

A. GENERAL INFORMATION

Exam Date: 8/19/2008

- | 3. <u>SOURCE</u> | <u>TRIBUTARY</u> |
|------------------|------------------|
| WASTE WATER | SNAKE RIVER |

1. Other water rights with the same place of use: BIG BEND IRRIGATION & MINNING CO; TWIN FALLS NORTH SIDE LAND & WATER CO
2. Other water rights with the same point of diversion:

Method of Determination: GPS

- PLACE OF USE: WATER QUALITY IMPROVEMENT
STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				
			<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>	<u>Totals</u>
07S	13E	22											X						

Method of Determination:

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.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

2. Measurements:

E. FLOW CALCULATIONS

Measured Method:

_____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: WATER QUALITY IMPROVEMENT STORAGE

SURFACE AREA OF POND ROUGHLY 1.24 ACRES

POND GENERALLY V-SHAPED, AVERAGE DEPTH AROUND 15 FEET

CAPACITY: 1.24 ACRES * 15 FEET * 0.4 = 7.5 AF

G. NARRATIVE/REMARKS/COMMENTS

License is for one and a quarter acre pond for water quality improvement outside of Hagerman in the swnw of T07SR13E22. Source is wastewater coming from the Big Bend, Bell and Buckeye ditches. Outlet from the pond empties into the Snake River. Pond had been dredged recently and a large sediment pile was evident. Chuck Steele maintains the pond for the right holder.

Pond volume at time of licensing is estimated at 7.5 af. Volume will be limited to permitted amount of 5.0 af. Permit was conditioned to require a measuring device however that requirement was waived by 11/7/2003 order.

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>
WATER QUALITY IMPROVEMENT STORAGE	01/01 to 12/31		5.00 AF
<u>Totals:</u>			5.00 AF

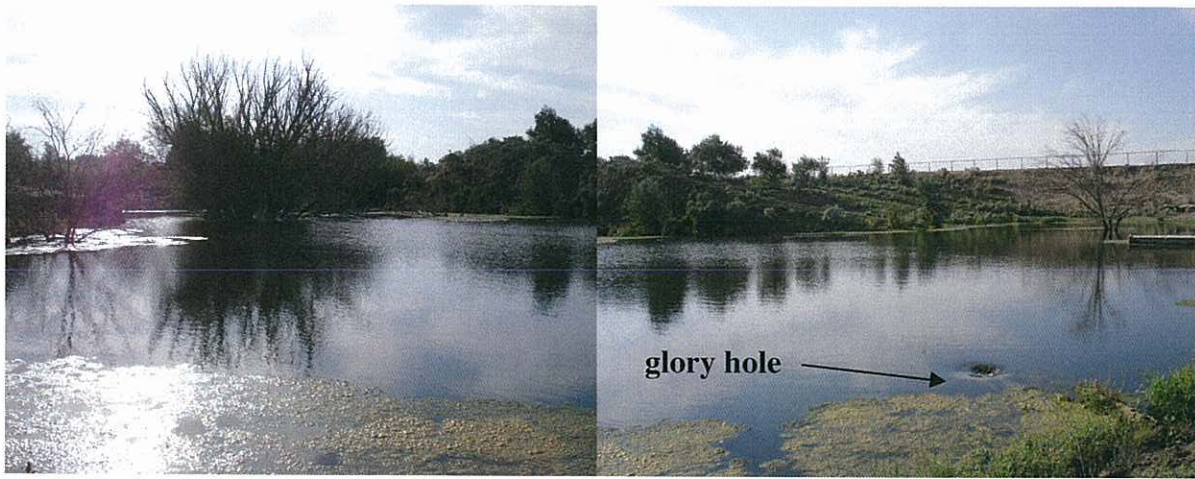
2. Recommended Amendments

 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 Nick Van Dyke Date 8/19/08
 Reviewer Nick Van Dyke Date 12/29/08



Above: Looking East back across pond from the dam. Glory hole intake in lower right of picture.

Below: Where wastewater enters the pond. Notice the loose fill material on the left side of picture - dredged material from pond.



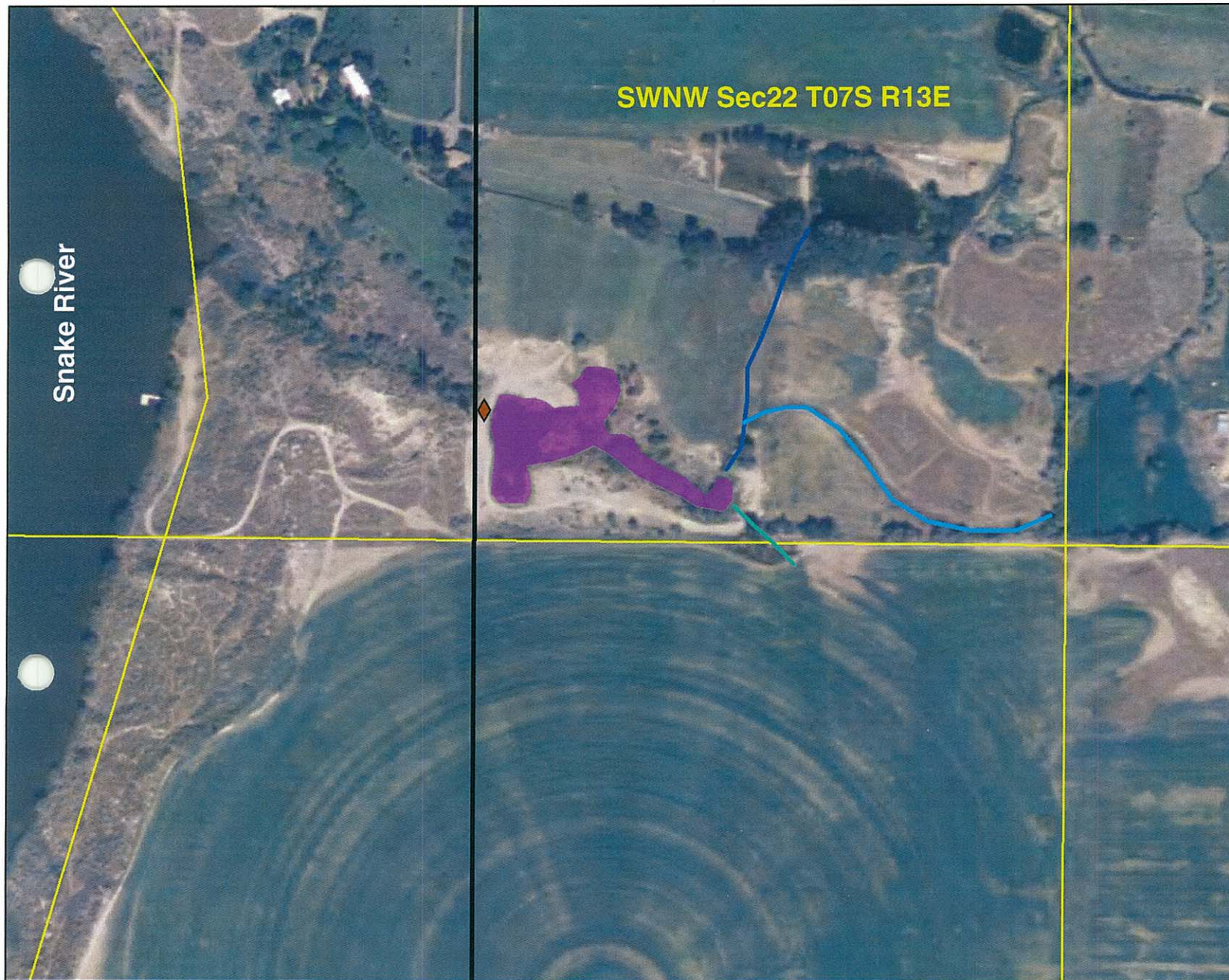


Above: View of the dam. Spillway is the culvert in the upper left and the outlet discharge is in the bottom left.

Below: Close ups of the outlet discharge and spillway.



36-16099 Forgeon License



Legend

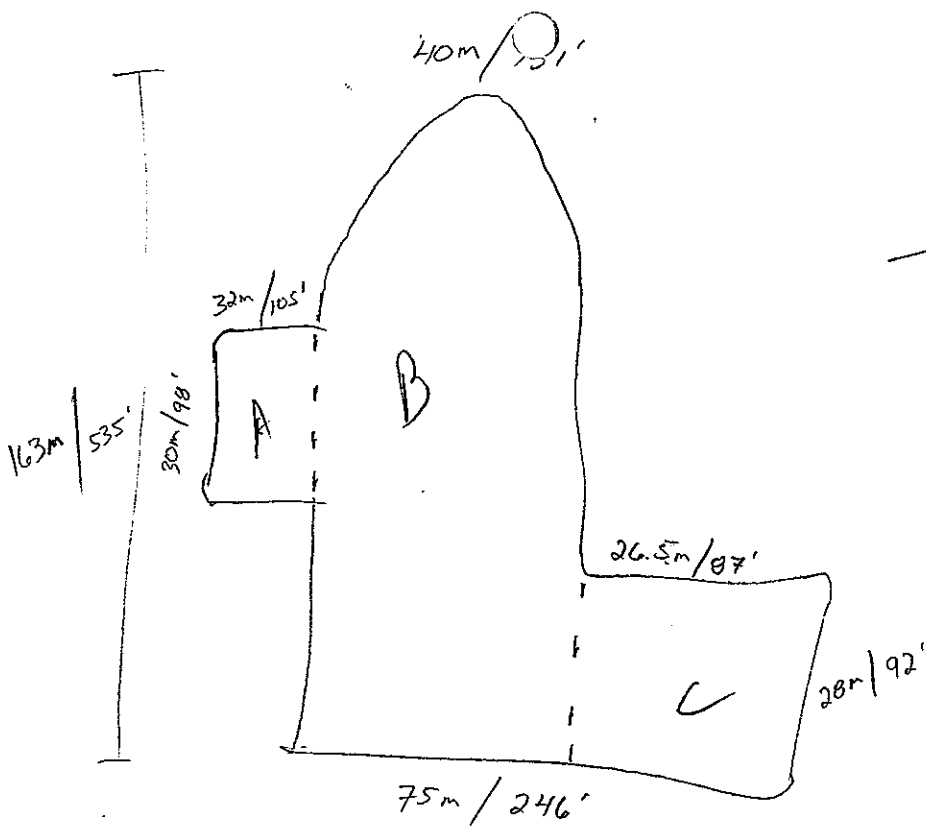
- license_pond
- DAM
- Buckeye
- Bell
- Big_Bend
- Sections
- QQ

2004 Imagery



0 100 200 400 Meters

Map Created By:
Nick Van Dyke
October 10 2008



VOLUME CALCULATIONS

$$A = \frac{105(98)}{43,560} = 0.24 \text{ ACRES}$$

$$B = \frac{[535(131)(0.5)]}{43,560} = 0.8 \text{ ACRES}$$

$$C = \frac{87(92)}{43,560} = 0.2 \text{ ACRES}$$

$$\text{CAPACITY} = [1.24 \text{ ACRES} (15') (0.4)]$$

$$= 7.44 \text{ AF}$$

15' deep

10' with Virginia

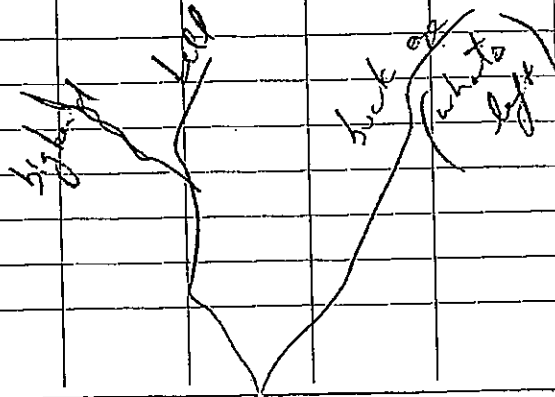
clay | sand | Virginia | sand | rock

big head → winter supply

left → summer supply

84 yards wide

Broken ditch originally
cut rather



11

