement grout ☐ Bentonite ☒ Puddling clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port: <u>Sandary well seal</u>	Thickness	Diameter	From	To	250 inches	6 inches	1 feet	21 feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet																																				
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6. LOCATION OF WELL Sketch map location <u>must</u> agree with written location. N W 30 E S Subdivision Name _____ Lot No. _____ Block No. _____ County <u>CANYON</u> <u>SW</u> 1/4 <u>SW</u> 1/4 Sec. <u>30</u>, T. <u>7</u> N., R. <u>1</u> W.	10. Work started <u>8-25-89</u> finished <u>8-26-89</u>																																																																			
11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. <u>SCOTT DRILLING CO.</u> Firm Name <u>5412 LAKE AVE.</u> Firm No. <u>327</u> <u>CALDWELL, ID 83605</u> Address <u>(203) 459-6696</u> Date <u>8-27-89</u> Signed by (Firm Official): <u>James A. Scott</u> and <u>[Signature]</u> (Operator)																																																																				

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