

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

MAR 17 2011

WATER RESOURCES
WESTERN REGION

A. GENERAL INFORMATION

Permit No. 65-13738

1. Owner Sabala Whitetail LLC Phone No. 208-630-0250

Current address 501 W. Lake St., McCall, ID 83638

2. Examiner's name Terry Scanlan, P.E. (Examiner No. 11-129) EXAM DATE July 30, 2010

3. Accompanied by Rick Mooney Email rmooney@whitetailclub.com

Address 501 West Lake Street, McCall, ID 83638

Relationship to permit holder Manager Phone No. 208-634-6429

4. Source Ground Water tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use 65-13704B (65-23452)cp

2. Other water rights with the same point of diversion 65-13704B (65-23452)cp

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	1/4	1/4	1/4	Sec	Twp	Rge	County	Method of Determination/Remarks
1			NW	SE	12	18N	2E	Valley	Exam, 2009 Photo

2. Place(s) of Use: Method of determination Exam, 2009 Photo

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
18N	2E	12													X				

X = Pond Storage

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (**required**)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well 1	Franklin	10	2822029330	unknown	submersible

*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

2. Measurements:

E. NARRATIVE/REMARKS/COMMENTS

A 6-inch well equipped with a submersible pump supplies ground water to a pond (locally known as Betsey Lake) for storage. Stored ground water is then used for aesthetic, recreation, and wildlife purposes. A 5 hp pump located at the south end of the pond is used to recirculate water in the pond. The permit also lists stockwater storage, but no stockwater use was observed.

An unnamed stream listed on the permit is not used as a water source for Betsey Lake. A culvert structure has been installed on the north end of the pond, allowing the stream to bypass the pond and discharge back into the natural stream channel at the south end of the pond (see attached map).

Under this permit, Well 1 supplies storage water to Betsey Lake for miscellaneous wildlife (including fish) and aesthetic use. Permit 65-13704B covers additional storage of ground water in Betsey Lake from the same well, to be used for irrigation and recreational purposes.

Calculations included in Attachment C indicate storage capacity for Betsey Lake is 14.4 acre-feet. This right, when combined with 65-13704B should be limited to a 0.25 cfs diversion capacity, and a 14.4 acre-foot storage capacity.

Attachment A: Copy of the permit and proof of beneficial use
Attachment B: Copy of the well driller's report
Attachment C: Capacity calculations
Attachment D: USGS topographic map and aerial photo
Attachment E: Photos of the place of use and point of diversion (well)

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

Measuring devices are no longer necessary because the unnamed stream is not a source of water for Betsey Lake (see Permit Condition No. 8).

Evaporation losses from the pond are covered using groundwater diverted under permit 65-13704"B" rather than this permit (see Permit Conditions No. 9 and 10).

F. FLOW CALCULATIONS

Additional computation sheets attached

Measured Method:

Well 1:

10 hp pump @ 60% efficiency, 40 psi discharge pressure and 100 foot pumping water level, 20 feet misc friction loss

$$(10 \text{ hp} \times 0.60 \times 3960) / ((40 \text{ psi} \times 2.31 \text{ psi/ft}) + 100 \text{ feet} + 20 \text{ feet}) = 23,760 / 212.4 = 112 \text{ gpm} = 0.25 \text{ cfs}$$

Total diversion to storage rate = 0.25 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I,R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{\hspace{2cm}}$$

$$V_{D,R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = \underline{\hspace{2cm}}$$

$$V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} = \underline{\hspace{2cm}}$$

2. Volume Calculations for Other Uses:

Betsey Lake capacity: 14.4 af

Ground water storage potential: $0.25 \text{ cfs} \times 365 \times 1.9835 = 246.2 \text{ afa}$

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Diversion to Storage	1/1	12/31	0.25 cfs	
Wildlife Storage	1/1	12/31		14.4 afa
Aesthetic Storage	1/1	12/31		14.4 afa
Totals:			0.25 cfs	14.4 afa

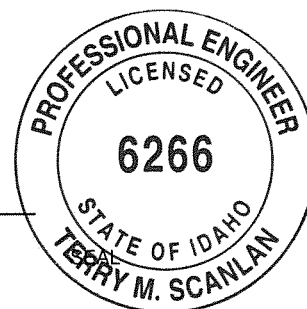
2. Recommended Amendments

- ☐ Change P.D. as reflected on page 1 ☐ Add P.D. as reflected on page 1 ☒ None
☐ Change P.U. as reflected on page 1 ☐ Add P.U. as reflected on page 1 ☐ Other

I. AUTHENTICATION

Field Examiner's Signature Terry M. Scanlan Date March 12, 2011

Reviewer _____ Date _____





ATTACHMENT A

PERMIT RECORD AND PROOF OF BENEFICIAL USE

State of Idaho
Department of Water Resources
Permit To Appropriate Water

NO. 65-13738

Proposed Priority: July 18, 1997

Maximum Diversion Rate

2 35 CFS

This is to certify, that M RESORTS

PO BOX 1006

HCCALL ID 83638-1006

has applied for a permit to appropriate water from

UNNAMED STREAM

tributary of WILLIAMS CREEK

GROUNDWATER

and a permit is APPROVED for development of water as follows

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
STOCKWATER STORAGE	01/01 to 12/31		20 0 AF
WILDLIFE STORAGE	01/01 to 12/31		20 0 AF
RECREATION STORAGE	01/01 to 12/31		20 0 AF
AESTHETIC STORAGE	01/01 to 12/31		20 0 AF
DIVERSION TO STORAGE	01/01 to 12/31	2 35 CFS	
	Totals	2 35 CFS	

LOCATION OF POINT(S) OF DIVERSION:

NESE , Sec 12, Township 18N, Range 02E

NWSE , Sec 12, Township 18N, Range 02E

VALLEY County

PLACE OF USE STOCKWATER STORAGE

TWN RGE SEC

18N 02E 12

NESE

CONDITIONS OF APPROVAL AND REMARKS

- 1 Proof of construction of works and application of water to beneficial use shall be submitted on or before November 1, 2002
- 2 Subject to all prior water rights
- 3 Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control
- 4 Use of water under this water right will be regulated by the watermaster of State Water District No 65
- 5 Point of diversion from groundwater is located within NWSE, and the point of diversion from the unnamed stream is located within NESE, S12, T18N, R02E
- 6 Diversion of unnamed stream tributary to Williams Creek shall not exceed 2 00 cfs and diversion from groundwater shall not exceed 0 35 cfs
- 7 The storage facility is a pond locally known as Boisey Lake and recreational activity associated with the pond will be fishing and swimming Water from the pond will also provide stockwater for eight horses

State of Idaho
Department of Water Resources**Permit To Appropriate Water**

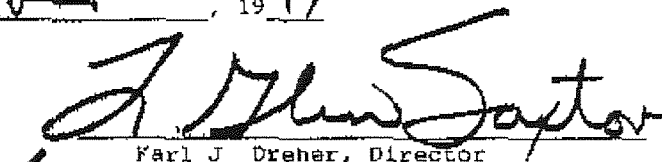
NO. 65-13738

CONDITIONS OF APPROVAL AND REMARKS

- 8 The permit holder shall install permanent measuring devices as approved by the department in a manner to assure that water in the channel upstream from the pond will not be impounded when prior downstream water rights are not being filled. The right holder shall provide reasonable access to the pond and measuring devices.
- 9 Prior to impoundment under terms of this right the right holder shall annually rent 4.0 AF of water from the Water District 65 Rental Pool to mitigate evaporation losses from the pond. If the right holder does not replace evaporation losses until all prior downstream storage rights are filled the requirement for mitigation is waived.
- 10 The groundwater source identified on this right shall be used to replace seepage use only and not used to replace evaporation.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.
Witness the signature of the Director, affixed at Boise, this

23rd day of October, 1997


for Earl J. Dreher, Director

REC-1

OCT 17 2001

FOR OFFICE USE ONLY
Amt of Fee \$ 50
Receipt No 120384-14
Receipt By WJR
Date Received 10-17-01

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

PROOF OF BENEFICIAL USE

The Idaho Department of Water Resources considers this form a statement that the permit holder(s) has/have completed all development that will occur under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below. This form must be accompanied by a license examination fee when necessary or be accompanied by a completed field examination report prepared by a certified water right examiner.

1 Permit No 65-13738 Telephone No 208-634-2244

2 Name of Permit Holder(s) M RESORTS LTD

3 Mailing Address 501 W LAKE ST

City McCALL State ID Zip 83638

4 Source of Water GROUND WATER UNNAMED STREAM if GROUNDWATER (well) Date Drilled mo _____ / yr _____

Well Driller _____ Drilling Permit Number _____

5 Use(s) (as authorized by the water right permit)

Domestic (No. of households) _____ Stockwater (No. and type of stock) _____

Irrigation (No. of acres) _____ Other STORAGE

6 Total rate of diversion and/or volume for which proof is submitted _____ cfs OR 20 acre-feet

7 Measuring Device Requirement (refer to the approval conditions on your permit and respond accordingly)

(This question is not optional. Please check either yes or no. Proofs returned not checked accordingly will be considered incomplete.)

Measuring Device Is a measuring device required? Yes _____ or No /
Has the measuring device been installed? Yes _____ or No _____

8 Fee Enclosed \$ 50 (See Fee Schedule on back of the instructions for filing proof of beneficial use)

9 Person to contact to accompany the Department representative during field examination of the water system

Name BOB McKENNA Telephone Number 634-9675

Address same as above

10 The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted. I agree to relinquish any undeveloped portion of the permit to the State of Idaho.

Signature of permit holder R McKenna WJR Date 9-24-01
(include your title if on behalf of company or organization)

MICROFILMED



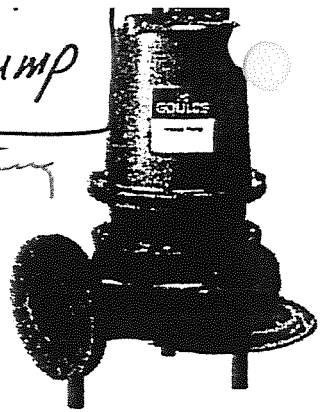
ATTACHMENT B

WELL DRILLER'S REPORT & PUMP CURVE FOR POND CIRCULATING PUMP

State law requires that this report be filed with the Director, Department of Natural Resources within 30 days after the completion or abandonment of the well.

[illegible]

Best way
Outlet pump
recirculating
pump



Submersible Sewage Pump

MODEL 

3888D4

APPLICATIONS

Used in a variety of residential, commercial and industrial applications such as:

- Sewage systems
- Flood and pollution control
- Dewatering
- Farms
- Hospitals
- Trailer courts
- Motels

SPECIFICATIONS

Pump:

- Solids handling capabilities: 3 1/2" spherical maximum.
- Discharge size: 4" flanged.
- Capacities: up to 550 GPM.
- Total heads: up to 51 feet TDH.
- Mechanical seals: carbon rotary/ceramic stationary 300 series stainless steel metal parts BUNA-N elastomers.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- Fasteners: 300 series stainless steel.
- Capable of running dry without damage to components.

Motor:

- Single phase: 1 1/2–5 HP, 230 V, 60 Hz, 1750 RPM. Built-in overload with automatic reset on 1 1/2–2 HP. Pilot duty thermal sensors 3 and 5 HP. Over temperature protection must be connected in control panel. Capacitors must be provided in 3 and 5 HP control panel. CP-2 capacitor pak must be used to validate warranty if not using Goulds control panel. Permanent split capacitor type.

- Three phase: 1 1/2–7 1/2 HP, 230/460 V, 60 Hz, 1750 RPM. 200 V models available 1 1/2–5 HP. Overload protection must be provided in starter unit.
- Class B insulation.
- Shaft: 300 series stainless steel keyed design.
- Bearings: ball bearings upper and lower.
- Power cord: 20 foot standard. Single phase – 14/3 STO, 10/3 STW 3 and 5 HP. Three phase – 14/4 STO, 10/4 STW 5 HP, 230 V. Optional lengths available.
- On CSA listed models, 20 foot length SJTW and STW are standard.

FEATURES

- **Impeller:** Cast iron, two vane semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

- **Casing:** Heavy duty cast iron, volute type for maximum efficiency. 4" flange conforms to 125 PSI ANSI standard. Adaptable for A10-40 slide rail system.

- **Dual Mechanical Seals:** Ceramic vs. carbon sealing faces, stainless steel metal parts, BUNA-N elastomers. Upper and lower tandem mounted shaft seals are positioned independently and are separated by an oil-filled chamber. Optional **SILICON CARBIDE OR TUNGSTEN CARBIDE** faced lower seals available.

- **Shaft:** 300 series stainless steel, keyed design.

- **Motor:** Fully submerged in oil-filled chamber. High grade turbine oil surrounds motor for more efficient heat dissipation, permanent lubrication of bearings and mechanical seal for complete protection against outside environment.

- **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits and can be operated continuously without damage.

- **Bearings:** Upper and lower heavy duty ball bearings construction for precision positioning of parts and to carry thrust loads.

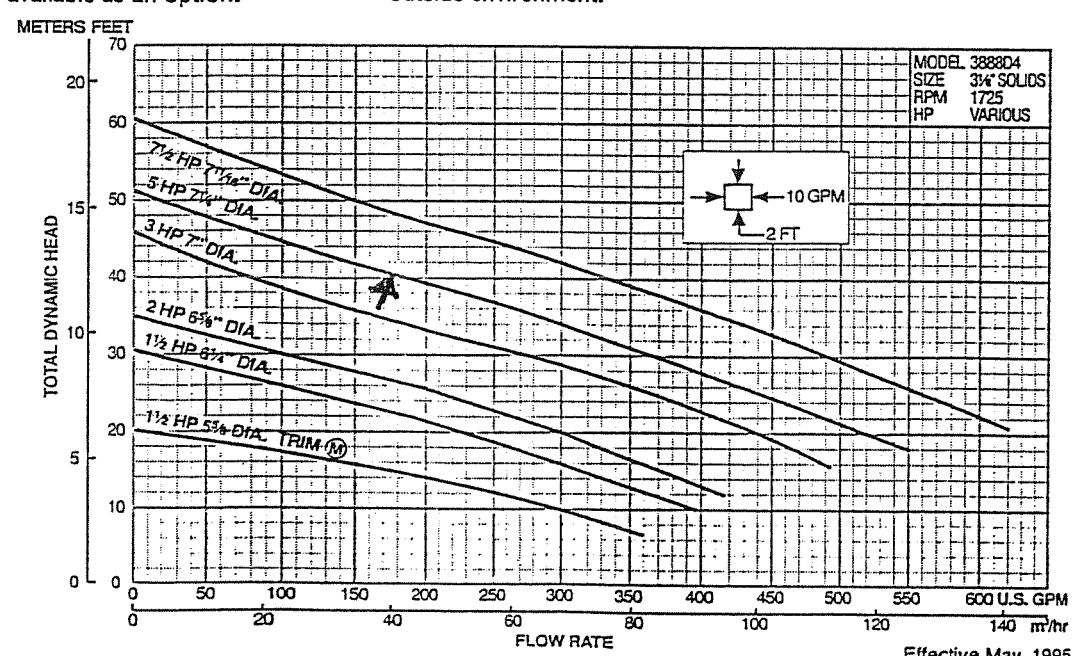
- **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking.

- **O-Ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

 Canadian Standards Association

 Underwriters Laboratories





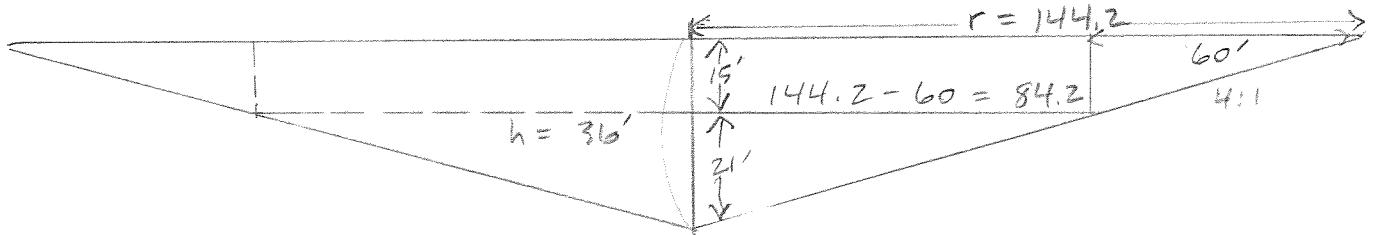
ATTACHMENT C

POND STORAGE CAPACITY CALCULATIONS



By _____ Date _____ Client _____ Sheet _____ of _____
Chkd By _____ Description BETSY POND VOLUME Job No _____

Betsy Pond : 1.5 acre surface area
15' deep
4:1 slope $4 \times 15 = 60'$



$$1.5 \text{ acre surface area} \times 43560 \text{ ft}^2 / \text{ac} = 65340 \text{ ft}^2$$

$$A = \pi r^2 \quad r = \sqrt{\frac{A}{\pi}} = 144.2 \text{ ft}$$

$$h = 144.2 / 4 = 36 \text{ ft}$$

$$\begin{aligned} \text{Total Volume} &= \frac{\pi r^2 h}{3} \\ &= \frac{\pi (144.2)^2 (36)}{3} \\ &= 783,901.8 \text{ ft}^3 \end{aligned}$$

$$\begin{aligned} \text{Volume to Remove} &= \frac{\pi (84.2)^2 (21)}{3} \\ &= 155,909 \text{ ft}^3 \end{aligned}$$

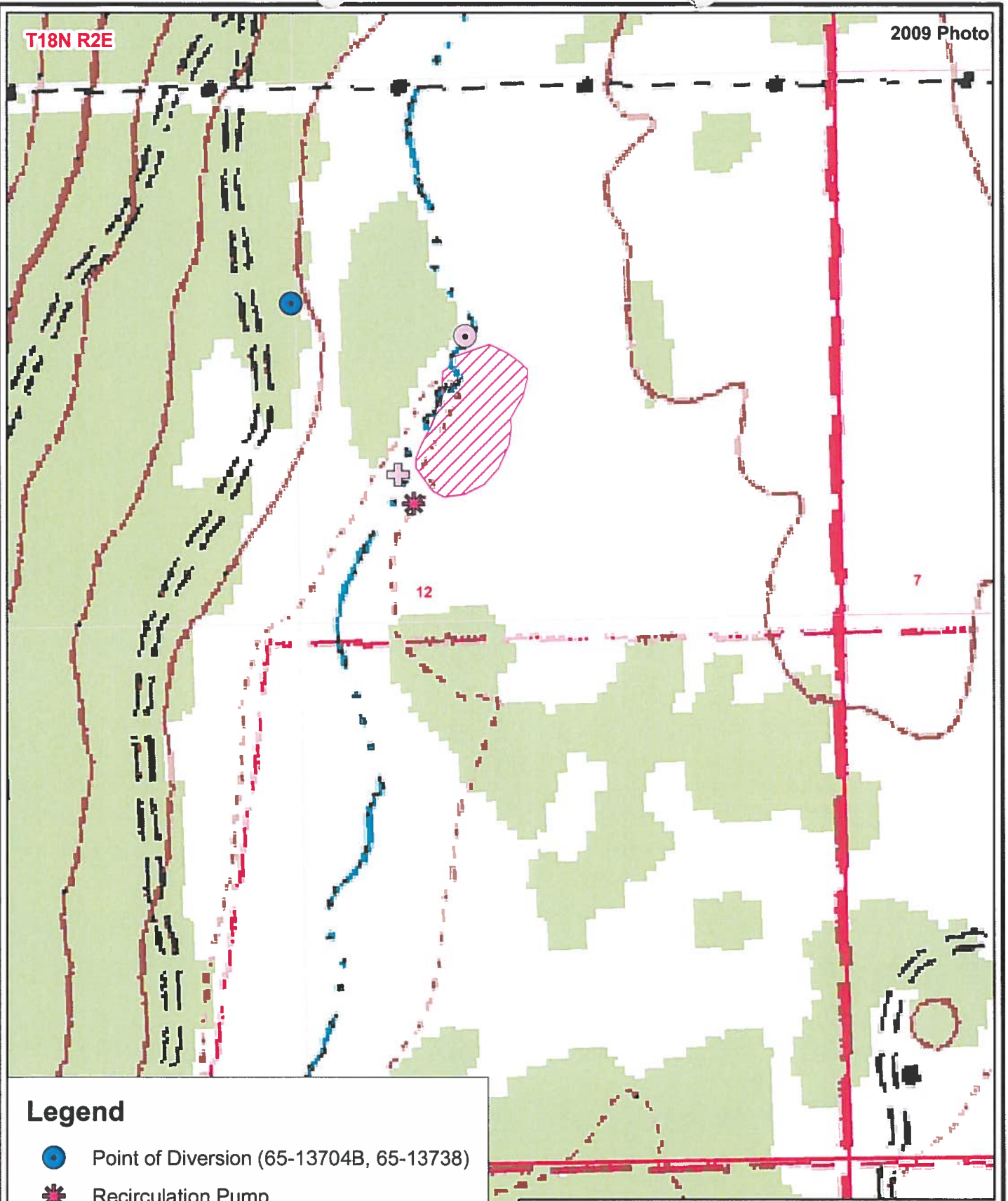
$$\begin{aligned} \text{Balance} &= 783,901.8 \\ &\quad - 155,909 \\ &\quad \hline &= 627,992.8 \text{ ft}^3 / 43560 = \underline{\underline{14.4 \text{ af}}} \end{aligned}$$



ATTACHMENT D
TOPO MAP AND 2009 AERIAL PHOTO

T18N R2E

2009 Photo



Legend

- Point of Diversion (65-13704B, 65-13738)
- ★ Recirculation Pump
- Bypass Culvert
- ✚ Bypass Culvert Outlet
- ▨ Betsey Lake (1.5 acres)

Permit 65-13738



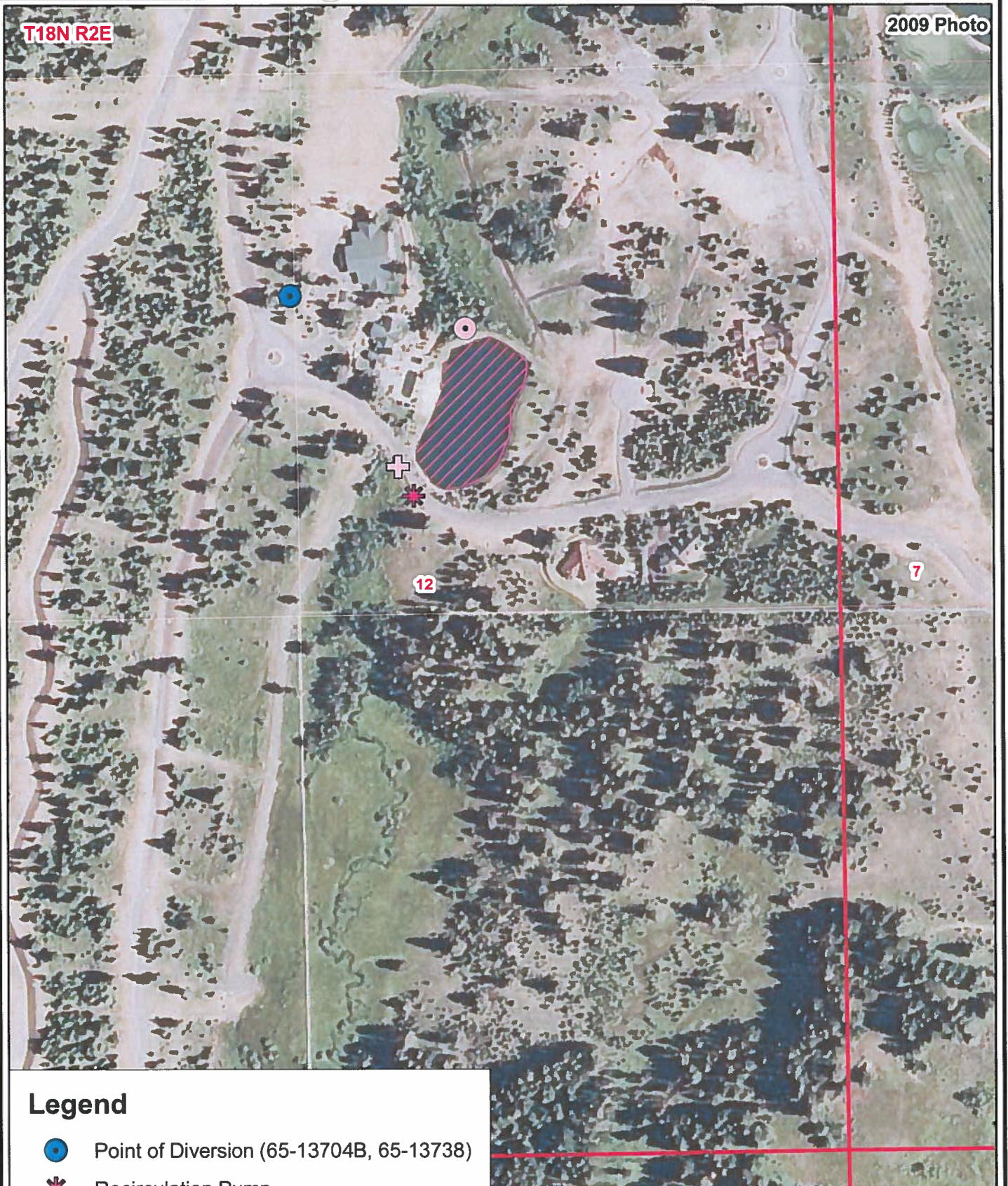
0 230 460 Feet



SPF WATER
ENGINEERING

T18N R2E

2009 Photo



Legend

-  Point of Diversion (65-13704B, 65-13738)
-  Recirculation Pump
-  Bypass Culvert
-  Bypass Culvert Outlet
-  Betsey Lake (1.5 acres)

Permit 65-13738



0 230 460
Feet





ATTACHMENT E
PHOTOS



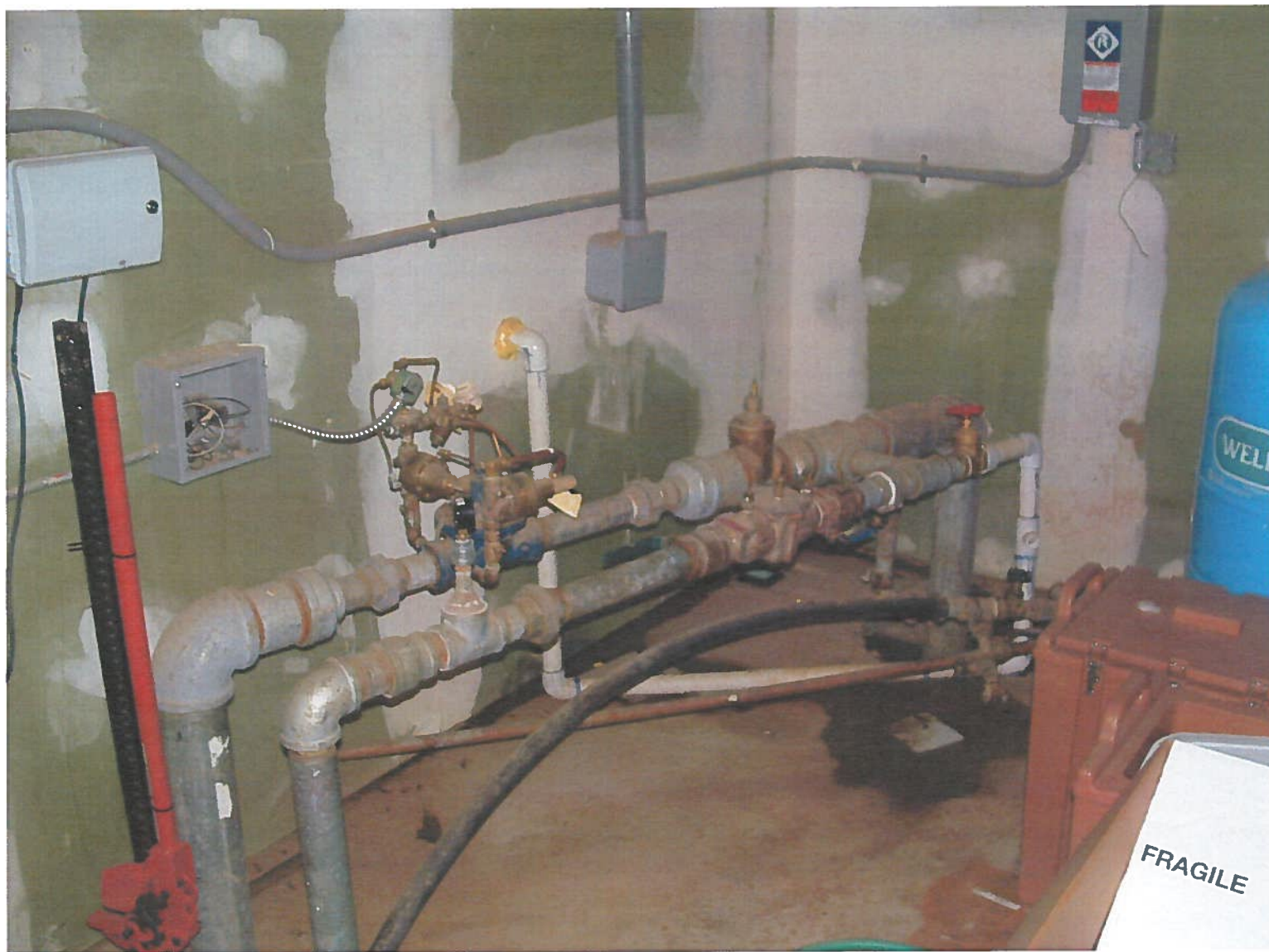
Well No. 1 at Edge of Parking Lot



Well No. 1 at Edge of Parking Lot



Building with Pump Panel and Piping



Well No. 1 valves and discharge piping



Well No. 1 Control Box



Inlet Pipe from Well 1 at Betsey Pond



Betsey Pond



Betsey Pond



Betsey Pond



Betsy Pond Recirculating Submersible Pump



Betsy Pond Overflow to Recirculation Pump



Unnamed Stream Upstream from Betsy Pond



Unnamed Stream Bypass Culvert Inlet



Unnamed Stream Bypass Culvert Outlet