

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12550

Exam Date: 8/23/2007

1. Current Owner: RICHARD PORTER
6225 N MEEKER PL STE 200
BOISE ID 83713
(208)658-2200

And/Or

ROBERT HOROWITZ
6225 N MEEKER PL STE 200
BOISE ID 83713
(208)658-2200

2. Accompanied by: Richard Porter & Scott King P.E.

Phone No: 383-4140

Address: 600 E. River Park LN Suite 105 Boise ID 83706

Relationship to Permit Holder: SPF water resource consultant

3. SOURCE

BOISE RIVER

TRIBUTARY

SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 63-31049
2. Other water rights with the same point of diversion: 63-31049

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

BOISE RIVER NE1/4SE1/4
CANYON County

Sec. 15, Twp 04N, Rge 02W, B.M.

Method of Determination: Same POD for 63-31049

2.

PLACE OF USE: AESTHETIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
04N	02W	15	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
					X				X	X		X			X	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.

Measurement
Equipment Type Make Model No. Serial No. Size Calib. Date

Acoustic Doppler Velocimeter, FLOWTracker handheld P1765 8/23/2007

Standard Contracted Rectangular Weir

2. Measurements: See attached documentation

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method:

See Discharge Measurement Summary in file for FlowTracker calculations, flow measured at 3.02 CFS

Weir measurement: 4' length, height of water = 3.7" gives a flow to be 2.94 CFS

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: See third paragraph of narrative for volume calculation explanation.

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

$$V_{D.R.} = [5.0 \text{ (cfs)}] \times (365) \times 1.9835 = 3,620 \text{ Acre Feet}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 3,620 \text{ AF}$$

G. NARRATIVE/REMARKS/COMMENTS

Applicant is diverting water for non-consumptive use in existing water-way. Diversion comes off the Boise River through an existing headgate for irrigation water right 63-31049. Water diverted under this right is for aesthetic use and is meant to increase the flow rate of existing right, water is being discharged back in to Boise River in the NWSW quarter of Section 15. There was no construction or excavation found as the irrigation ditches and natural channels were already in place. Flow measurements were taken at the point of diversion using the FlowTracker and a rectangular weir that was in place.

During the field exam it was found that the condition on the permit that states "The right holder shall also install/maintain a permanent measuring device at the point of discharge back into the river" was not met. The water was being discharged back into the river through a large corrugated metal pipe. The applicant and his representative Scott King were notified at the time of the exam and a letter was mailed on September 13th, 2007 providing written notification of the condition not being met. A response letter was received on October 15th requesting the condition be removed with a signed letter from Lee Sisco, the water master of basin 63, stating he supported the removal of the condition. An order to have the condition removed will accompany the license at the time of signing.

In determining the volume calculation for this license the applicant and his consultant Scott King of SPF were contacted regarding the amount and seasonal duration of water being diverted and put to beneficial use during the development period. After several failed attempts to get a specific number regarding an average rate and season of use, a rate of 3.0 cfs for ten months was proposed to the applicant based on the amount that was found at the field exam and factoring two months for winter freeze of the diversion. After more correspondence with Scott King it was found that the amount diverted depends on the time the applicant spends on the diversion point and he stated that the full 5.0 cfs was diverted year round during the development period. He stated that the applicant had not spent the time to maintain the diversion point prior to the field exam and this is why only 3.0 cfs was found at that time. Based on the applicants testimony a rate of 5.0 cfs year round and corresponding volume of 3,620 cfs will be allocated for this license.

Have conditions of permit approval been met? **Yes**

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
AESTHETIC	1/01 to 12/31	5.000 CFS	3,620 AF
<u>Totals:</u>		5.000 CFS	

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 Jeff HARRIS Date 1/23/08

Reviewer _____ Date _____

Discharge Measurement Summary

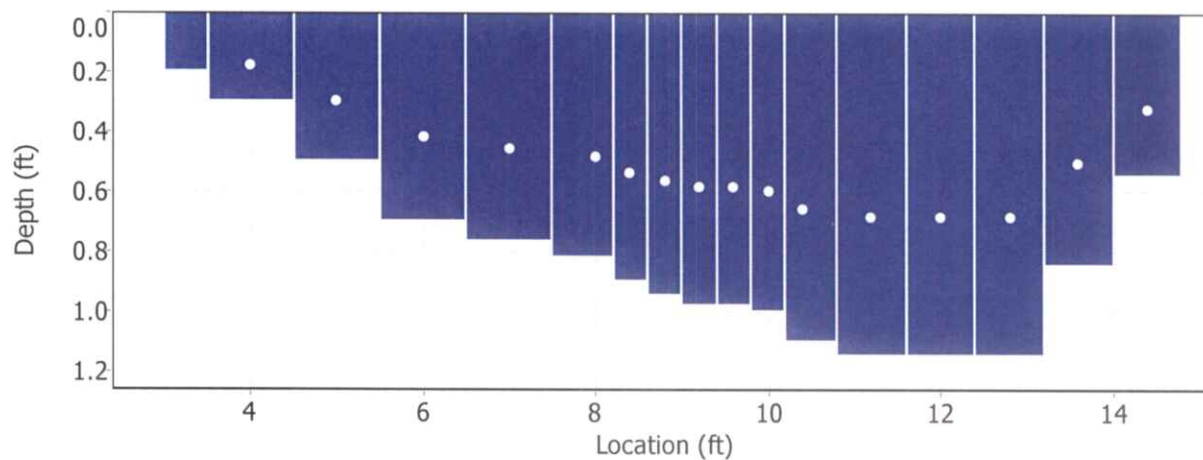
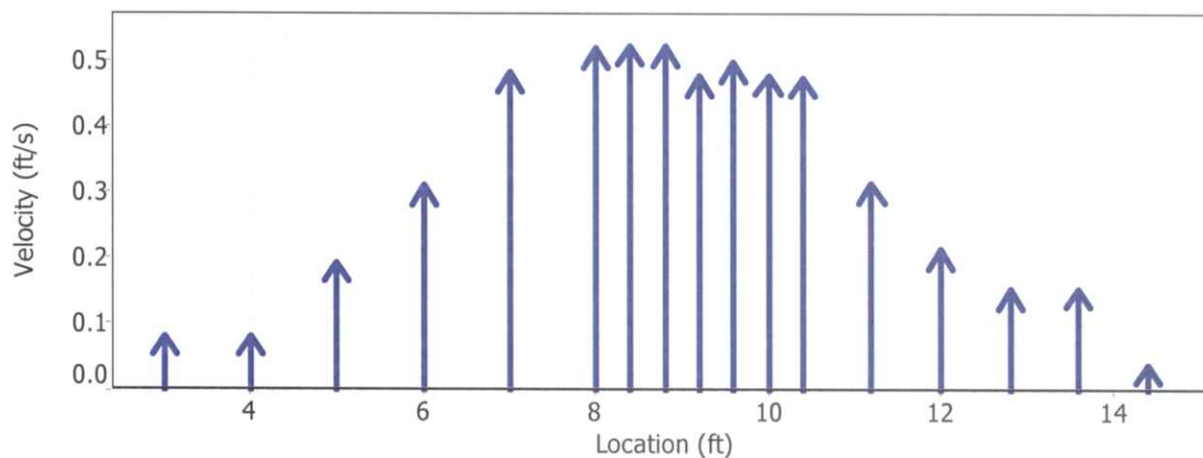
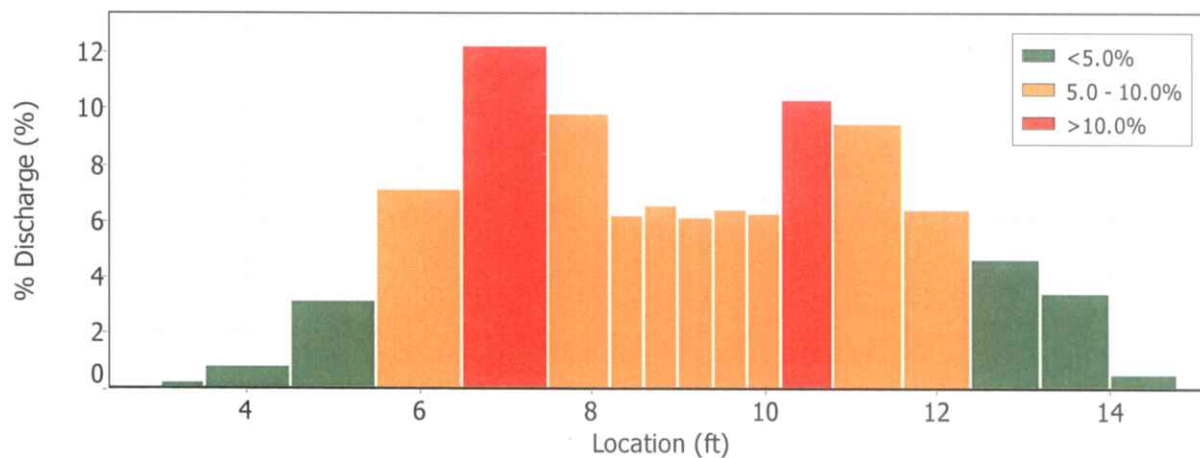
Date Generated: Fri Aug 24 2007

File Information

File Name PORTER.WAD
Start Date and Time 2007/08/23 14:31:46

Site Details

Site Name
Operator(s) CNF



Discharge Measurement Summary

Date Generated: Fri Aug 24 2007

File Information

File Name PORTER.WAD
Start Date and Time 2007/08/23 14:31:46

Site Details

Site Name
Operator(s) CNF

System Information

Sensor Type FlowTracker
Serial # P1765
CPU Firmware Version 3.2
Software Ver 2.11

Units (English Units)

Distance ft
Velocity ft/s
Area ft²
Discharge cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.3%	1.3%
Velocity	0.8%	2.3%
Width	0.1%	0.1%
Method	2.1%	-
# Stations	2.8%	-
Overall	3.7%	2.8%

Summary

Averaging Int.	40	# Stations	18
Start Edge	REW	Total Width	12.201
Mean SNR	26.1 dB	Total Area	9.409
Mean Temp	68.84 °F	Mean Depth	0.771
Disch. Equation	Mid-Section	Mean Velocity	0.3213
		Total Discharge	3.0229

Supplemental Data

#	Time	Location	Gauge Height	Rated Flow	Comments
1	Thu Aug 23 15:05:15 MDT 2007	15.201	0.350		

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	14:31	3.00	None	0.200	0.0	0.0	0.0000	1.00	0.0804	0.100	0.0080	0.3
1	14:32	4.00	0.6	0.300	0.6	0.120	0.0804	1.00	0.0804	0.300	0.0241	0.8
2	14:34	5.00	0.6	0.500	0.6	0.200	0.1926	1.00	0.1926	0.500	0.0963	3.2
3	14:36	6.00	0.6	0.700	0.6	0.280	0.3081	1.00	0.3081	0.700	0.2157	7.1
4	14:38	7.00	0.6	0.770	0.6	0.308	0.4806	1.00	0.4806	0.770	0.3701	12.2
5	14:39	8.00	0.6	0.820	0.6	0.328	0.5171	1.00	0.5171	0.574	0.2967	9.8
6	14:57	8.40	0.6	0.900	0.6	0.360	0.5217	1.00	0.5217	0.360	0.1878	6.2
7	14:41	8.80	0.6	0.950	0.6	0.380	0.5200	1.00	0.5200	0.380	0.1977	6.5
8	15:00	9.20	0.6	0.980	0.6	0.392	0.4747	1.00	0.4747	0.392	0.1861	6.2
9	14:42	9.60	0.6	0.980	0.6	0.392	0.4967	1.00	0.4967	0.392	0.1947	6.4
10	15:02	10.00	0.6	1.000	0.6	0.400	0.4757	1.00	0.4757	0.400	0.1903	6.3
11	14:44	10.40	0.6	1.100	0.6	0.440	0.4731	1.00	0.4731	0.660	0.3124	10.3
12	14:46	11.20	0.6	1.150	0.6	0.460	0.3114	1.00	0.3114	0.920	0.2865	9.5
13	14:47	12.00	0.6	1.150	0.6	0.460	0.2116	1.00	0.2116	0.920	0.1947	6.4
14	14:49	12.80	0.6	1.150	0.6	0.460	0.1522	1.00	0.1522	0.920	0.1401	4.6
15	14:50	13.60	0.6	0.850	0.6	0.340	0.1539	1.00	0.1539	0.680	0.1047	3.5
16	14:52	14.40	0.6	0.550	0.6	0.220	0.0387	1.00	0.0387	0.440	0.0170	0.6
17	14:52	15.20	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Discharge Measurement Summary

Date Generated: Fri Aug 24 2007

File Information

File Name PORTER.WAD
Start Date and Time 2007/08/23 14:31:46

Site Details

Site Name
Operator(s) CNF

Quality Control

St	Loc	%Dep	Message
1	4.00	0.6	High angle: -22
13	12.00	0.6	High angle: -26
14	12.80	0.6	High angle: -23
16	14.40	0.6	Boundary QC is Poor; possible boundary interference

Discharge Measurement Summary

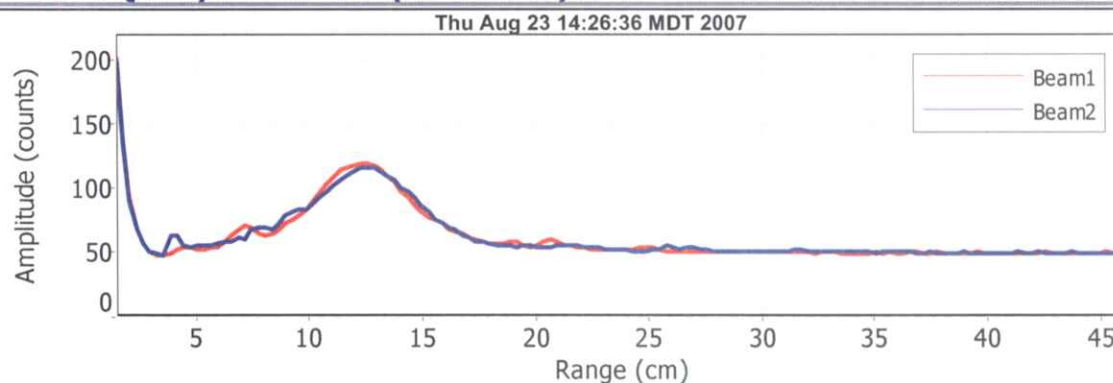
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Automatic Quality Control Test (BeamCheck)

- ✓ Noise level check - Pass
- ✓ SNR check - Pass
- ✓ Peak location check - Pass
- ✓ Peak shape check - Pass

8/23
2007



STANDARD CONTRACTED RECTANGULAR WEIR 4' Length Water H: $\approx 0.37'$ = 2.94 CFS



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High Water mark $H \approx 1.00 = > 5.0 \text{ CFS}$