

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33374

Exam Date: 5/9/2012

1. Current Owner: RICHARD M FRASER
2433 CAN ADA RD
MELBA ID 83641
2. Accompanied by: Tom White and Richard Fraser
Phone No:
Address:
Relationship to Permit Holder: Tom White owner of 63-33375 and Richard Fraser owner of 63-33374
3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: canal shares
2. Other water rights with the same point of diversion: 63-11702, 63-33373, and 63-33375

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

GROUND WATER NE1/4SE1/4 Sec. 24, Twp 01N, Rge 02W, B.M.
CANYON County

Method of Determination: Field visit and GPS

2. PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N	02W	24													3.8				3.8

Total Acres: 3.8

Method of Determination: Field visit and ArcMap

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. Well or Diversion

ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	Dutz	100	B62706218	Johnson	138558 8 inch discharge

D. FLOW MEASUREMENTS**1. Measurement**

Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
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Two 2 ft cipolletti weirs available. System not on therefore no measurement made.

2. Measurements: None

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

The system capacity was calculated on the combined system for the 4 rights as proof was filed when it was a single system and the system has not been modified since the splits. Proof paid is the limiting factor therefore the diversion rate for each of the rights is based upon the 2.00 cfs associated with the combined POU of 105.8 acres. The pumping level of 300 ft may be overstated however it is the value submitted on the Proof of Beneficial use.

$$\frac{(\frac{100}{10}) \text{ Hp} * 8.8 * 0.7}{(\frac{10}{10}) \text{ PSI} * 2.31 - 300 \text{ ft}} = \underline{2.04} \text{ cfs}$$

Permit Rate (irr) = 2.40 cfs
 Proof Pd (\$ \$135.00) (max cfs) = 2.00 cfs
 Found POU acres 105.8 * 0.02 cfs/ac = 2.12 cfs

EXPECTED FLOWS FOR PIPE DIAMETERS

08 in Dia = 1.74 cfs

Specific for this right: 3.8 ac * 0.0189 cfs/ac = 0.07 cfs recommendation

F. VOLUME CALCULATIONS

$$\begin{aligned} V &= (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 105.8 \text{ ac } 4.5 \text{ af} = 476.1 \text{ afa} \\ \text{I.P.} \\ V &= [\text{Div Rate (cfs)}] \times (\text{Days in Irr season}) \times 1.9835 = 2.00 \text{ cfs} * 260 \text{ days} * 1.9835 = 1031.4 \text{ afa} \\ \text{D.P.} \end{aligned}$$

Specific for this right: 3.8 ac * 4.5 = 17.1 afa recommendation

G. NARRATIVE/REMARKS/COMMENTS**33375**

Rights 63-11702, 63-33373, 63-33374, and 63-~~33374~~ were split from 63-11702 through 3 assignments of permits. The original permit was filed for 2.40 cfs to irrigate 120 ac. All 4 rights still share the original POD and delivery system. Late proof of beneficial use was filed by Greg Johnson prior to the assignments of permits and the priority date was advanced to 3-8-1992. The proof fee paid was \$135.00 which is \$10.00 greater than the required fee of \$125 for 2.00 cfs but \$15.00 less than the required fee of \$150.00 for 3.00 cfs. In the Analysis sheet for proof of beneficial use completed 5-10-1996 by the state office the agent noted the fee discrepancy but elected to "wait until exam to determine exam fee." On April 26, 2012 I mailed a common letter to each one of the four permit holders in which I addressed the fee issue, indicating that additional fees would be due to be able to recognize a combined diversion rate in excess of 2.00 cfs. No response was received from any permit holder. Therefore the four rights when combined are limited to 2.00 cfs. The breakdown per right based upon found acreage is;

rate	tot ac	rt per ac
2	105.80	0.0189
	ac	rate
63-11702	80.00	1.51
63-33373	8.00	0.15
63-33374	3.80	0.07
63-33375	14.00	0.27

The common irrigation system is an open discharge from the well into the farm canal system. The well is located at the high point in relation to all four rights. The system is designed to allow the water to be diverted north or south with the south line capable of diverting into the Butte Lateral for exchange with canal shares or carried across the canal into a farm ditch for the irrigation of ground south of this point. There are 2 ft cipolletti weirs on each of the north and south ditch systems where the well water could be measured if necessary. Water is applied to the fields via flood irrigation in corrugates.

Only the field west of the home receives canal shares and therefore a proportional share of the supplemental groundwater from this right. The domestic well irrigates the yard and areas east of the home. No canal shares are used on that ground. The found POU is within the permitted POU. The POU is also irrigated with Boise Kuna Irrigation district water. The POD is shared with all 4 rights. The right was permitted with a 3-15 irrigation season starting date. I am recommending the current standard of 3-1.

I recommend that the measurement and reporting conditions be modified to reflect condition 01M. The permit identified a water bearing zone of 200 to 350 ft. The well log did not identify water bearing zones but did identify fractured rock and gravel at 165 thru 185 ft followed with sandy clay from 185 ft thru 210 ft. A number of narrow sand zones were identified from that point to 362 ft. As this area is roughly 16 miles south southwest of the Boise Front Management area therefore the water bearing zone is not applicable.

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>
IRRIGATION	03/01 to 11/15	0.070 CFS	17.10 AF
	<u>Totals:</u>	0.070 CFS	17.10 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

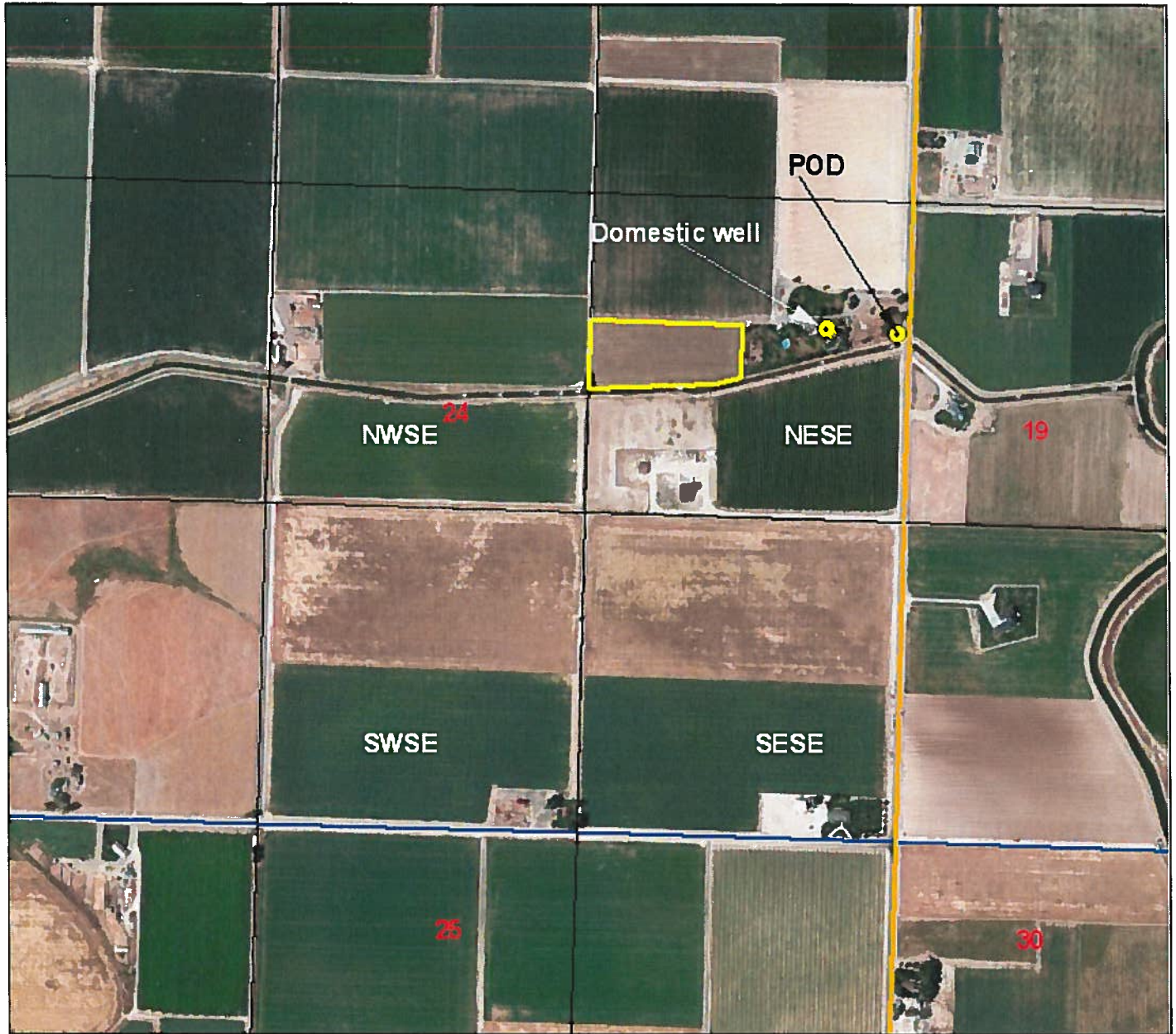
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name Kelly K. Christensen Date 7-17-12

Reviewer _____ Date _____

63-33374 LICENSING PLACE OF USE



0 660 1,320 2,640 Feet

★ LOCATION IN BASIN

PLACE OF USE
TWP 01N, RNG 2W Sec 24
Data Entry on July 16, 2012

- Found point of diversion
- Found place of use
- Township lines
- Section lines
- Quarter/quarter lines

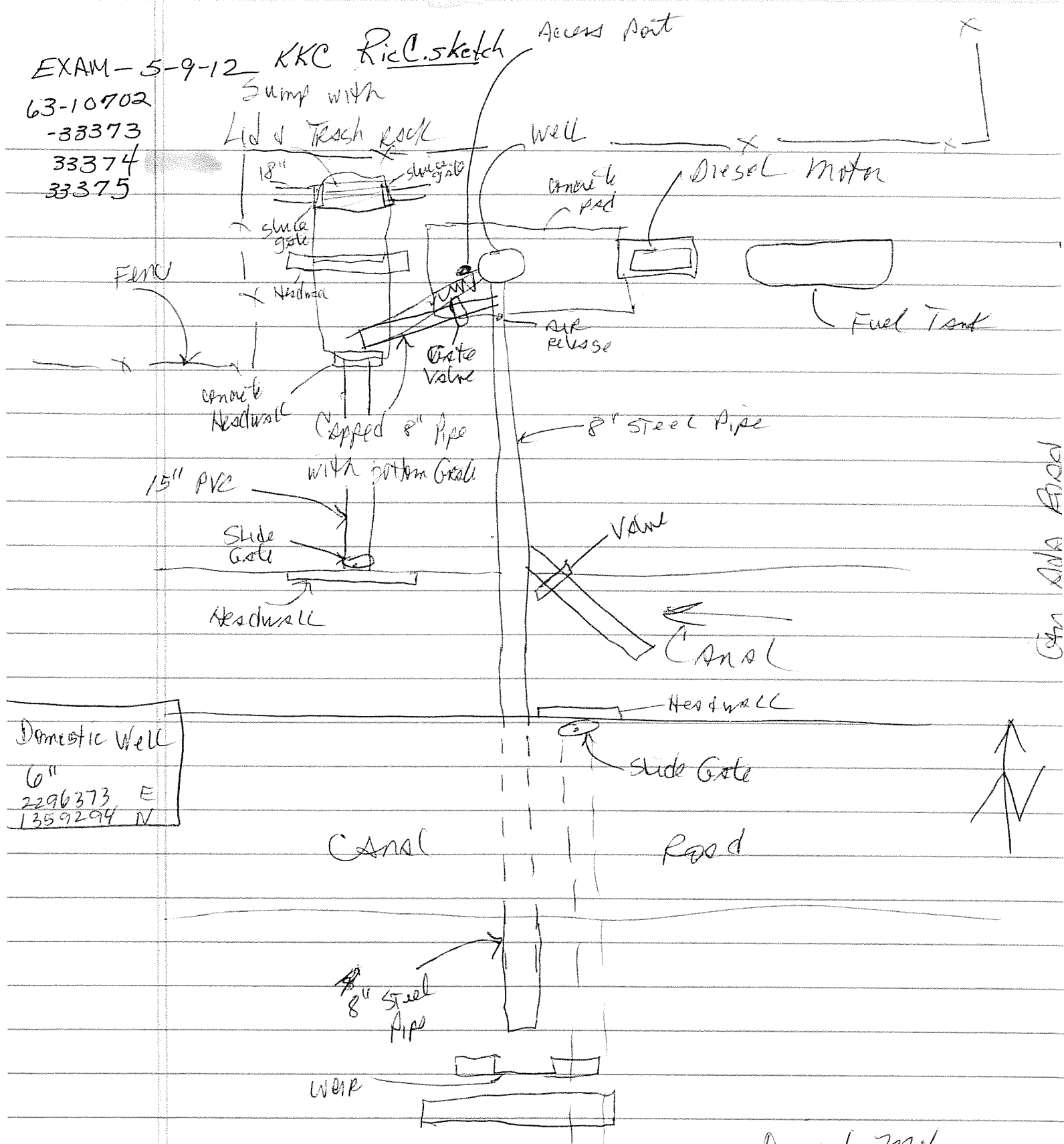
GIS PLACE OF USE PRESENTATION
2011 AERIAL PHOTOGRAPHY
BY KELLY K CHRISTENSEN

Basin 63



EXAM-5-9-12 KKC Ric. sketch

63-10702
-33373
33374
33375



Well Pumps

Johnson
Serial # 138558 H110
Ratio 1-1
BHP 100 @ 1760 Rpm - Vertical shaft

Diesel Motor

BF6L 913
6079501
B62706128 1980
EUT2 2300 Rpm?

63-33373 Holm

	Twp	Rng	Sec	QQ
Google Maps 2011 flight	01N	02W	24	

SWSE

3 Par Pic

McElroy Rd

63-33374 Fraser

	Twp	Rng	Sec	QQ
Google Maps 2011 flight	01N	02W	24	

NESE

$\approx 1/2$ ac

≈ 7.8 ac

win?

Scenic Rd

Scenic Rd

FIELD EXAM PHOTOS

Permit # 63-11702 63-33373, 63-33374, 63-33375 split from 63-11702

Exam date 5-9-2012

Agent KKC

Photo set 1

You are looking north on the left to east on the right. The foreground portion of the field is the POU for 63-33373. That right is farmed in conjunction with 63-11702 which is the background portion of the field.



Photo set 2

You are looking south on the left to southwest on the right. Shown is the Can Ada road. The field shown is the POU for 63-33375.

The photo location is just south of the POD which is in the southeast corner of the ground associated with 63-33374.

Pipeline from well crossing the canal.



Agent KKC

follow-up on original exam

Photo Set 1

This photo set is looking south and shows the delivery pipe system that delivers water across the canal to irrigate ground to the south and west or to dump water into the delivery system carrying water to the north. That headgate was identified as # 104 on the weir structure. South discharge point south pipeline north pipeline



Photo 2

This photo is looking north at the well and diesel motor used to drive the well.



Photo 3

This shows the 2 ft cipolletti weir leading to the north ditch. You are looking south at the weir. The weir is in fair shape if the brush would be cleaned out. It may leak around the bottom some though.



Photo 4

This shows the 2 ft cipolletti weir leading to the south ditch. You are looking south at the weir. The weir is in poor shape. it was made out of three sections of metal which have separated from each other by as much as an inch on the left. It has also pulled away from the backing board on the bottom creating an effective crest of two plus inches.



Photo 5

This shows the pipe system coming from the well. The left line crosses the canal to dump into the farm ditch system just above the south weir. The pipe to the right allows water to be dumped into the main canal as exchange water

Well

West pipe

East Pipe

