

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 97-7537
Exam Date: 04/13/2021

1. Current Owner:
JANA OSTLER 4672 GLEASON MC ABEE FALLS RD PRIEST RIVER ID 83853
2. Accompanied by: Jana Ostler
Phone No: 208-946-5353
Address: Same as above
Relationship to permit Holder: Permit Holder

3. SOURCE:
SPRING
SURFACE RUNOFF

Tributary
SINKS

Method of Determination: Arcmap and DRG.

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
97-7538	SPRING / SURFACE RUNOFF	STOCKWATER	LICENSE

Comments: 97-7538 is licensed to the same applicant, and uses spring & surface runoff for multiple beneficial uses; stockwater use is the only beneficial use that overlaps this right's POU. The small pond associated with 97-7538 is separate from this permits pond and water sources. Stockwater use associated with 97-7538 is not used by the 12 horses covered under this permit, and there is no concern for overlap between rights 97-7537 & 97-7538.

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

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

SURFACE RUNOFF NE¼ SW¼, Sec. 8, Twp 58N, Rge 04W, B.M. BONNER County
SPRING NE¼ NE¼ SW¼, Sec. 8, Twp 58N, Rge 04W, B.M. BONNER County

Method of Determination: GPS; POD(s) is an earthen dam located at -116°53.125, 48°23.533.

PLACE OF USE: STOCKWATER STORAGE and FIRE PROTECTION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
58N	04W	8									X								

PLACE OF USE: STOCKWATER FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
58N	04W	8								X	X								

Method of Determination: Field exam and Arcmap aerial imagery.

3.

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

X Indicate weir size/pipe as applicable.X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.X 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
N/A					

D. FLOW MEASUREMENTS

1.

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

2. Measurements: N/A

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses:

- See attached pond analysis worksheet
- Stockwater annual volume = 12 horses x 12 GPD x 365 Days = 52,560 GPY / 325,850 gal/af = 0.16 af = **0.2 af**, considering department rounding standards.

G. NARRATIVE/REMARKS/COMMENTS

Field exam conducted on 4/13/2021 with the applicant, Jana Ostler, showed spring water and surface runoff water filling a small pond used for stockwater storage and fire protection storage. The approved permit included diversion to storage, stockwater, irrigation storage, irrigation from storage, and irrigation beneficial use(s); at time of exam it was determined that none of these uses were developed, and these were removed from the permit during licensing review.

At the POD, a very small 'v' grade was damned using earth and wooden poles to create the pond. Horses have degraded the land uphill from the pond and around it, making it difficult to discern exact spring location, but it was co-located with the pond. The entire area substrate was heavily saturated, identifying the natural spring area contained within the small ravine. A GPS point was taken at the earthen pond, and there are two points of diversion identified by a single centroid on the map. Due to the removal of direct flow beneficial uses and diversion to storage use, there is no diversion rate applied to this water right for licensing purposes. At the POU, the applicant has a stock tank positioned downhill from the small pond, which fills continuously. Additionally, the applicant uses a small run of poly pipe to syphon water from the pond for use at nearby

corrals. Excess overflow water leaks through the dam and does run downgrade, seeping within the applicant's parcel.

During the field exam the applicant asserted the pond was used for storage purposes only, and that stock animals used the pond directly as a water source. The stockwater storage and fire protection storage pond POU was sketched out during the field exam, and during licensing review Arcmap aerial imagery was used to trace out the pond surface area equaling 0.03 acres. The pond has an average depth of 3.5 feet, a pond capacity of 0.1 af, and estimated evaporation loss of 0.1 af annually, and incorporated **0.1 af** for stockwater from storage purposes. Due to the close proximity of the stock tank to pond, and that horses drink directly from the pond as well as the tank, 0.1 af was assigned to pond storage and 0.1 af was applied to from storage use. Based on current pond analysis sheet calculations, the annual volume calculations for the pond recommended for the license equal:

- Stockwater storage annual volume = 0.1 af (pond capacity) + 0.1 af (evaporation loss) + 0.1 af (stockwater from storage use) = **0.3 af**
- Fire Protection storage annual volume = 0.1 af (pond capacity + 0.1 af (evaporation loss) = **0.2 af**

The stockwater from storage POU was identified as approximately half the applicant's parcel, which is the extent to which the horses have access. Additionally, the water sources only serve the twelve horses, and the remaining stock on the property utilize stockwater from a separate spring source covered under right 97-7538.

Conditions 26A, 082, R66, and X02 were removed from the permit during licensing review. Condition 219 was replaced with 259, updating pond volume metrics and including stockwater from storage use. Condition 220 was updated to reflect total capacity calculated to the nearest tenth of an acre-foot. All other conditions on the permit will be carried forward to the license. Overlap concerns: 97-7538 is licensed to the same applicant, and uses spring & surface runoff for multiple beneficial uses; stockwater use is the only beneficial use that overlaps this right's POU. The small pond associated with 97-7538 is separate from this permit's pond and water sources. Stockwater use associated with 97-7538 is not used by the 12 horses covered under this permit, and there is no concern for overlap between rights 97-7537 & 97-7538.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Annual Volume</u>
STOCKWATER STORAGE	01/01 to 12/31	0.3 AF
STOCKWATER FROM STORAGE	01/01 to 12/31	0.1 AF
FIRE PROTECTION STORAGE	01/01 to 12/31	0.2 AF

Totals: 0.3 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 X None

I. AUTHENTICATION Luke Bates - Water Resource Agent

Field Examiner's Name Z. RB Date 4/16/2021

Reviewer Aid F. Smith Date 4/16/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
97-7537

STOCKWATER STORAGE and FIRE PROTECTION STORAGE system diagram.



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

0 0.02 0.04 0.08 Miles



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STOCKWATER FROM STORAGE system diagram.

04W



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

0 0.035 0.07 0.14 Miles



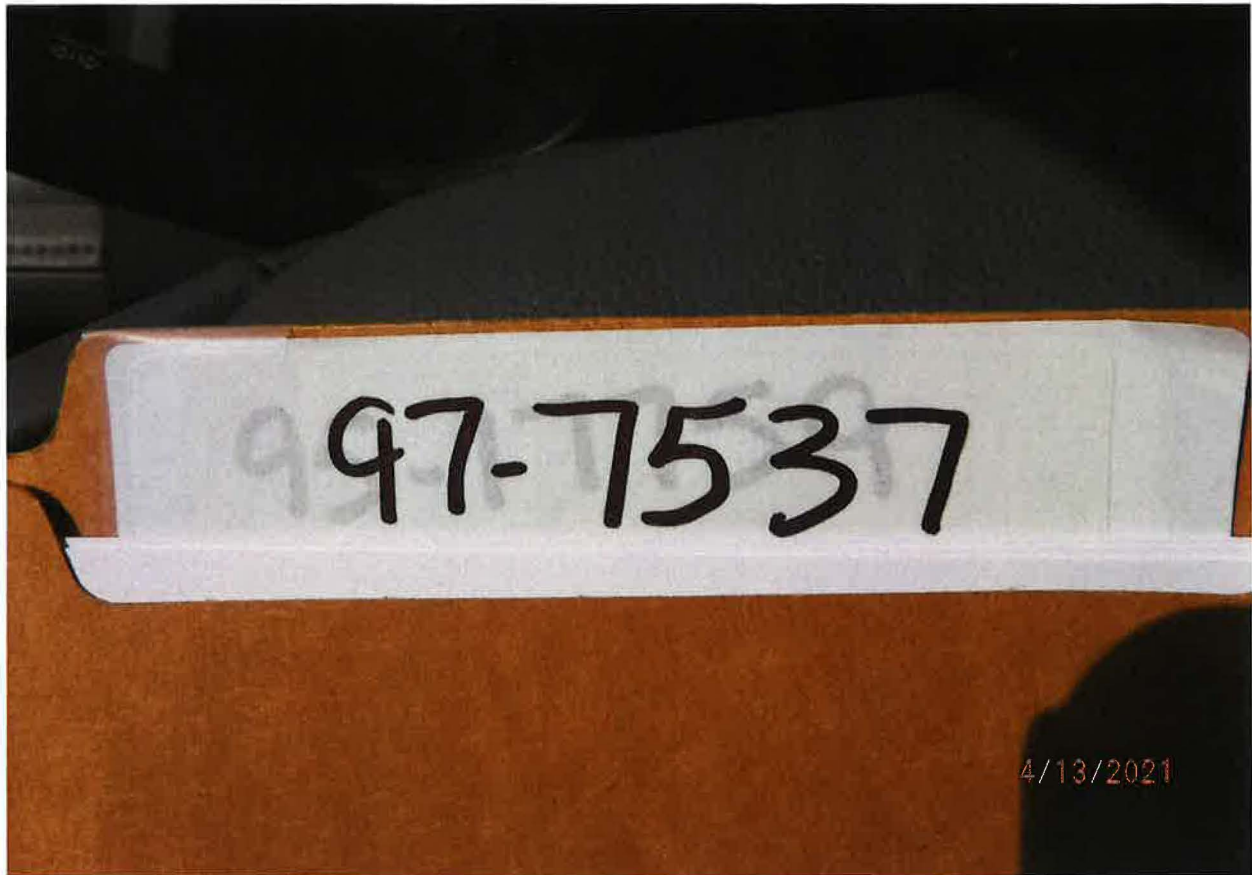
Total Storage Calculations

FILE NUMBER	97-7537
REVIEWER	LUKE BATES
DATE	4/14/2021

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.)	0.03	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	3.5	"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)	0.1	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)	0.0	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.



FIELD EXAM DATE – 4/13/2021



POD(S) – SURFACE RUNOFF & SPRING



POU – FIRE PROTECTION STORAGE AND STOCKWATER STORAGE





POU – STOCKWATER FROM STORAGE – STOCK TANK FILLED FROM SMALL POND





POU – STOCKWATER FROM STORAGE – HORSES USE STOCK TANK AS ONLY WATER SOURCE

