

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 93-7432

Exam Date: 07/24/2024

1. Current Owner:
COREY JOHNSON 6896 FARM TO MARKET RD BOW WA 98232-9260 AND
RACHEL JOHNSON 6896 FARM TO MARKET RD BOW WA 98232-9260
2. Accompanied by: Corey Johnson
Phone No: 360-333-5059
Address: Same as above
Relationship to permit Holder: Permit Holder.

3. **SOURCE:**
GROUND WATER

Method of Determination: ArcMap and DRG Layer.

B. OVERLAP REVIEW

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

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

GROUND WATER NE¼ SE¼, Sec. 19, Twp 45N, Rge 04W, B.M. BENEWAH County

Method of Determination: GPS Located POD at -116°52.6942, 47°13.6093, Well D-TAG D0003688

PLACE OF USE: STOCKWATER, STOCKWATER STORAGE, and 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 | |
| 45N | 04W | 19 | | | | | | | | | | | | | X | | | | |

PLACE OF USE: IRRIGATION

| Twp | Rng | Sec | NE | | | | NW | | | | SW | | | | SE | | | | Totals |
|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|----|----|--------|
| | | | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | |
| 45N | 04W | 19 | | | | | | | | | | | | | 0.5 | | | | 0.5 |

Total Acres: 0.5

Method of Determination: Beneficial use field examination, ArcMap aerial imagery, and Benewah County tax parcel maps.

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 Model No. | Pump Make | Pump Serial No. or Discharge Size |
|---------------------------|-------------------|-----|-----------------|-----------|-----------------------------------|
| D0003688 | Franklin Electric | 1.5 | 2823008110 | Unknown | Unknown |

D. FLOW MEASUREMENTS

1.

| Measurement Equipment | Type | Make | Model No. | Serial No. | Size | Calib. Date |
|-----------------------|------|------|-----------|------------|------|-------------|
| NONE | | | | | | |

2. Measurements: Unable to perform flow measurements due to inadequate pipe requirements. Main water line from well routed directly to a single pressure tank before distribution; first frost-free hydrant off main water service pipeline tested and directly influenced by pressure tank. A Theoretic Pump Equation was used with system component information to derive a flow rate of 0.03 cfs considering Department rounding standards.

E. FLOW CALCULATIONS X Additional Computation Sheets Attached

Measured Method: Theoretic pump equation estimates flow as follows:

- D0003688 – 1.5 hp pump motor hung at 295 ft with 45 PSI operating pressure equals **0.03 cfs** considering department rounding standards.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \text{ ac} \times 3.0 \text{ afa} = 1.5 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 214\text{-days} \times 1.9835 = 12.7 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = \mathbf{1.5 \text{ af}}$$

2. Volume Calculations for Other Uses: Stockwater Storage – see attached pond analysis worksheet.

- Domestic annual volume for 1 home (in-home use only) = **0.6 af**.
- Stockwater annual volume = 10 horse/mule x 12 gpd x 365-days = 43,800 gal annually / 325,850 gal per af = **0.1 af** annually considering Department rounding standards.
- Maximum diversion volume = sum of all beneficial uses = 1.5 af + **0.3 af** (stockwater storage) + 0.6 af + 0.1 af = **2.5 af**.

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 7/24/2024 with one of the Permit Holders, Cory Johnson, showed a cased ground water well being used for domestic, stockwater, stockwater storage, and irrigation uses. At the POD, GW well D0003688 and the Franklin Electric 1.5 hp pump motor relay control panel reside in a small, enclosed pump shed with a pressure tank. The well centroids entered in IDWR's database are incorrect and the well D-Tag is swapped with another well drilled further east from the applicant's property. A photograph was captured at the time of exam that illustrates the correct D-Tag information for this POD.

I was unable to capture accurate flow measurements due to inadequate pipe requirements and a theoretical pump equation was calculated during licensing review which derives a flow rate of 11.9 gpm or **0.03 cfs** considering Department rounding standards. I'm recommending 0.03 cfs as the maximum diversion rate for licensing purposes; the applicant is limited by pump performance as installed at time of the field exam, which reduces the domestic & irrigation beneficial use authorized rates below what Department standards would authorize for the water uses as developed under the Permit. The stockwater use diversion rate remains **0.02 cfs** and the Diversion to Storage diversion rate I'm authorized to recommend remains at **0.02 cfs** as Permitted for licensing purposes.

From the well and pump shed a main service poly-pipeline splits conveying water to the main residence just up-hill from the well site and to multiple frost-free hydrant stubs. The applicant uses frost-free hydrants for stockwater and irrigation purposes along with diversion to storage to fill a small stock pond. I took photographs of the residence and used ArcMap aerial imagery during licensing review to assign the domestic POU. For licensing purposes, the Permit's domestic use is authorized **0.6 af** annually for one home with irrigation covered on a separate beneficial use (B.U.) component.

A small portable stock tank is positioned and filled using hoses from a hydrant for stockwater use. The applicants have 12 horses/mules which they rotate between Washington and the stockwater POU throughout the year. I used field maps to locate the reach of area hoses are used to fill the stock tank and during licensing review I used ArcMap aerial imagery to create the stockwater POU which is a triangular shape; stock range throughout the larger parcel(s) owned by the applicant but come back to the POU for watering purposes. The annual volume recommended for stockwater = **0.1 af** considering Department rounding standards.

I used field maps during the exam to sketch out the irrigation POU, which consists of a small orchard tree plot developed on a sloped grade down-hill from the residence. Soaker hoses from a frost-free hydrant are used to irrigation and trees spaced at intervals; photographs were taken to illustrate the irrigation beneficial use as developed at the time of exam. During licensing review, I used ArcMap aerial imagery to accurately trace out the irrigation POU that equals 0.5 acre. I'm recommending an annual diversion volume of **1.5 af** based on Department standard irrigation diversion rates for licensing purposes. Current water usage by the applicant is focused on water conservation and only drip line soaker style hoses are in place to water trees.

Hoses are routed from a frost-free hydrant to fill a shallow stock pond co-located with the irrigation plot on the sloped hill. The pond is located on a parcel showing ownership under a different name than the applicant: Cedardale Family Farm LLC. The parcel's LLC is a State of Washington based corporation which I validated during licensing review designates Corey Johnson, the Permit Holder, as an acting Member for the LLC. Although I've de-conflicted any ownership issues between properties the Stockwater Storage POU is located on, I recommend maintaining condition 004 for licensing purposes. The small stockwater storage pond is less than 0.1 acres in size (0.02 ac), has an average depth of 3-ft, pond capacity of 0.1 af, seepage & evaporation loss rates = 0.2 af, and total volume required equal to 0.3 af. I've recommended **0.3 af** for licensing purposes for stockwater storage and used ArcMap aerial imagery to designate the POU shape for licensing purposes.

The permit authorized development of the ground water source with multiple B.U.(s) POU legal description – Twp 45N, Rge 04W, Sec 19, NE¼NE¼. I used a Garmin GPS to validate the POD location and during licensing review ArcMap aerial imagery demonstrated all of the POU(s) are located in the NE¼SE¼. I mailed an Amendment to Permit to change the domestic, stockwater, stockwater storage, & irrigation POUs at time of licensing to the applicant on 10/3/2024; the Northern Regional Office received the amendment with fees on 10/21/2024.

The following changes to Permit conditions of approval are recommended for licensing Right 93-7432:

- Removed 26A & X02 – applicant complied with 26A and X02's description of stock type isn't required on the license.
- I revised condition 132 as the applicant only developed one home vice the two homes authorized by the Permit.
- I revised condition 219 describing storage pond volumetric data ascertained during licensing review.
- I removed condition 220 based on directives from the Deputy Director – Shelley Keen.
- I replaced condition R66 with X31 to accurately describe small acreage irrigation occurring of less than 1 acre in size.
- Condition 004 was retained due to multiple parcel association with B.U. POU(s) with different ownership reflected on Benewah County tax rolls.

There are no overlapping water right concerns toward licensing Permit 93-7432.

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>Annual Volume</u> |
|-----------------------|----------------------|--------------------------|----------------------|
| STOCKWATER | 01/01 to 12/31 | 0.02 CFS | 0.1 AF |
| STOCKWATER STORAGE | 01/01 to 12/31 | | 0.3 AF |
| DIVERSION TO STORAGE | 01/01 to 12/31 | 0.02 CFS | |
| IRRIGATION | 04/01 to 10/31 | 0.03 CFS | 1.5 AF |
| DOMESTIC | 01/01 to 12/31 | 0.03 CFS | 0.6 AF |
| <u>Totals:</u> | | 0.03 CFS | 2.5 AF |

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

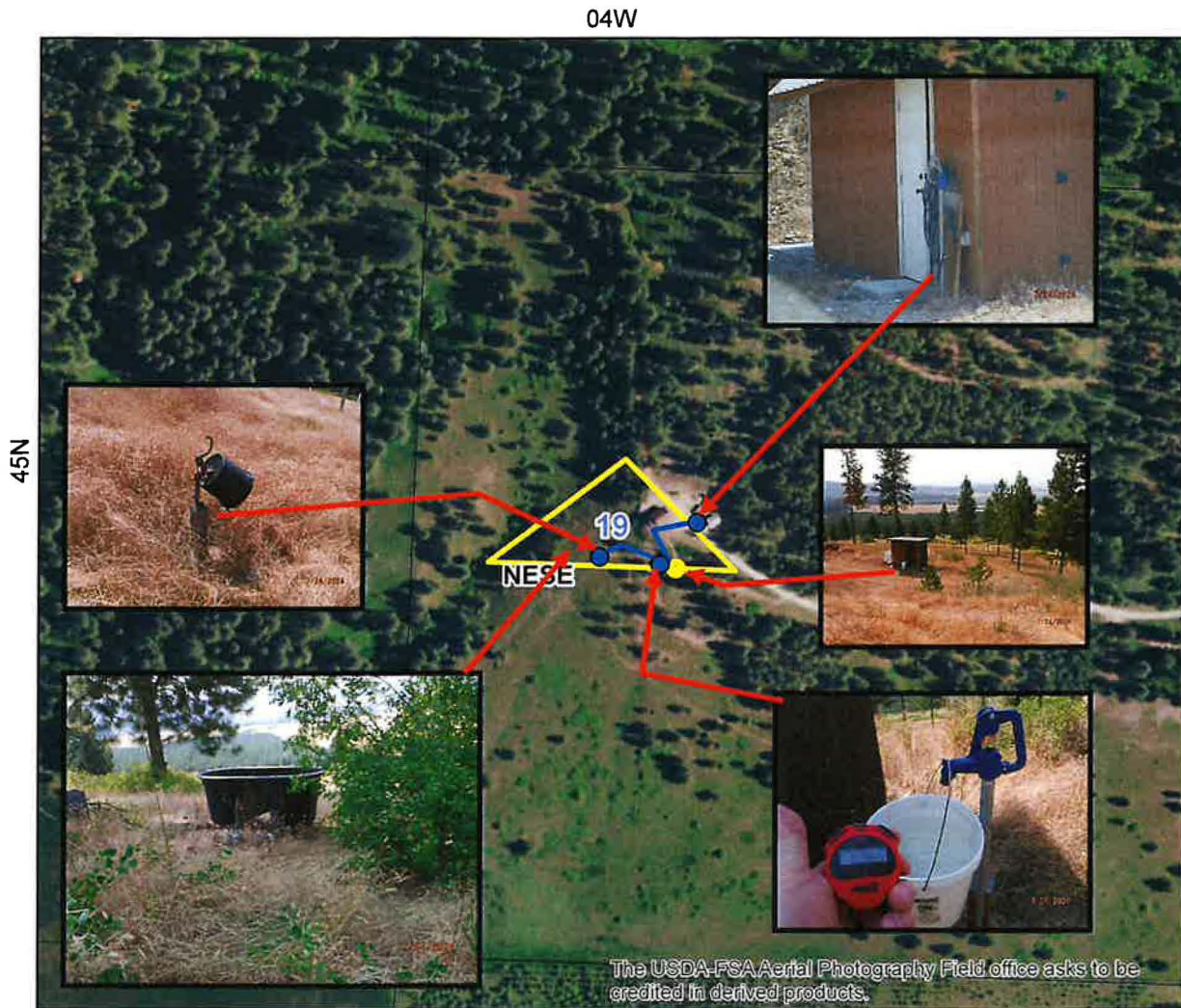
Luke Bates – Sr. Water Resource Agent

Field Examiner's Name *Bob* Date *10/24/2024*






Reviewer *Chris Buf* Date *3/27/2025*

State of Idaho
Department of Water Resources
Attachment to Field Exam
93-7432

This map depicts the STOCKWATER system diagram.



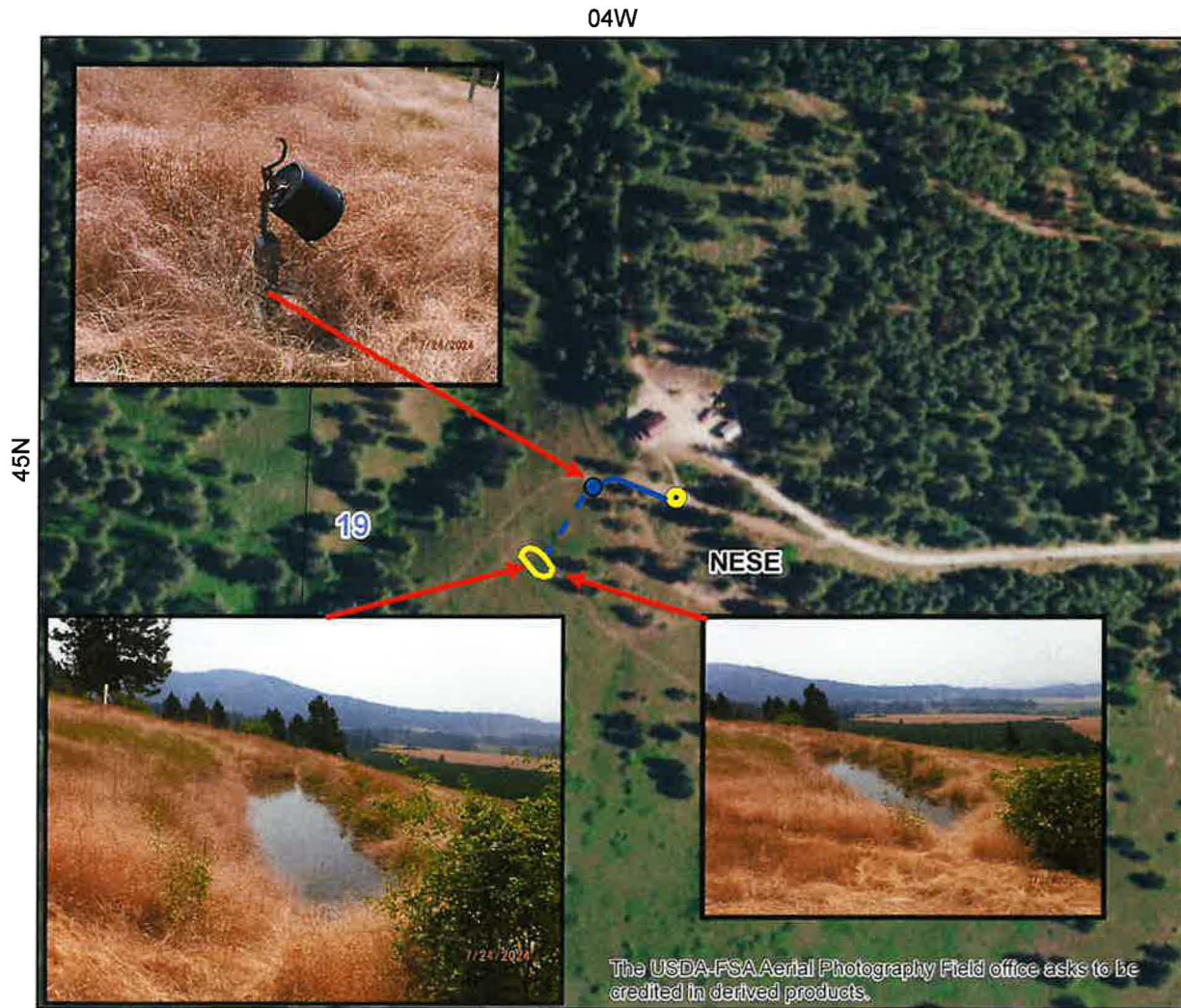
0 0.035 0.07 0.14 Miles

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








State of Idaho
Department of Water Resources
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This map depicts the STOCKWATER STORAGE system diagram.



0 0.025 0.05 0.1 Miles

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








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This map depicts the IRRIGATION system diagram.



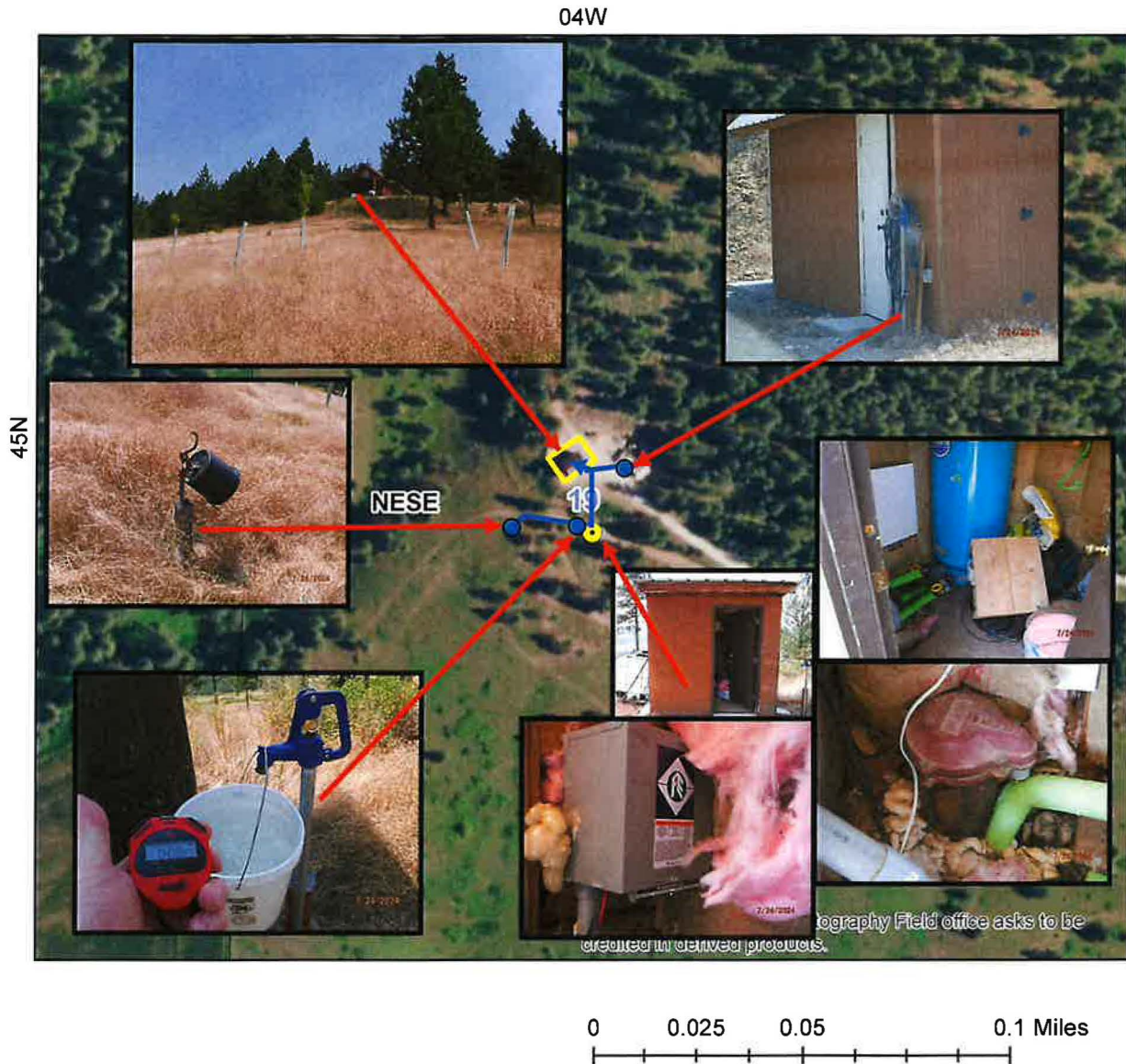
0 0.035 0.07 0.14 Miles

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



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This map depicts the DOMESTIC system diagram.



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



RENEW YOUR
Corporation or LLC

Print

CEDARDALE FAMILY FARM, LLC
UBI: 602 735 558

Thank you for renewing online

Your annual report has been completed and submitted. Please print this receipt for your records and allow 14 days to receive your license document in the mail.

Completed date and time: May 22 2015 1:10PM Pacific Time
 Transaction number: 2015 142 3861
 Credit card approval number: 532229

| Your company | | Your fees | |
|----------------------|----------------------------|-------------------------------------|----------|
| Company name: | CEDARDALE FAMILY FARM, LLC | Domestic Limited Liability Company: | \$ 60.00 |
| Unified business ID: | 602 735 558 | Renewal application fee: | \$ 11.00 |
| State of formation: | Washington | Total fees: | \$ 71.00 |
| Date of formation: | 06/14/2007 | Previous payment: | \$ 0.00 |
| Expiration date: | 06/30/2016 | Total amount charged: | \$ 71.00 |

Business information

| | |
|---|--|
| Principal place of business: | 17203 W. Big Lake Blvd. Mount Vernon, Washington 98274 United States |
| Company telephone number: | (360) 708 3132 |
| Company email address: | None provided |
| My company is managed by: | Members |
| Does your company own real property (including leasehold interests) in Washington? | Yes |
| Has there been a transfer of stock, other financial interest change, or an option agreement exercised during the last 12 months that resulted in a transfer of controlling interest? | No |
| Has an option agreement been executed in the last 12 months allowing for the future purchase or acquisition of the entity, that, if exercised would result in a transfer of controlling interest? | No |

If your company owns real property (including improvements on leased land) in Washington State, you must contact the Washington State Department of Revenue to report a transfer of a controlling interest. Failure to report the transfer is subject to the penalty provisions of RCW 82.45.220.

"Real property" means land or anything affixed to land, including standing timber or crops. Examples: Buildings, condominiums, used park model trailers, used floating homes, underground irrigation systems or utilities, and other types of property that are permanently affixed such as leasehold improvements not required to be removed at the end of your lease. See WAC 458-61A-102 & WAC 458-61A-106 for additional information.

For more information please call the Dept. of Revenue at (360) 534-

Nature of business

Type: Agriculture, Forestry, Fishing, Hunting & Trapping

Governing people

| | | |
|---------------------------|--------|---|
| COREY JOHNSON | Member | 17203 W. Big Lake Blvd. Mount Vernon, Washington 98274 United States |
| RICHARD (DICK) JOHNSON | Member | 17203 W. Big Lake Blvd. Mount Vernon, Washington 98274 United States |

Registered agent

| | |
|--|---|
| Agent type on file: | No agent type on file. |
| Agent on file: | RICHARD E JOHNSON |
| Agent's office street address on file: | 17203 W BLACK LAKE BLVD MOUNT VERNON, Washington 98274 United States |
| Agent's mailing address on file: | Same as registered office address. |
| Request agent type change to: | Individual |
| Request agent office street address change to: | 17203 W BIG LAKE BLVD MOUNT VERNON, Washington 98274 United States |

Person completing this renewal

| | |
|------------------------|---|
| Submitted By: | RICHARD (DICK) JOHNSON |
| Title: | Member |
| Renewal certification: | I am the person listed above and I certify under penalty of perjury that the renewal information submitted is true and correct to the best of my knowledge. I understand that deliberately submitting false information may be punishable as a gross misdemeanor. RCW 43.07.210 |

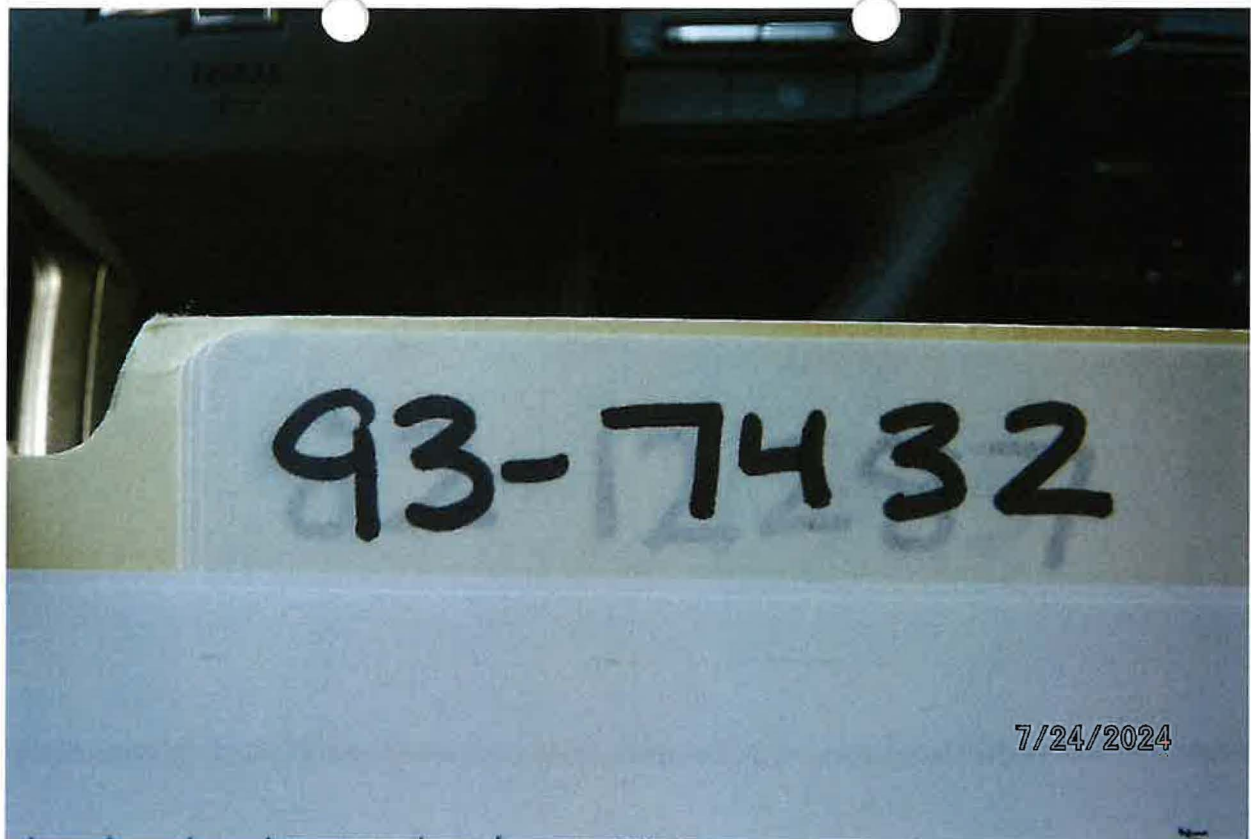
Total Storage Calculations

| | |
|-------------|------------|
| FILE NUMBER | 93-7432 |
| REVIEWER | Luke Bates |
| DATE | 10/3/2024 |

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

| |
|----------------------|
| User input |
| Calculated value |
| Formula Explanations |

| | | |
|--|------|---|
| Surface Area (AC.) | 0.02 | "Surface Area" is automatically carried over from the "Seepage Loss" sheet. |
| Average Pond Depth (FT.) | 3 | "Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth. |
| Pond Capacity (AF) | 0.1 | Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use. |
| Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF) | 0 | The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space. |
| Estimated Seepage Loss (AF) | 0.1 | The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet. |
| Estimated Evaporation Loss (AF) | 0.1 | The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet. |
| Total Volume Required (AF) | 0.3 | The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required. |



BENEFICIAL USE FIELD EXAM DATE 7/24/2024



POD – GROUNDWATER WELL LOCATED WITHIN PUMP HOUSE

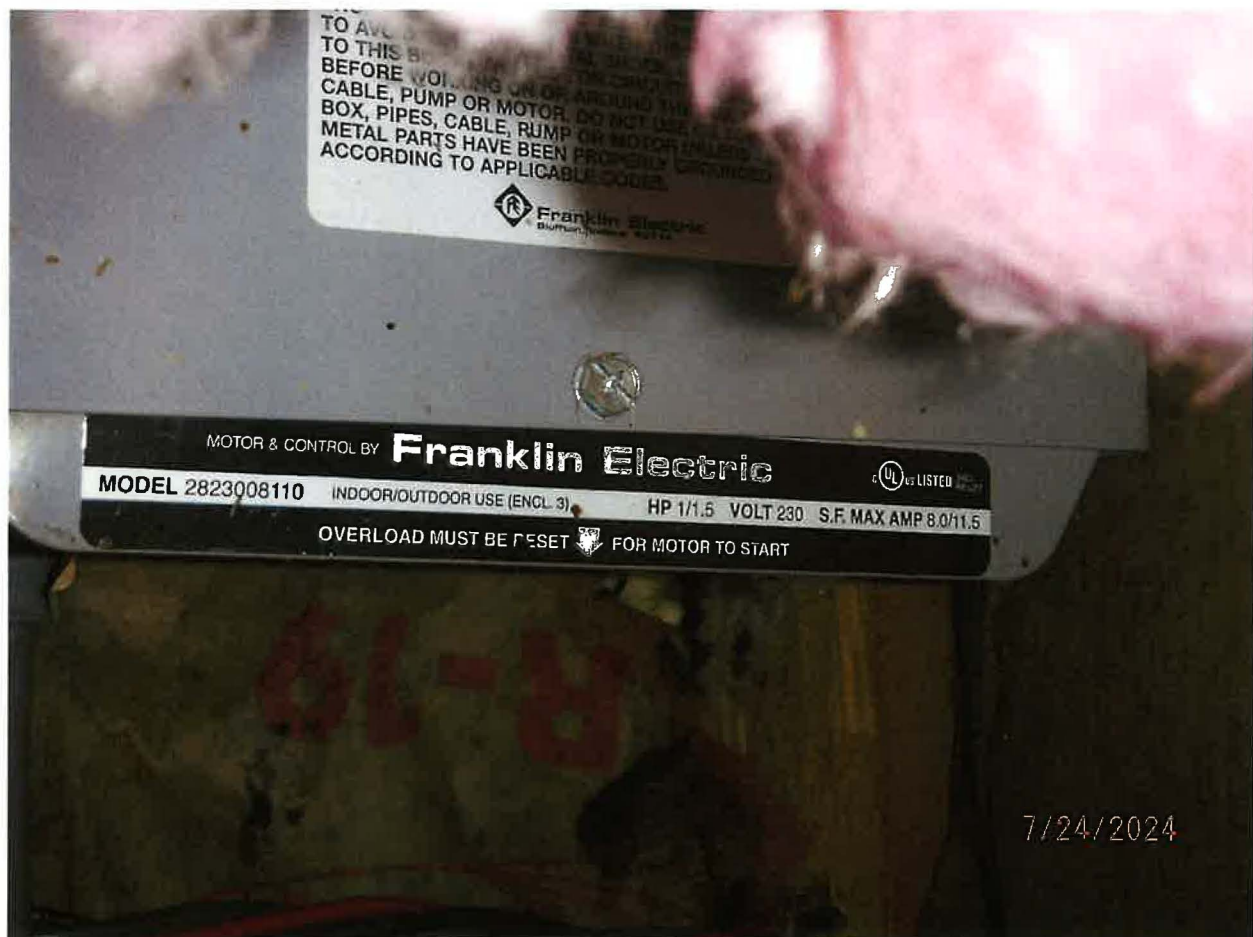


POD – GROUNDWATER WELL D0003688 (TAG FACING EXTERIOR WALL OF PUMP HOUSE)





DIVERTING WORKS – 1.5 HP FRANKLIN ELECTRIC PUMP MOTOR MODEL No. 2823008110





WATER CONVEYANCE SYSTEM INCORPORATES WELL PUMPING DIRECTLY TO A PRESSURE TANK BEFORE DISTRIBUTION TO WATER USES



DOMESTIC POU – 1 HOME OVERLOOKING HILLSLOPE



IRRIGATION POU – SMALL PLOT ORCHARD TREES USING DRIP LINE IRRIGATION

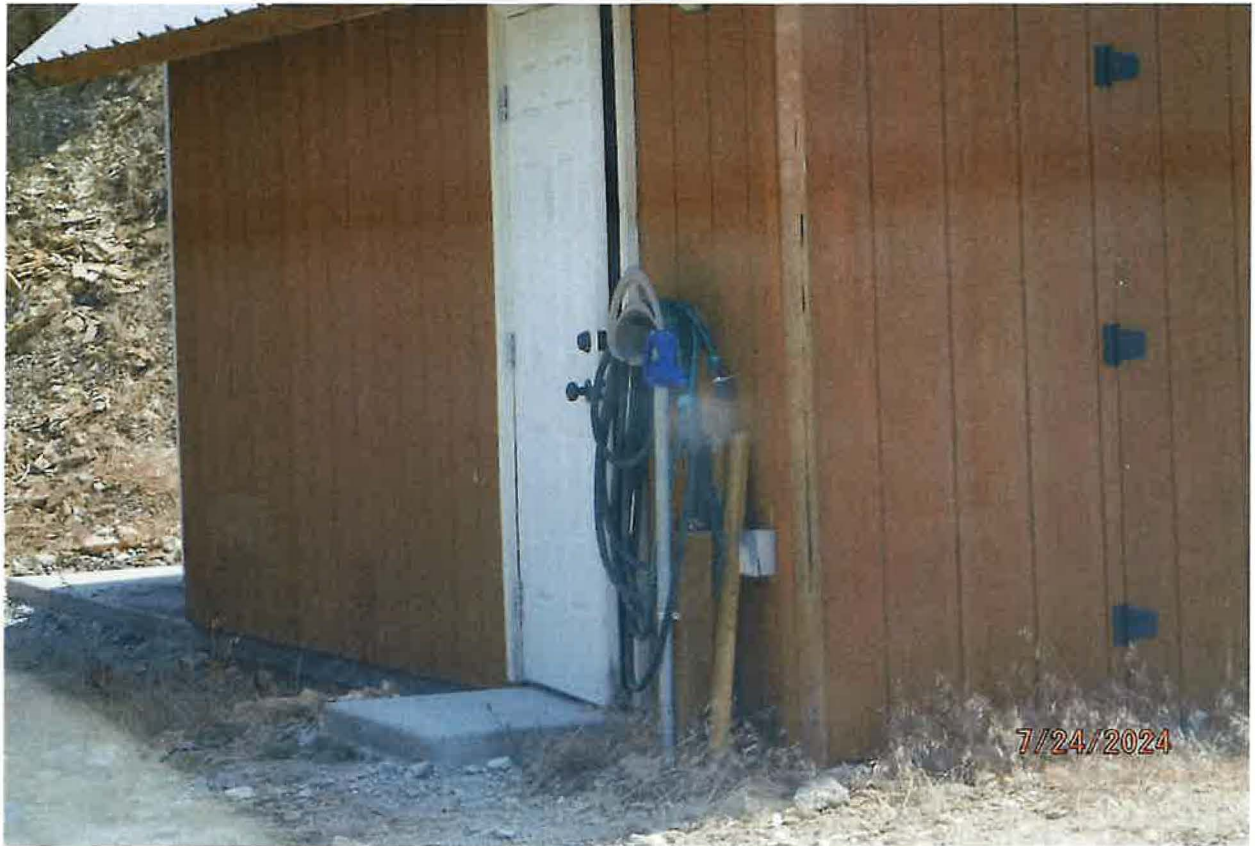




IRRIGATION POU – ORCHARD TREES PLANTED AT INTERVAL ALONG HILLSLOPE



STOCKWATER POU – FROST FREE HYDRANT AND HOSE(S) USED TO FILL PORTABLE STOCK TANK



DIVERSION TO STORAGE – SMALL POND FILLED BY GROUNDWATER WELL FROM HYDRANT & HOSES



STOCKWATER STORAGE POU – SMALL PONDING KEPT FULL USING GROUNDWATER THROUGHOUT SUMMER MONTHS – BENEFITS FROM SEASONAL RUNOFF DURING SPRING AND WINTER