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DEPARTMENT OF WATER RESOURCES

Permit No: 47-8356

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 47-8356

Exam Date: 2/28/05

3/10/05

4/27/05

1. Current Owner: SIMPLOT MC COLLUM DEVELOPMENT CO
DBA CANYON SPRINGS
PO BOX 27
BOISE ID 83707
(208)336-2110

CANYON SPRINGS
PO BOX 27
BOISE ID 83707-0027
(208)336-2110

2. Accompanied by: Dave McCollum on 2/28/05 and LaMar Sylten on 3/10/05 and 4/27/05

Phone No: Dave: 736-0829 LaMar: 731-2593

Dave McCollum is the owner/developer and LaMar Sylten manages the fish facility and turns the water.

3. **SOURCE**

PERRINE COULEE

TRIBUTARY

SNAKE RIVER

B. OVERLAP REVIEW

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

Rights that supply water to same fish propagation facility are: 36-7239 (Springs trib to Alpheus Ck)

47-7758 (Hot Well)

47-8357 (Porcupine Spring)

02-7472 (Snake River)

Rights that supply water to same Aesthetic use:

36-7239 (Springs trib to Alpheus Ck)

47-8357 (Porcupine Spring)

2. Other water rights with the same point of diversion: Shares in TFCC diverted at same pipelines.

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

PERRINE COULEE

NE1/4NE1/4SW1/4

Sec. 33, Twp 09S, Rge 17E, B.M.

TWIN FALLS County

Method of Determination:

2. GPS and Arcview

PLACE OF USE: AESTHETIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
09S	17E	29																X	
09S	17E	32	X																
09S	17E	33					X	X	X										
									L 2										

PLACE OF USE: FISH PROPAGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
09S	17E	29																X	
09S	17E	32	X																
09S	17E	33					X	X											

Method of Determination: Arcview GIS system

3. _____ Delivery System Diagram Attached (required). Indicate all major components and distances between components. 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.
- _____ Aerial Photo Attached (required for irrigation of 10+ acres).
- ___X___ Photo of Diversion and System

4.

Well or Diversion

A concrete check is located in the stream allowing water to be diverted into either of two headgates that control the flow into two buried pipelines. (See photos) All flow is by gravity to discharge at head of fish raceway or aesthetic ponds.

D. FLOW MEASUREMENTS

1.

Measurement

<u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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3' contracted rectangular weir placed in head of fish raceway to measure south pipeline flow. Flow from Porcupine Spring was previously determined to be 0.69 cfs. Porcupine Spring and Coulee were measured together and Alpheus Ck Spring was shut off to make measurement of this water. Portable staff gauge. North pipeline was measure with bucket and stopwatch at outflow.

2. Measurements:

Measured 0.44' head over weir which by using chart equals 2.83 cfs. By subtraction flow in south pipeline from Perrine Coulee was 2.14 cfs.

Measured 5 gallons in 4.2 seconds which equals 0.16 cfs.

Total flow from Perrine Coulee was (2.30 cfs) 2.14 + 0.16

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: NONE

2. Volume Calculations for Other Uses:

$$V_{\text{fish}} = [\text{Diversion Rate (cfs)}] \times (\text{Days in season}) \times 1.9835 =$$

$$2.30 \times 365 \times 1.9835 = 1665 \text{ AFA}$$

$$V_{\text{aesthetic}} = [\text{Diversion Rate (cfs)}] \times (\text{Days in season}) \times 1.9835 =$$

$$2.30 \times 365 \times 1.9835 = 1665 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS

This water source was developed to replace the diminishing flow diverted under 36-7239. The water diverted is essentially waste water that collects in the Perrine Coulee before discharging into the Snake River. Note that the TFCC delivers shares to Canyon Springs and also the Centennial Park from the Perrine Coulee but the flow in the coulee fluctuates due to inflow of waste water from fields above and that is what has been developed under this permit. There is a concrete check at the diversion point to allow diversion into either of two pipelines to locations on the property. The northern pipeline conveys water to a fairway pond for aesthetic purposes then on to fish ponds near the hot well and then commingled with hot water then conveyed to the fish ponds in the northwest corner of the property. The southern pipeline conveys water to the same raceways near the center of the property as 47-8357 and 36-7239 and used in the same manner in ponds and streams for fish and aesthetic purposes as 47-8357, ultimately ending up in the same ponds that water from the northern pipeline ends up. These ponds enjoy water from the Snake River (02-7472) and water from the hot well (47-7758). Some of this mingled water is used for irrigation under 36-7239, 36-15455 or 47-7758 or the TFCC shares at either the pumps located at the end of the fish ponds in the northwest corner of the property or at the end of the fish ponds near the hot well. If not used for irrigation the water is discharged into the Snake River.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
AESTHETIC	01/01 to 12/31	2.300 CFS	
FISH PROPAGATION	01/01 to 12/31	2.300 CFS	
<u>Totals:</u>		2.300 CFS	1,665.00 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name



Date

5/16/05

Reviewer

Date

View of Point of Diversion for 47-8356 on Perrine Coulee looking west. The concrete check dam with metal and wooden flashboard is in the foreground with area where screw gates head the two pipelines in background.



View of the screw gates at head of pipelines diverting from Perrine Coulee 47-8356.
The right or northern pipeline goes to fairway pond then on to fish ponds near hot well.
The left or southern pipeline goes to ponds near center of golf course to same site where
water piped from Porcupine Springs and also from Alpheus Creek spring discharge.

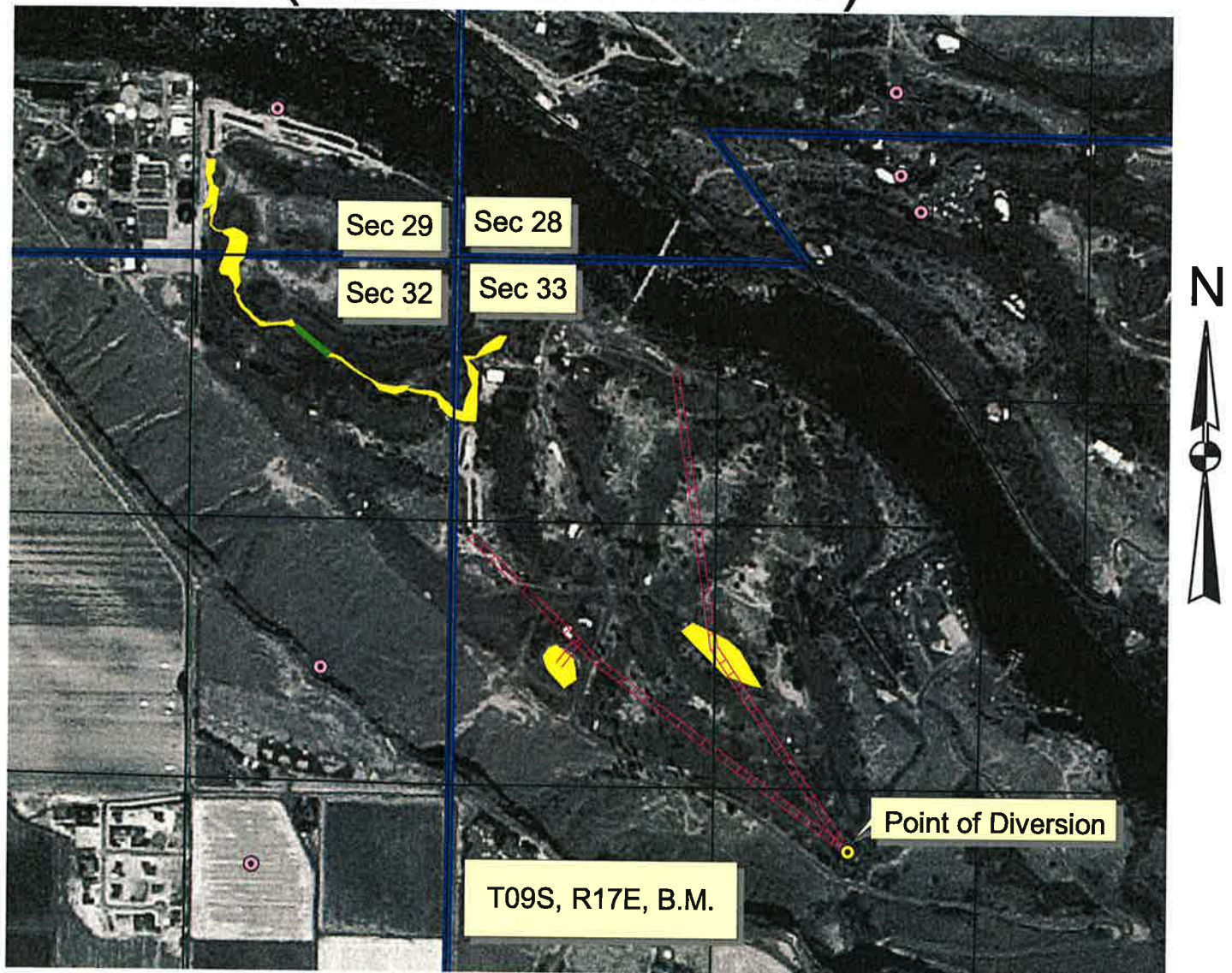


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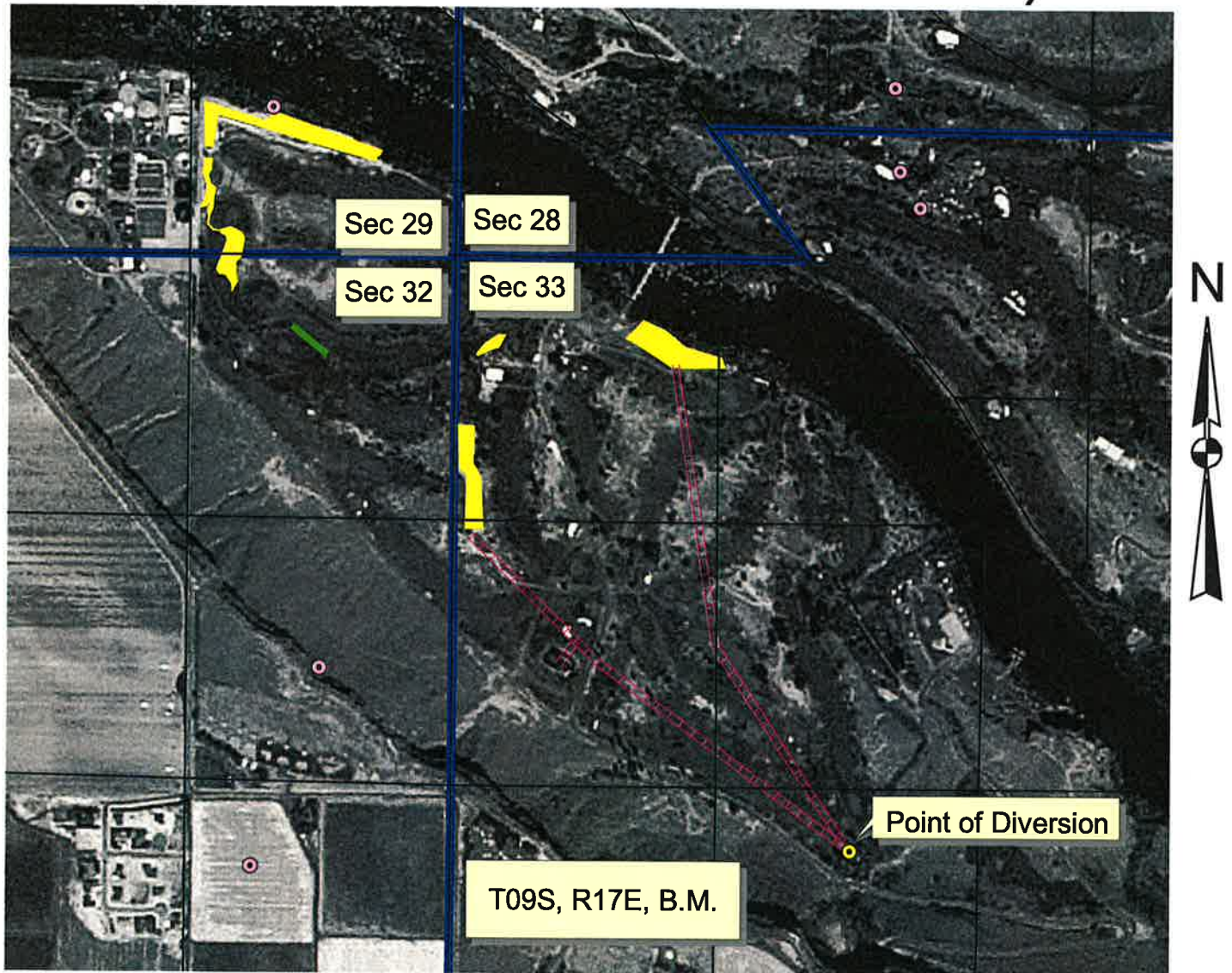
Photo taken when water was being diverted from three different sources. White plastic pipeline comes from Porcupine Springs. Metal pipeline comes from Alpheus Creek Springs. Lower concrete pipeline comes from Perrine Coulee.

Field Exam 47-8356 Aesthetic Uses (Ponds & Streams)



1320 0 1320 Feet

Field Exam 47-8356 Fish Propagation Uses (Ponds where fish are raised)



1320 0 1320 Feet

Notes
Am

4/27

0.44 on gauge

Spring + Perrine Creek

Hydro Sgallon Bucket test

4.1 sec

4.2 sec

$$\begin{array}{rcl} 0.44' \Rightarrow 3' \text{ contracted Perrine} & \Rightarrow & 2.83 \text{ cfs} \\ - \text{ spring} & & 0.69 \text{ cfs} \\ \hline & & 2.14 \text{ cfs} \end{array}$$

$$\begin{array}{rcl} 59/4.2 \text{ sec.} & \Rightarrow & 0.16 \text{ cfs} \\ & & \hline & & 2.3 \text{ cfs} \end{array}$$

L2ML

731-2583