

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

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DEPT. OF WATER RESOURCES
SOUTHERN REGION

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATIONPermit No. 71-109211. Owner Ketchum-Long Island, LLCPhone No. 208-726-1190Current address P.O. Box 2238; Ketchum, Idaho 833402. Examiner's name Erick PowellEXAM DATE August 8, 20143. Accompanied by John Miller

Email _____

Address P.O. Box 2238; Ketchum, Idaho 83340Relationship to permit holder Member of LLCPhone No. 208-726-11904. Source Salmon Rivertributary to Snake River**B. OVERLAP REVIEW**1. Other water rights with the same place of use 71-109192. Other water rights with the same source and point of diversion 71-10919**C. DIVERSION AND DELIVERY SYSTEM**

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
		SW	SE	SW	10	7N	14E	Custer	GPS and Aerial Photography

2. Place(s) of Use:

Method of determination GPS and Aerial Photography

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
7N	14E	10															R,J		

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

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
NA					

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

1.

2. Measurements: _____

E. NARRATIVE/REMARKS/COMMENTS

A site visit was made on August 8, 2014 to document, measure, and evaluate the pond system that is authorized under permit no. 71-10921. This permit was applied for on 12/10/2007 for recreation, recreation storage, aesthetic, and aesthetic storage with 1.22 cfs of diversion rate and 12 acft of storage. Evaporation from the surface area of the proposed ponds was mitigated by drying up 1.5 acres of irrigation right 71-10919. Water diverted from the Salmon River to the ponds for storage, recreation, and aesthetic uses is returned to the Salmon River via a return pipeline.

The ponds have been lined as evidence in the photographs. An 8" Badger Electro-Magnetic flow meter (model M2000 - an approved meter by IDWR) has been installed on the delivery pipe to the ponds. Irrigation diversion for water right 71-10919 is diverted from the same Point of Diversion. There is another flow meter on the irrigation diversions from the ponds. The water not diverted for irrigation or lost to the atmosphere by evaporation is returned to the Salmon River. There is not a flow measurement device on the return flow, but the return flow can be calculated as outlined above.

The Point of Diversion box within the Salmon River has a fish screen to prevent fish from entering the pond system. Numerous agencies have been involved with the installation of the Point of Diversion and it is my understanding that this box conforms with requirements by Idaho Fish and Game.

As stated previously, the permit application included mitigation for pond evaporation by drying up 1.5 acres of irrigation right 71-10919 (1.8 afa for recreation and aesthetic storage). The constructed ponds have a surface area of only 0.56 acres, which means that the applicant over mitigated. It is recommended that the applicant only mitigate for the pond surface area (0.56 acres) and the remaining mitigation (0.94 acres) be returned to irrigation under water right 71-10919. That would adjust water right 71-10919 to be as follows: Irrigation limit of 11.94 acres within PPU area; Irrigation diversion rate 1.55 cfs (conditioned to 0.24 cfs); Recreation and Aesthetic storage of 0.67 afa; Diversion to storage of 0.08 cfs.

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?

An approved measuring device has been installed on the water diversion from the Salmon River. A measuring device has not been installed on the return flow. However, the return flow can be calculated using the irrigation diversion from the ponds and evapotranspiration calculations.

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

Badger Mag-meter was read numerous times with the valve fully open and the pump at maximum. The diversion rate was an average of 764 gpm (1.70 cfs). This includes the irrigation diversion of 71-10919, which is conditioned to 0.22 cfs (increased to 0.24 cfs). The diversion rate for this permit is 1.22 cfs. Therefore, the system is capable of diverting the pond rate of 1.22 cfs and the irrigation rate of 0.24 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:

Surface area of ponds was measured at 0.56 acres with a GPS and Aerial Photography. Numerous pond depths were taken with a survey rod. The average depth of the ponds was measured to be 5.32 ft. Ponds volume was calculated to be 2.98 acft, which was rounded up to 3 acft. This volume is well below the authorized pond volume of 12 acft and average depth of 8 ft.

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Recreation	1/1	12/31	1.22 cfs	
Recreation Storage	1/1	12/31		3 acft
Aesthetic	1/1	12/31	1.22 cfs	
Aesthetic Storage	1/1	12/31		3 acft
Totals:			1.22 cfs	3 acft

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

See Narrative, Section E

I. AUTHENTICATION

Field Examiner's Signature

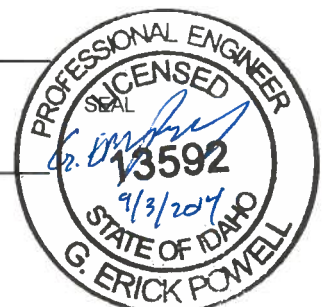


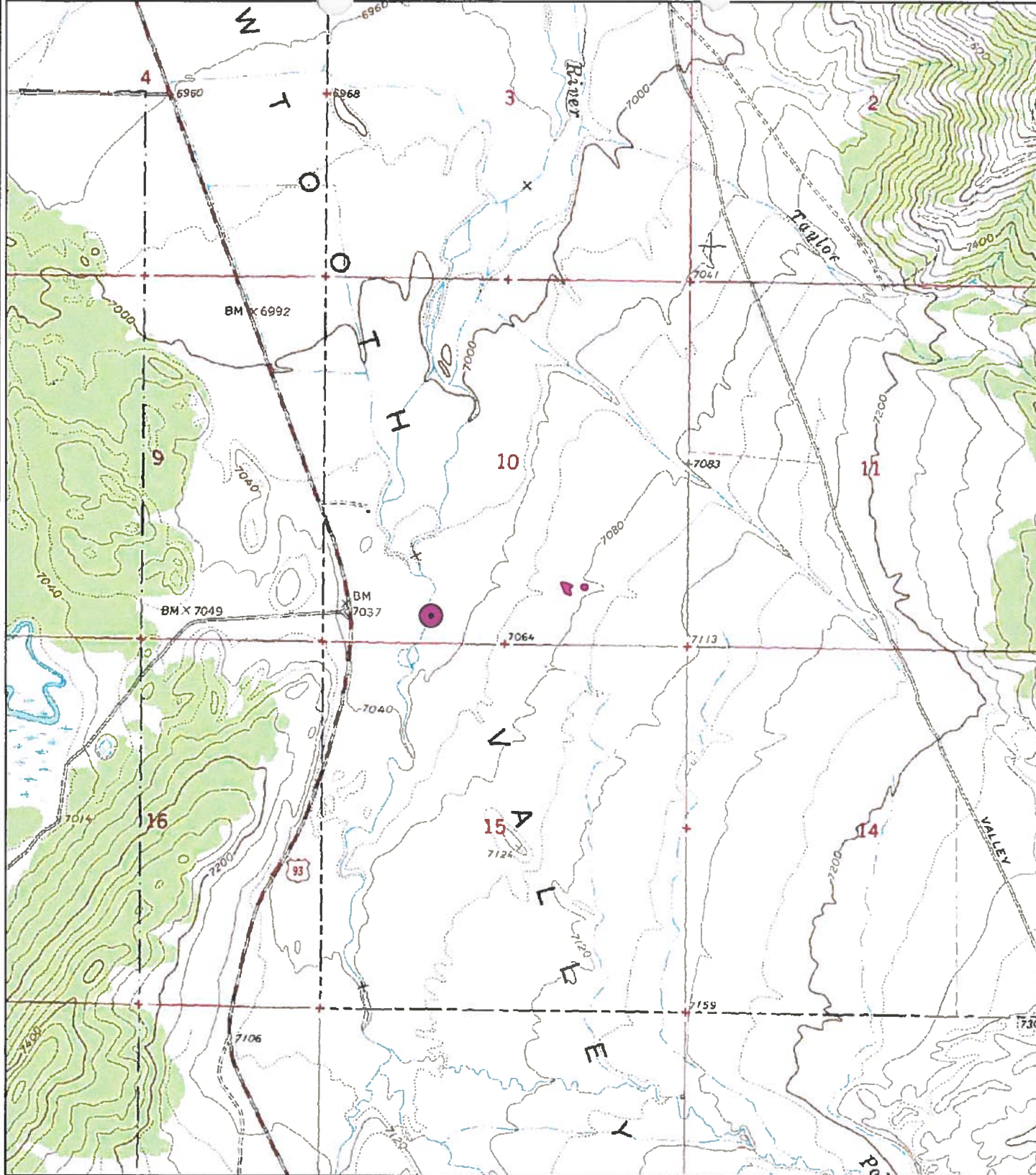
Date

9/3/2014

Reviewer

Date





1 inch = 2,000 feet

KETCHUM-LONG ISLAND, LLC LICENSE EXAM
WATER RIGHT NO. 71-10921
CUSTER COUNTY, IDAHO
USGS TOPOGRAPHIC QUAD SHEET

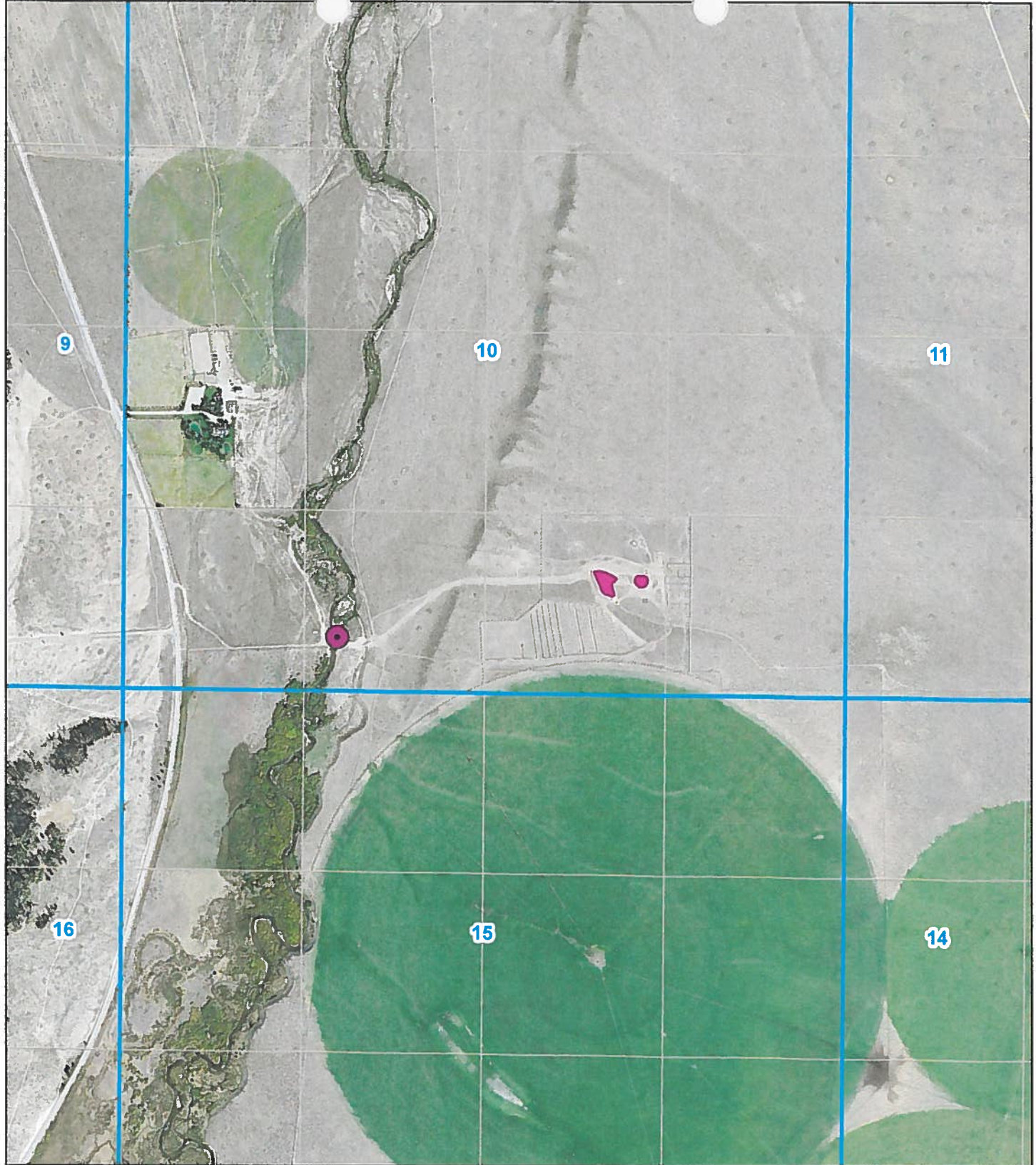
Legend

● POD

■ Ponds

0 0.25 0.5 1 Miles

BROCKWAY ENGINEERING, PLLC
GEP - 9/3/2014



1 inch = 1,000 feet

KETCHUM-LONG ISLAND, LLC LICENSE EXAM
WATER RIGHT NO. 71-10921
CUSTER COUNTY, IDAHO
NAIP 2013 AERIAL PHOTOGRAPH

Legend

 POD

 Ponds

Miles

BROCKWAY ENGINEERING, PLLC



Picture 1: Point of diversion with fish screen is shown along with return flow back to the river.



Picture 2: Badger M2000 flow meter installed on delivery pipe to ponds.



Picture 3: Diversion from the ponds to the irrigation delivery system is shown. A flow meter is installed on the irrigation diversion from the pond. This facility also includes the potable system pressure tank.



Picture 4: We dug through rocks and dirt to find and expose a portion of the pond liner, then covered the liner back with material.



Picture 5: Pond shown with return flow stand pipe visible. Water spills into pipe and returns to the Salmon River.



Picture 6: Close up picture of the return flow stand pipe.