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MAY 23 2005

DEPARTMENT OF WATER RESOURCES

Permit No: 47-8357

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STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

Permit No: 47-8357

Exam Date: 2/28/05  
3/10/05

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

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**

SPRING (Referred to as Porcupine Spring by )  
McCollum

**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)  
47-8356 (Perrine Coulee - Wastewater)  
02-7472 (Snake River)

Rights that supply water to same Aesthetic use: 36-7239 (Springs trib to Alpheus Ck)  
47-8356 (Perrine Coulee - Wastewater)

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

**C. DIVERSION AND DELIVERY SYSTEM**

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

SPRING L5 SE1/4NW1/4SE1/4 Sec. 33, Twp 09S, Rge 17E, B.M.  
TWIN FALLS County

Method of Determination: GPS and Arcview

2.

**PLACE OF USE:** FISH PROPAGATION

| Twp Rge Sec | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|             | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 09S 17E 29  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |        |
| 09S 17E 32  | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |
| 09S 17E 33  |    |    |    |    |    | X  | X  |    |    |    |    |    |    |    |    |    |        |

**PLACE OF USE:** AESTHETIC

| Twp Rge Sec | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|             | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 09S 17E 29  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |        |
| 09S 17E 32  | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |
| 09S 17E 33  |    |    |    |    |    | 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 Attached

4.

**Well or Diversion**

A vertical CMP approx 4' diameter is located at the spring source creating a collection gallery. Within the CMP there is an overflow pipe discharging into the spring channel back to Snake River. Also in the CMP is the diversion pipeline head that has a screw control valve regulating flow diverted. (See photos) All flow is by gravity to discharge at head of fish raceway.

**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> |
|------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|
|------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|

3' contracted rectangular weir placed in head of fish raceway to measure flow. Flow from Perrine Coulee and Alpheus Ck Spring were shut off to make measurement of this water. Portable staff gauge.

2. Measurements:

Measured 0.17' head over weir which by using chart equals 0.92 cfs. Noted small leakage from Perrine coulee pipeline. Note that LaMar has measured this same spring flow using 55 gallon drum and stop watch and calculated flow to be 0.67 cfs. He indicated that flow from spring does not vary much.

**E. FLOW CALCULATIONS**

\_\_\_\_ Additional Computation Sheets Attached

Measured Method: Weir

**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation: NONE

2. Volume Calculations for Other Uses:

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

$$0.67 \times 365 \times 1.9835 = 499.5 \text{ AFA}$$

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

$$0.67 \times 365 \times 1.9835 = 499.5 \text{ AFA}$$

**G. NARRATIVE/REMARKS/COMMENTS**

This water source was developed to replace the diminishing flow diverted under 36-7239. The water diverted at the spring which flows from rock rubble on the canyon wall is conveyed via a gravity flow buried pipeline (est. 12") and discharges at the head of the fish raceways near center of golf course. This is the same location where 36-7239 can discharge as well as 47-8356. At the time of exam no fish were present in these raceways. From the raceways water flows into aesthetic streams and flows west through the golf course picking up wasted water from heating (47-7758) passing through ponds and water hazards. Eventually on the west side of the golf course water mixes with water pumped from Snake River (02-7472) and hot ground water (47-7758). These mixed waters then flow into several raceways growing warm water fish along the northwest edge of the golf course. At the end of the raceways water can be pumped or recycled through the fish ponds, pumped for irrigation of the golf course under 36-7239, 36-15455 and 47-7758 or 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> |
|-----------------------|----------------------|-----------------------|----------------------|
| FISH PROPAGATION      | 01/01 to 12/31       | 0.69 CFS              | 499.5 AF             |
| AESTHETIC             | 01/01 to 12/31       | 0.69 CFS              | 499.5 AF             |
| <u>Totals:</u>        |                      | 0.69 CFS              | 499.5 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 ☐ Other**I. AUTHENTICATION**

Field Examiner's Name



Date

5/16/05

Reviewer

Date

FE for 47-8357 3/10/05



View of Porcupine Spring diversion...note location in relation to curve in road.  
Overflow in foreground.

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Flow from Porcupine Spring. Note pipeline from Alpheus Creek is off. Water measured through slot at head of raceway in background.



3' weir in head of raceway. Note concrete pipeline from Perrine Coulee in background is also off

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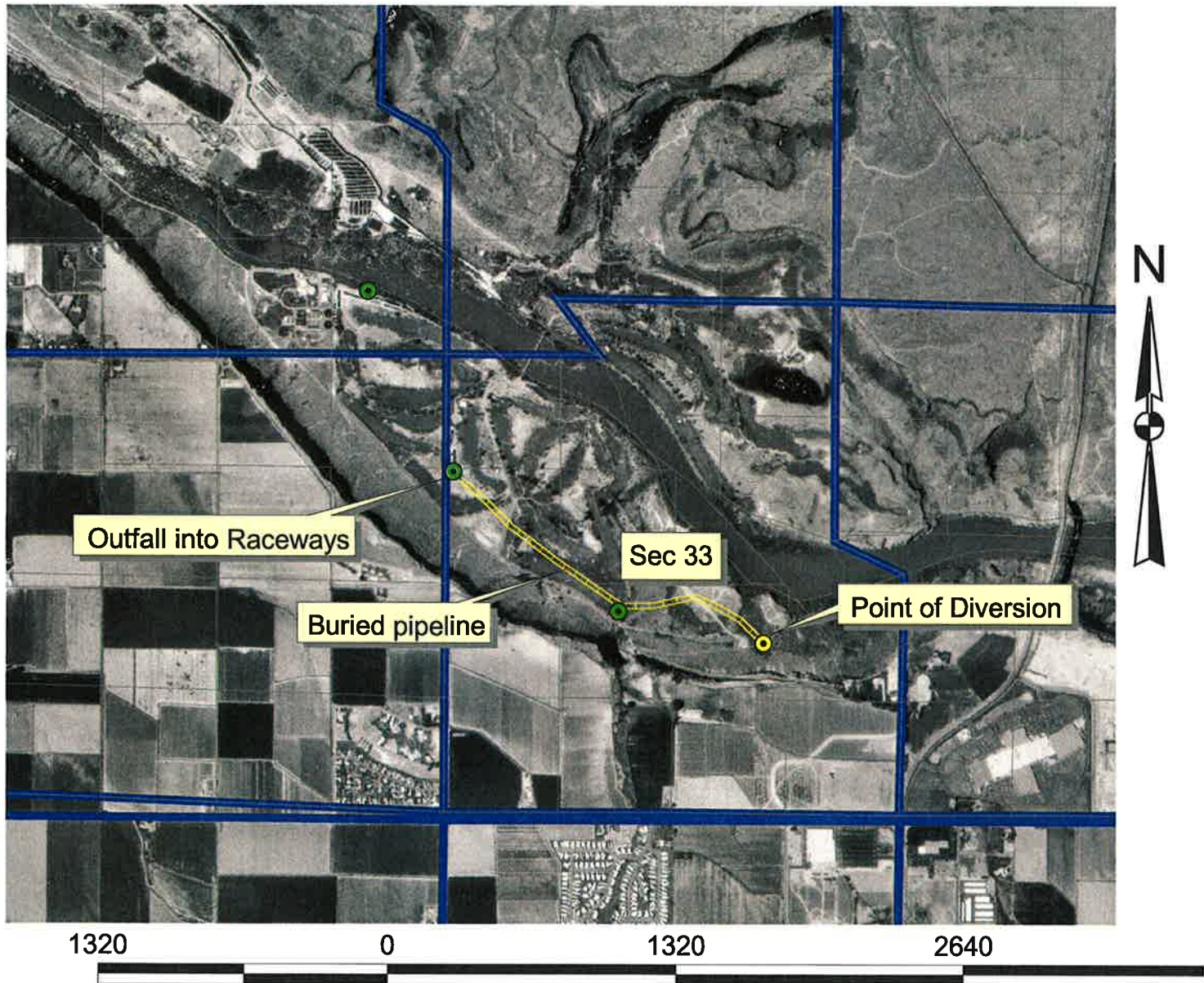


Spring Box



View inside box. Overflow slide gate on right. Diversion to pipeline on left.

# Field Exam 47-8357

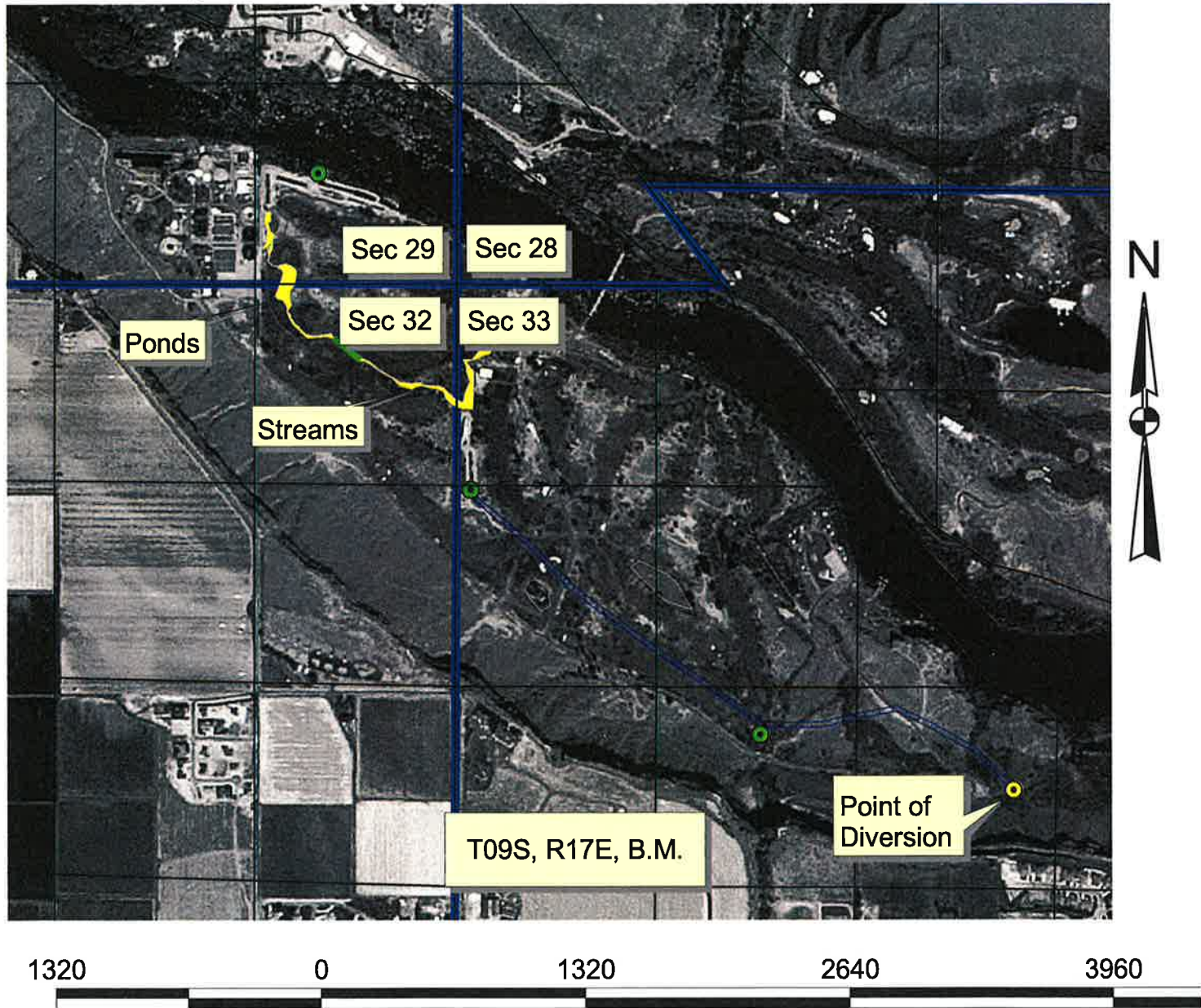


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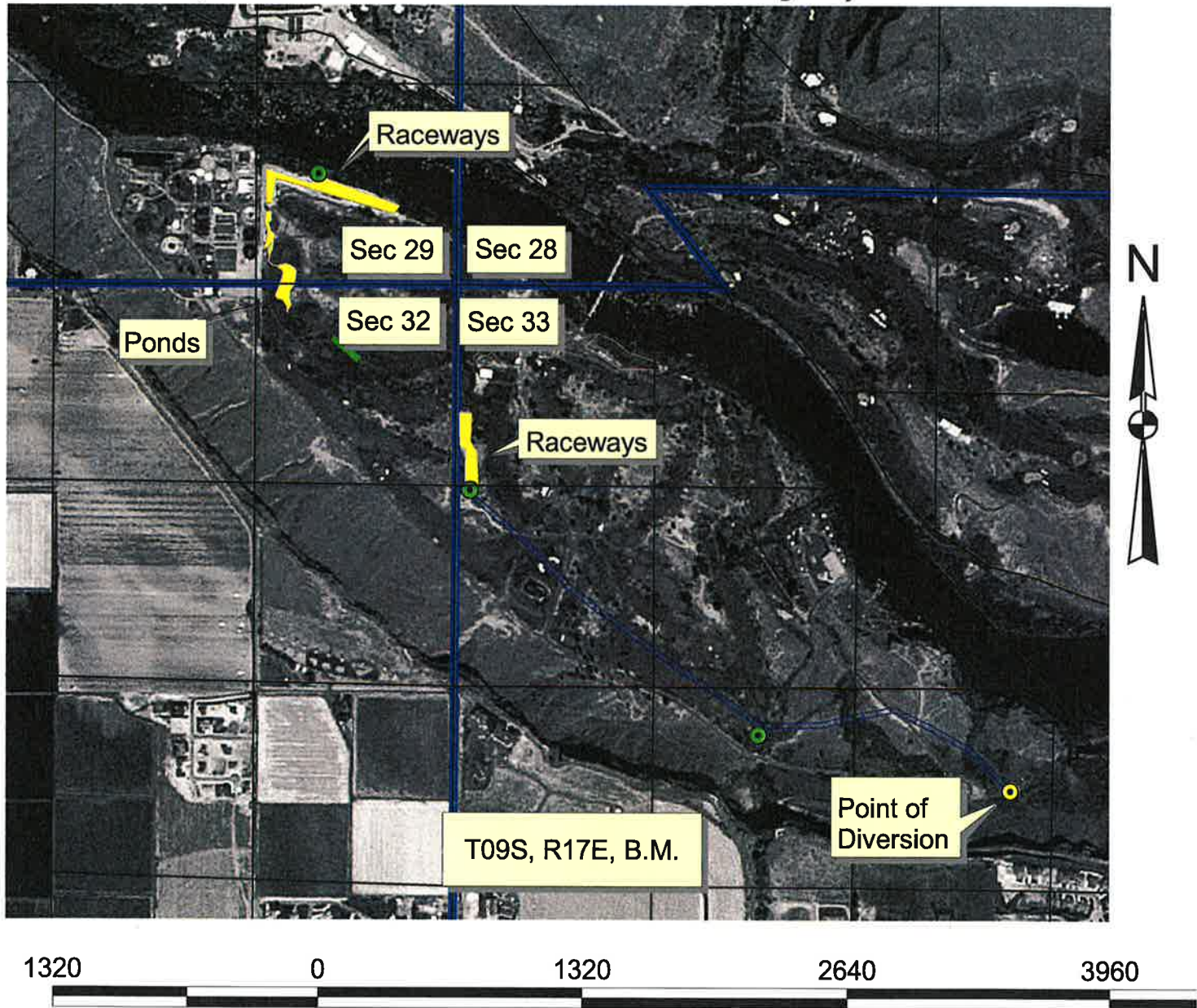


Photo taken when water was being diverted from three different sources. White plastic pipeline comes from Porcupine Springs. Metal pipeline comes from Alpheus Creek Springs. Lower concrete pipeline comes from Perrine Coulee.

# Field Exam 47-8357 Aesthetic Uses (Ponds and Streams)

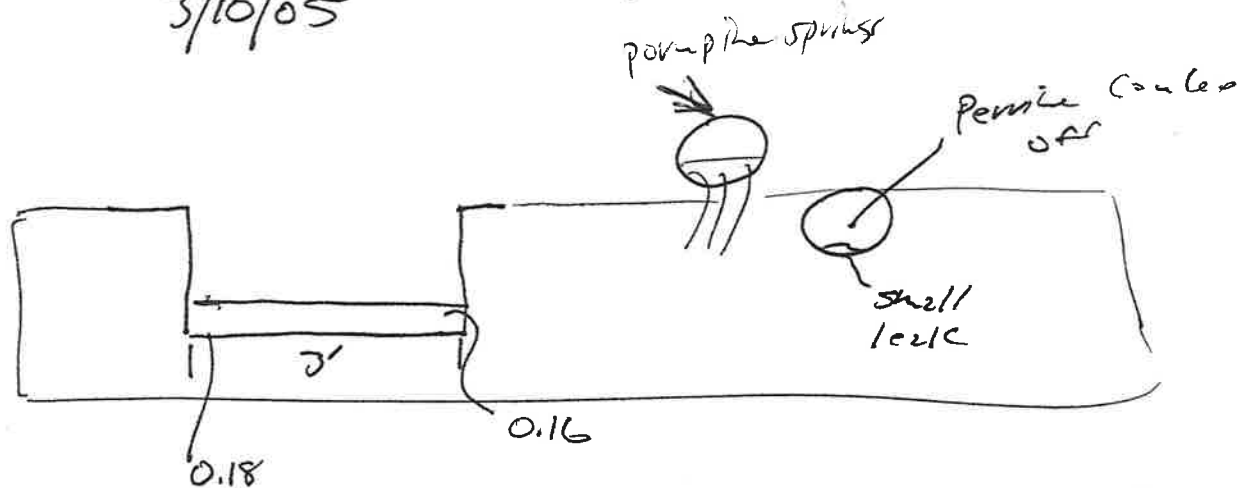


# Field Exam 47-8357 Fish Propagation Uses (Ponds and Raceways)



3/10/05

Looking South



Ave 0.17  $\Rightarrow$  3' contracted  $P_c \Rightarrow 0.692 \text{ cf}$

By bucket ditch 0.67  $\text{cf}$   
L2hu

Ann Notes

47-8357

File

A 11. file