

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-12653

Exam Date: 5/17/2016

1. Current Owner:

DOUG MORFITT 2 SOUTH WOLF LODGE CREEK RD COEUR D ALENE ID 83814 (208) 667-8890

And/Or

SHERRY MORFITT 2 SOUTH WOLF LODGE CREEK RD COEUR D ALENE ID 83814 (208) 667-8890

2. Accompanied by: Doug Morfitt

3. SOURCE: WOLF LODGE CREEK

TRIBUTARY: COEUR D ALENE LAKE

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Claim 95-12555 (Stockwater)

2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:WOLF LODGE CREEK SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 16, Twp 50N, Rge 02W, B.M. KOOTENAI County

Method of Determination: GPS and maps. POD location at 47° 41.062, 116° 35.648

2.

PLACE OF USE: FIRE PROTECTION STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	02W	16			X														

PLACE OF USE: RECREATION STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	02W	16			X														

PLACE OF USE: STOCKWATER FROM STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	02W	16			X														

PLACE OF USE: STOCKWATER STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	02W	16			X														

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

50N 02W 16

		X															
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PLACE OF USE: IRRIGATION FROM STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	02W	16			2.3														2.3

Total Acres: 2.3

PLACE OF USE: IRRIGATION STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	02W	16			X														

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	02W	16			2.3														2.3

Total Acres: 2.3

DIVERSION TO STORAGE same as IRRIGATION

Method of Determination: GPS and 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.

 X

 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

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5 GALLON BUCKET						

2. Measurements: 5 GALLON BUCKET TEST PERFORMED AND WAS FILLED IN 3 MINUTES AND 50 SECONDS.
1.3 GPM OR 0.01 CFS.

E. FLOW CALCULATIONS

Measured Method:

 Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.3 \text{ AC} \times 3 \text{ AF} = 6.9 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.01 \times 246 \times 1.9835 = 4.9 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 4.9 \text{ AF}$$

2. Volume Calculations for Other Uses: SEE ATTACHED FOR POND ANALYSIS

$$5 \text{ HEAD OF MIXED STOCK} \times 12 \text{ GPD} \times 365 \text{ DAYS} / 325,850 \text{ GAL/AF} = 0.1 \text{ AF}$$

G. NARRATIVE/REMARKS/COMMENTS

FIELD EXAM SHOWED APPLICANT HAD DIVERSION FROM CREEK THAT GRAVITY FED THROUGH GARDEN HOSE TO POND AND IRRIGATION AND STOCKWATER. 5 GALLON BUCKET TEST WAS PERFORMED FROM HOSE AND WAS FILLED IN 3 MINUTES AND 50 SECONDS FOR 1.3 GPM OR 0.01 CFS. APPLICANT HAD THE ABILITY TO USE HOSE TO WATER GARDEN OR LAWN THROUGH FLOOD IRRIGATION, AND HAD ABILITY TO FILL UP STOCKWATER TANK DIRECTLY FROM CREEK. APPLICANT ALSO HAD THE ABILITY TO USE PUMP TO DIVERT WATER FROM POND OR 400 GALLON STORAGE TANK TO RUN SPRINKLERS OR FILL STOCKWATER TANK. APPLICANT HAD 2.3 ACRES THAT WERE IRRIGATED BY THESE METHODS AND BECUASE OF THE SMALL DIVERSION RATE WILL BE GIVEN 4.9 AF FOR IRRIGATION AND 0.1 AF FOR STOCKWATER PURPOSES.

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>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER	01/01 to 12/31	0.01 CFS	0.1 AF
STOCKWATER STORAGE	01/01 to 12/31		0.2 AF
STOCKWATER FROM STORAGE	01/01 to 12/31		0.1 AF
DIVERSION TO STORAGE	01/01 to 12/31	0.01 CFS	
IRRIGATION	03/15 to 11/15	0.01 CFS	4.9 AF
IRRIGATION STORAGE	01/01 to 12/31		5.0 AF
IRRIGATION FROM STORAGE	03/15 to 11/15		4.9 AF
FIRE PROTECTION STORAGE	01/01 to 12/31		0.1 AF
RECREATION STORAGE	01/01 to 12/31		0.1 AF
<u>Totals:</u>		0.010 CFS	5.10 AF

2. Recommended Amendments

Change P.D. as reflected above Add P.D. as reflected above X None

Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION

Field Examiner's Name Adam Fiedorik Date 5-19-2016

Reviewer Morgan Case Date 5/23/2016

Pond Total Storage Calculations

FILE NUMBER	95-12653
REVIEWER	Adam Frederick
DATE	5/19/2016

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.)	0.01	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	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)	0.05	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)		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)	0.0	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.1	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.

Stockwater Total Storage Calculations

FILE NUMBER	95-12653
REVIEWER	Adam Frederick
DATE	5/19/2016

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.)	0.01	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	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)	0.05	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)	0.0	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.2	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.

Irrigation

Total Storage Calculations

FILE NUMBER	95-12653
REVIEWER	Adam Frederick
DATE	5/19/2016

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.)	0.01	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	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)	0.05	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)	4.9	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 " <u>From Storage</u> " 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)	0.0	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	5.0	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.

State of Idaho
Department of Water Resources
Water Right License
95-12653

FIRE PROTECTION STORAGE, STOCKWATER STORAGE, IRRIGATION STORAGE,
AND RECREATION STORAGE

02W



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

0 0.0375 0.075 0.15 Miles



State of Idaho
Department of Water Resources
Water Right License
95-12653

IRRIGATION AND IRRIGATION FROM STORAGE

02W

50N



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

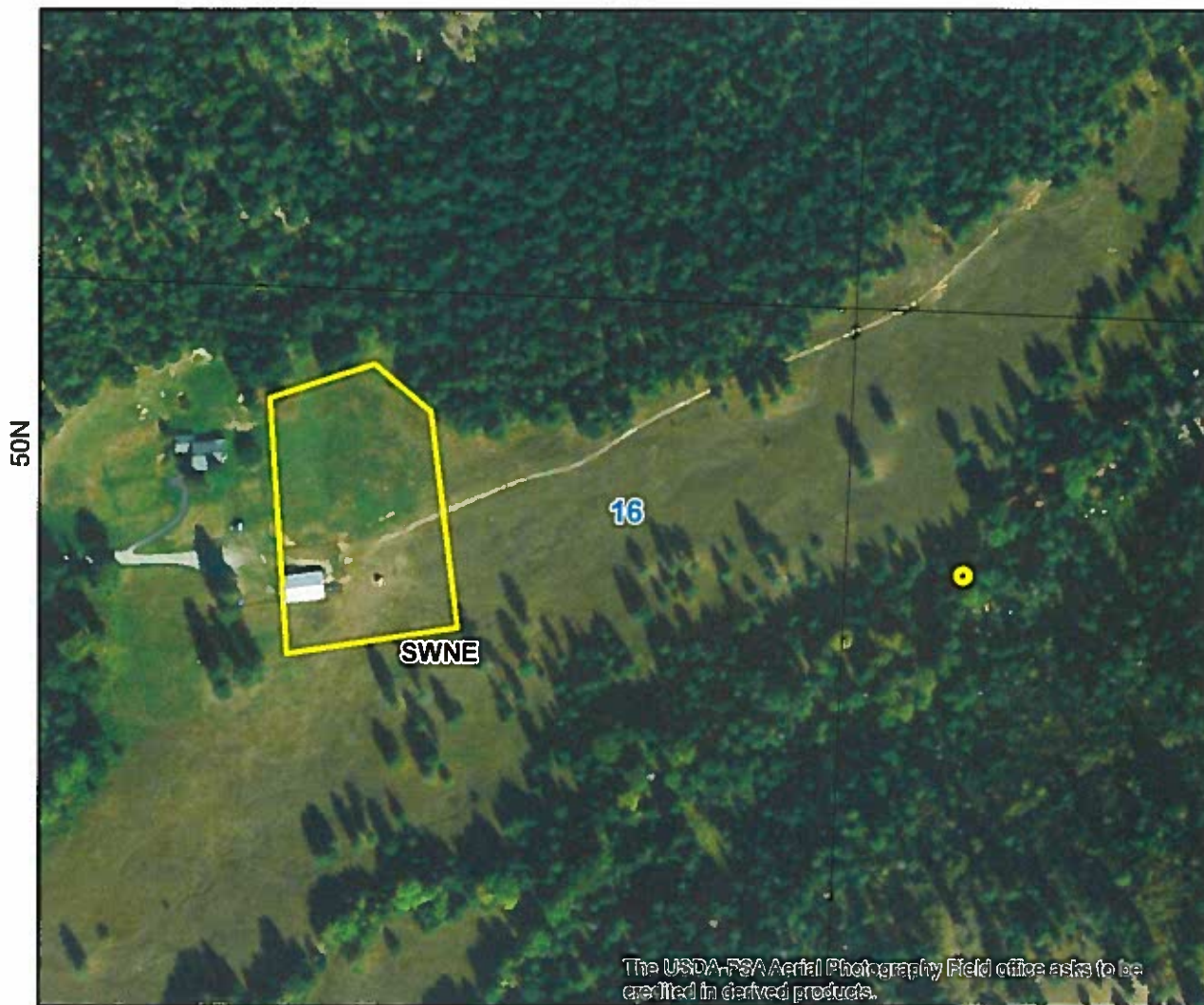
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State of Idaho
Department of Water Resources
Water Right License
95-12653

STOCKWATER AND STOCKWATER FROM STORAGE

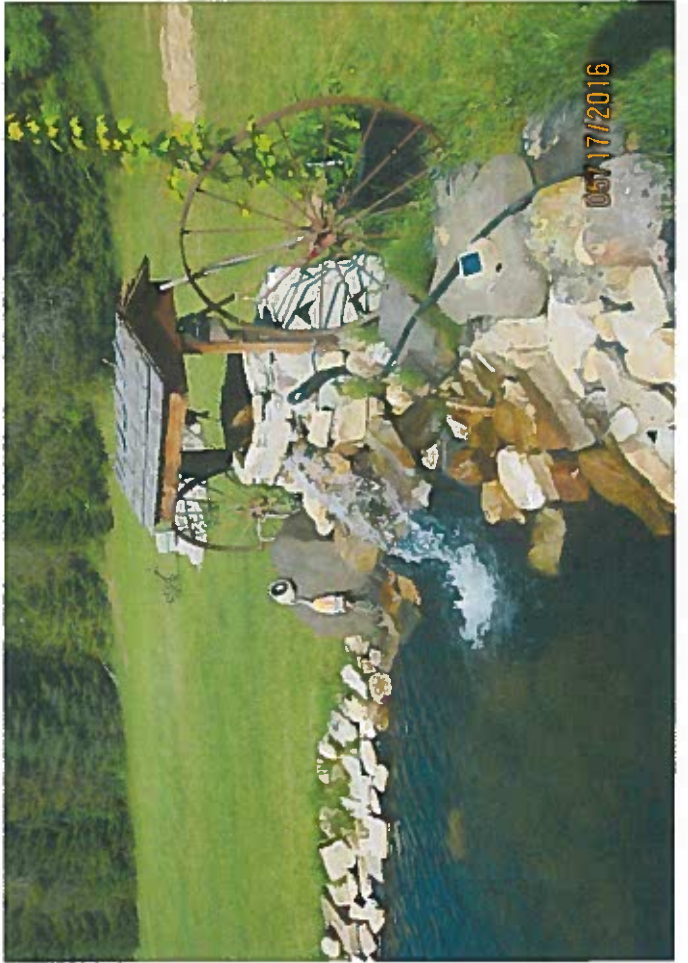
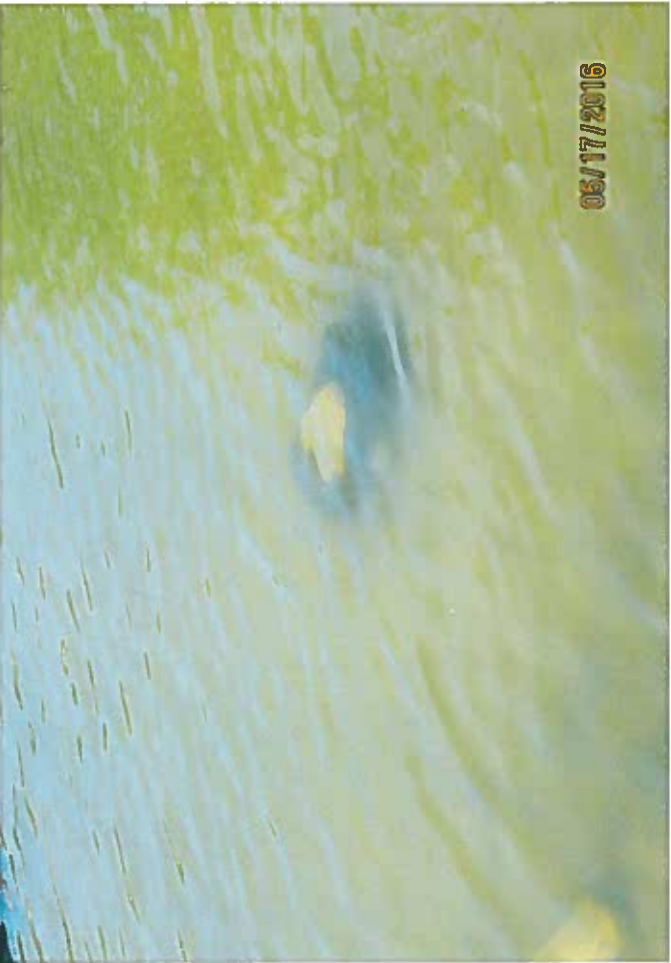
02W



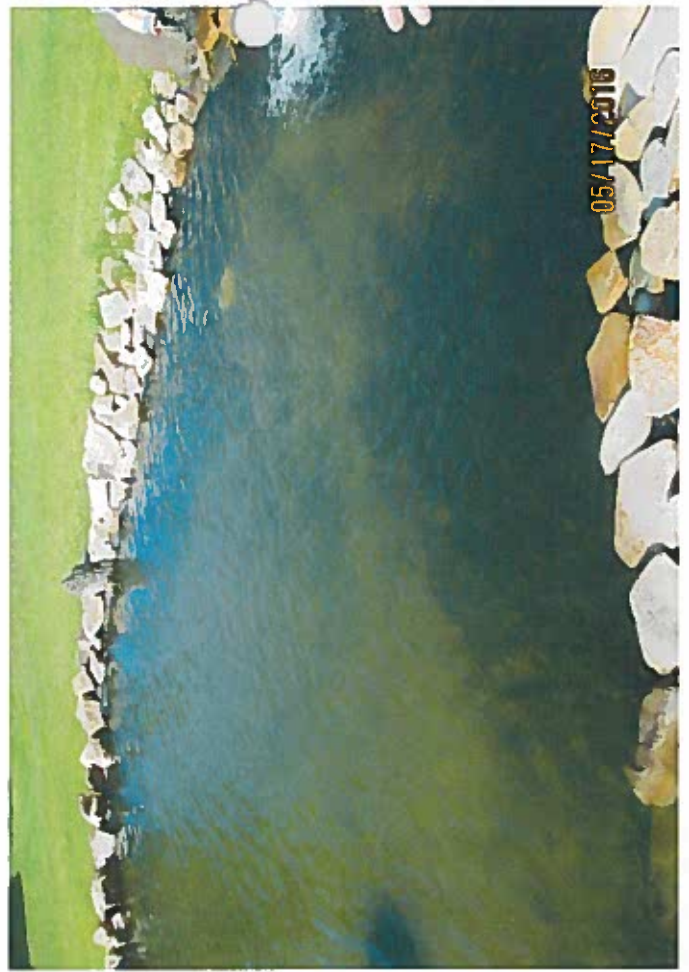
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-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections





95-12653



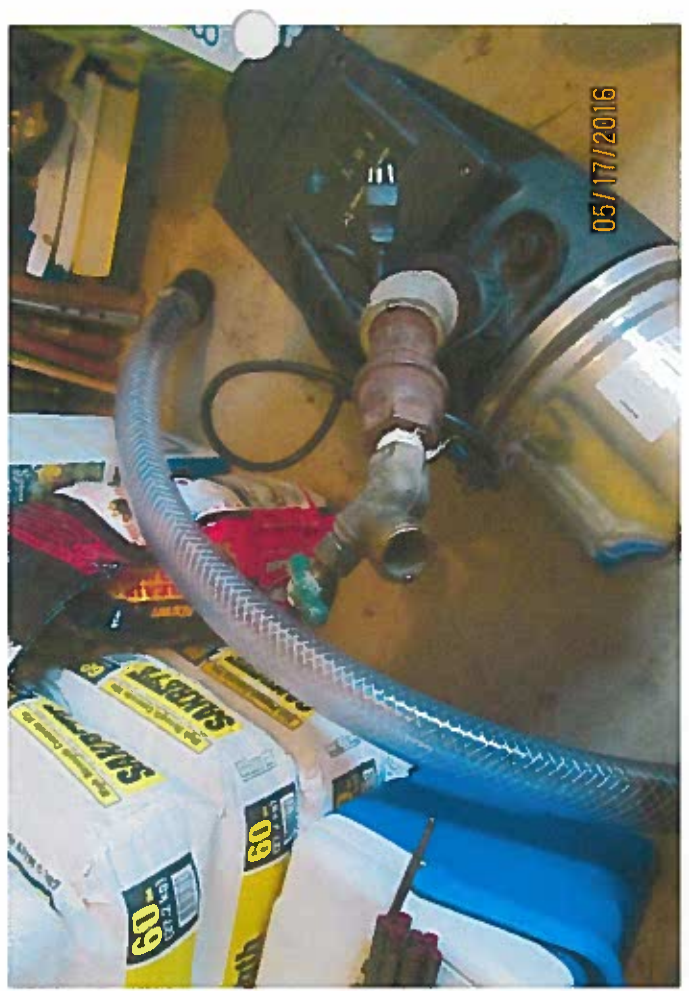
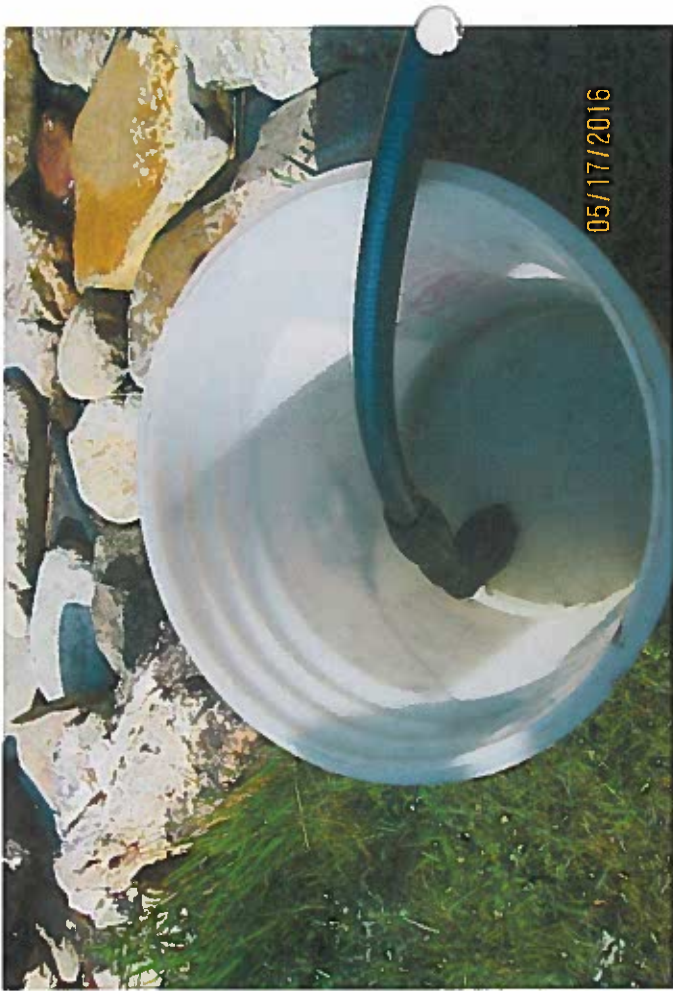
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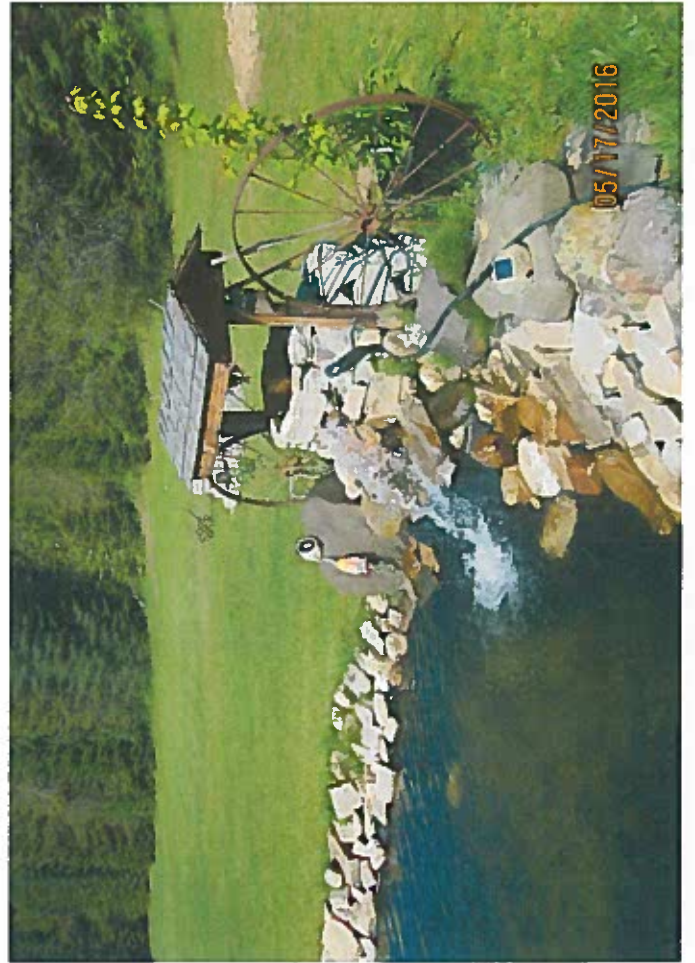


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