

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 36-8183

Exam Date: 7/30/1992

Completion: 6/17/2014

1. Current Owner: AARON BALL FARMS INC
575 N 600 E
RUPERT ID 83350

Original Owner: RONALD L HRUZA
798 E 400 N
RUPERT ID 83350
2. Accompanied by: The field exam was performed by Brian W. Block on 8-7-1992.
Field exam completed in office utilizing Department resources.

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

NE1/4SE1/4

Sec. 31, Twp 08S, Rge 25E, B.M.

MINIDOKA County

Method of Determination: Current GPS Point – Garmin. Field visit and Quad and ArcMaps.

2.

PLACE OF USE: COMMERCIAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08S	25E	31													X				

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08S	25E	31													X				

Method of Determination:

3. ☒ 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).

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>
D0050427 (Replacement)	Grundfos	1	9118	N/A	N/A

D. FLOW MEASUREMENTS N/A

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>
None						

2. Measurements: None Taken

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached *

Measured Method:

$$\text{THEORETICAL RATE OF FLOW: } Q = \frac{(8.8 \times (\text{HP}) \times (\text{EFF.}))}{\text{TDH}} = \frac{8.8 \times 1 \times 0.7}{87 + (37 \times 2.31)} = \frac{6.16}{172.47} = 0.0357 \text{ or } 0.04 \text{ cfs}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

2. Volume Calculations for Other Uses:

* Additional Computation Sheet from 7/30/1992 and Current Water Use Worksheet

Both work sheets calculated a total diversion volume of 4.5 AF

G. NARRATIVE/REMARKS/COMMENTS

Application for permit 36-8183 was filed on May 12, 1983 for 0.66 cfs (0.33 cfs for Stockwater and 0.33 cfs Commercial uses), associated with a dairy from Ground water. Permit 36-8183 was approved on June 10, 1985 and Proof of Beneficial Use was due on or before June 1, 1990. Proof of Beneficial Use was submitted on May 31, 1990 by the applicant. On July 30, 1992 a field exam was conducted by Brian W. Block and a Beneficial Use Field Report was completed documenting the findings of the field exam. There is nothing in the backfile to indicate why licensing was not completed after the exam in 1992. I have used the notes and calculations from this field exam and a current water use worksheet to complete this exam report. These two reports established a total of 4.5 af and 0.04 cfs. Therefore I recommend licensing 36-8183 for commercial use with a diversion rate of 0.04 cfs with a volume of 4.5 af and for stockwater use with a diversion rate of 0.04 cfs with a volume of 4.5 af, with a total combined diversion rate of 0.04 cfs and a total combined annual volume of 4.5 af to maximize the beneficial uses for this right.

Ronald I. Hruza owner of permit 36-8180, has recently sold a portion of the place of use for permit 36-8183 to Aaron Ball Farms Inc. In addition Ronald I. Hruza has submitted an Assignment of Permit to Aaron Ball Farms Inc. for all rights, title, and interest in permit 36-8183. Aaron Ball Farms Inc. has filed a Notice of Change in Water Right Ownership for right 36-8183. Therefore permit 36-8183 will be licensed in the name of Aaron Ball Farms Inc.

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>
COMMERCIAL	1/01 to 12/31	0.04 CFS	4.5 AF
STOCKWATER	1/01 to 12/31	0.04 CFS	4.5 AF
<u>Totals:</u>		0.04 CFS	4.5 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 Benny Walker Date 6/17/14

Reviewer [Signature] Date 6/18/14

FILE NUMBER _____
REVIEWER _____

DAIRIES: WATER USE WORKSHEET

REQUIRED DAIRY DATA

NUMBER OF MILKING CATTLE _____ 60
NUMBER OF DRY CATTLE _____ 0
NUMBER OF REPLACEMENT CATTLE 0-2 MONTHS _____ 0
3-4 MONTHS _____ 0
5-8 MONTHS _____ 0
9-12 MONTHS _____ 0
13-15 MONTHS _____ 0
16-24 MONTHS _____ 0
ENTER 1 FOR MANUAL COW WASHING, 2 FOR AUTOMATIC, OR 3 IF
SPRINKLERS ARE USED TO FLUSH HOLDING PEN AND WASH COWS _____ 1
IF SPRINKLERS ARE USED NUMBER OF SPRINKLERS IN HOLDING PEN _____ 0
NOZZLE DISCHARGE (USE 5.0 GPM IF UNKNOWN) _____ 0.00
OPERATION TIME OF SPRINKLERS (MIN/DAY) _____ 0
NUMBER OF MILKINGS PER DAY _____ 2
AVG. LBS. OF MILK PRODUCED PER DAY PER ANIMAL (IDAHO AVG IS 70 LBS.) _____ 70
HOURS PER DAY PUMP OPERATES FOR STOCKWATER USE _____ 20.0
HOURS PER DAY PUMP OPERATES FOR COMMERCIAL USE _____ 6.0
IS RECYCLED WATER USED TO FLUSH MILKHOUSE AND PARLOR FLOORS? _____ N
IS RECYCLED WATER USED TO WASH COWS? _____ N
IS A PLATE COOLER USED? _____ N
IS RECYCLED WATER USED FOR PLATE COOLER? (IF NO PLATE COOLER,
LEAVE BLANK) _____ N
IF CORRAL MISTERS ARE USED: NUMBER OF MISTERS IN HOLDING PEN _____
NOZZLE DISCHARGE (GPM) _____
OPERATION TIME OF MISTERS (MIN/DAY) _____
DAYS PER YEAR MISTERS ARE USED _____

CALCULATIONS

DIVERSION RATE (CFS):

STOCKWATER
MILKING CATTLE (BASED ON MILK PRODUCTION) _____ 0.00
DRY CATTLE @17.0 GPD/HD _____ 0.00
REPLACEMENT CATTLE _____ 0.00
TOTAL _____ 0.00
COMMERCIAL
TOTAL _____ 0.01
TOTAL DIVERSION RATE _____ 0.01

DIVERSION VOLUME (AFA):

STOCKWATER
MILKING CATTLE _____ 1.9
DRY CATTLE _____ 0.0
REPLACEMENT CATTLE _____ 0.0
TOTAL _____ 1.9
COMMERCIAL
WASHING OF BULK TANK AND RELATED EQUIPMENT _____ 0.4
BACKFLUSH _____ 0.1
PARLOR/MILKHOUSE/HOLDING PEN CLEANUP _____ 2.0
CATTLE WASHING BASED UPON METHOD OF WASHING _____ 0.1
PLATE COOLER _____ 0.0
CORRAL MISTERS _____ 0.0
TOTAL _____ 2.5
TOTAL DIVERSION VOLUME _____ 4.4

CONSUMPTIVE USE VOLUME (AFA)(assuming 100% consumptive):

STOCKWATER _____ 1.9
COMMERCIAL _____ 2.5
TOTAL CONSUMPTIVE USE _____ 4.4

THEORETICAL FLOW ESTIMATION WORKSHEET

REQUIRED PUMP INFORMATION

	PUMP 1	PUMP 2	PUMP 3	PUMP 4	PUMP 5
PUMP HORSEPOWER (HP) _____	1.00	0.00	0.00	0.00	0.00
LIFT (FT) _____	87	0	0	0	0
DISCHARGE PRESSURE (PSI) _____	37	0	0	0	0
FRICTION LOSSES (FT) _____	0	0.0	0.0	0.0	0.0
HOURS PER DAY PUMP OPERATES _____	6	0.0	4.0	0.0	0.0

CALCULATIONS

THEORETICAL FLOW RATE (CFS) * _____	0.04	0.00	0.00	0.00	0.00
DIVERSION VOLUME (AFA) ** _____	6.5	0.0	0.0	0.0	0.0

* PUMP EFFICIENCY WAS ASSUMED TO BE 70%.

** DIVERSION VOLUME IS THE ABSOLUTE MAXIMUM VOLUME BASED ON THE
THEORETICAL FLOW RATE ASSUMING PUMP RUNS EVERY DAY OF THE YEAR.

EVALUATION OF EQUIVALENT IRRIGATED ACREAGE

IRRIGATION RIGHT (BEFORE CHANGE)

DIVERSION RATE _____	CFS
ACRES OF IRRIGATION _____	ACRES
DIVERSION VOLUME _____	AC-FT/AC
CONSUMPTIVE USE VOLUME _____	AC-FT/AC
IRRIGATION IS BEING CONVERTED FOR WHICH PORTION OF THE DAIRY OPERATION - STOCKWATER (S), COMMERCIAL (C), OR BOTH (B)? _____	

CALCULATIONS

IRRIGATION DIVERSION RATE PER ACRE _____	#D/V/01	CFS/AC
REDUCTION OF IRRIGATION BASED ON DIVERSION RATE _____	0.0	ACRES
REDUCTION OF IRRIGATION BASED ON DIVERSION VOLUME _____	0.0	ACRES
REDUCTION OF IRRIGATION BASED ON CONSUMPTIVE USE _____	0.0	ACRES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

1. Owner: Ronald Hruza Permit No. 36-08183
Current Address: Rt. 4 Box 285 Rupert, ID 83350 Phone No. 436-4687
2. Accompanied by: owner EXAM. DATE: 7-30-92
Address: _____ Phone No. 436-4687
Relationship to Permit Holder: _____
3. Source: groundwater tributary to _____

B. OVERLAP REVIEW

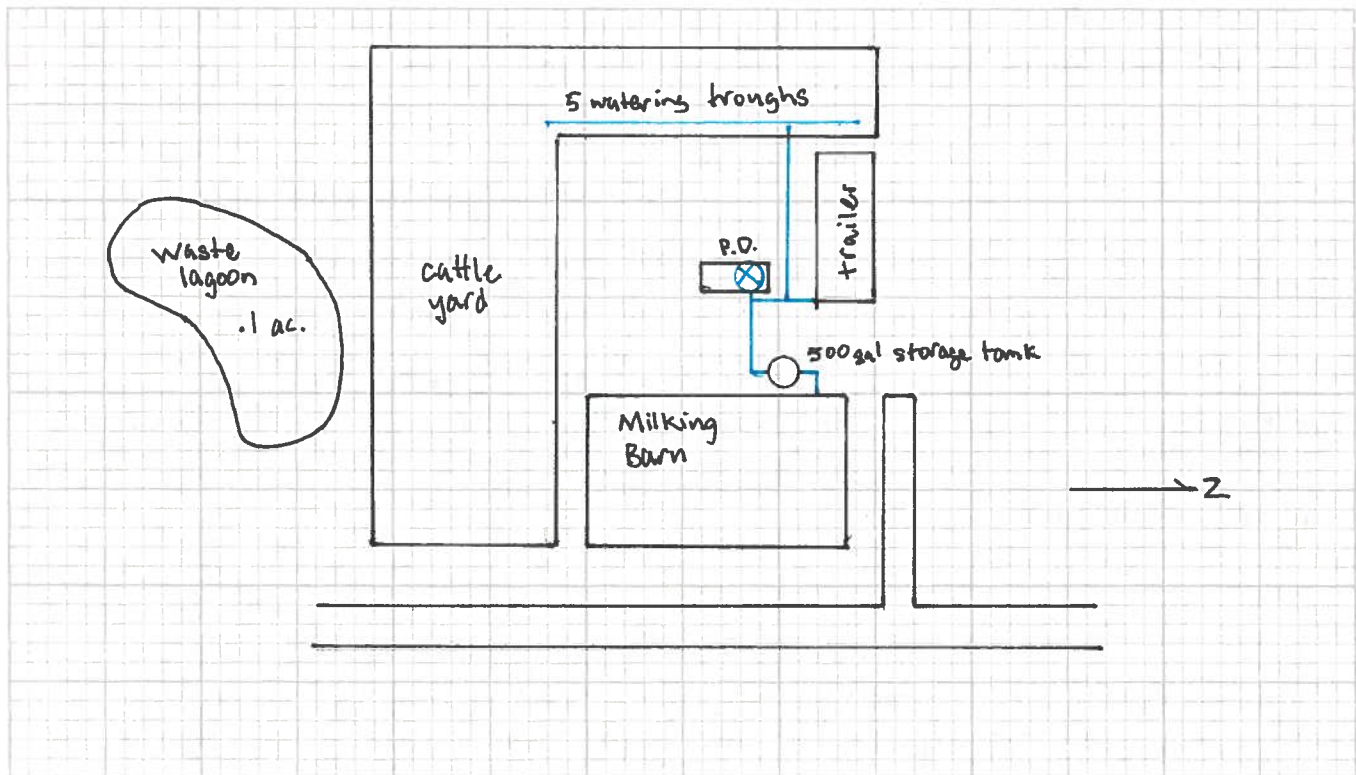
1. Other water rights with same place of use: none

☐ Copies Attached
2. Other water rights with same point of diversion: none

☐ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



Scale: 1" = NTS

2. ☒ Copy of U.S.G.S. Quadrangle Attached ☐ Aerial Photo Attached
Showing location(s) of point(s) of diversion and (required for irrigation of 10 acres or more).
place(s) of use (required).
☒ Photo of Diversion and System Attached
(required for all but single household domestic groundwater, and stockwater).

System Description (continued)

3. **Narrative:** Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

Well w/ 1 h.p. submersible pump connected to 50 gal press. tank supplies water for domestic mobile home and dairy operation. 500 gal storage tank for dairy use. 60 milking cows kept. 2 milkings per day.

☐ See Remarks on page 4 for continuation

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	GRUNDOS	1.0	9118		

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

5. **Point(s) of Diversion:**

Ident. No.	Gov't. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
			NE	SE	31	8S	25E	Minidoka	quad map / inspection

6. **Place(s) of Use:**

Indicate Method of Determination inspection

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
8S	25E	31													S				
															C				

Do not use this space

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

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

2. Measurements:

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

1. Measured Method:

2. Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)

Total Head: (1) + (2) = _____ (3) ; Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)

Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)

Meter Input HP: (6) x 1.34 = _____ (7)

Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Ampsx .001732 = _____ (6)

Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. 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:

SEE ATTACHED WORKSHEET

[illegible]

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
STOCKWATER	1-01	12-31	0.04	3.9
COMMERCIAL	1-01	12-31	0.04	0.6
		Totals:	0.04	4.5

☐ 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

Field Examiner's Name BRIAN W. BLOCK
Signature Brian Block
Certification Date _____
Field Report Preparation Date 8-7-92

K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

FILE NUMBER ----- 36-8183
REVIEWER ----- KMB 7/31/92

DAIRIES: WATER USE WORKSHEET

REQUIRED DAIRY DATA

NUMBER OF MILKING CATTLE ----- 60
NUMBER OF NONMILKING CATTLE ----- 0
IF LAGOON IS AEROBIC, ENTER ITS SURFACE AREA IN ACRES;
IF ANAEROBIC, ENTER ZERO ----- 0.1
EVAPOTRANSPIRATION FACTOR FOR AREA (AC-FT/AC-YR) ----- 4
ENTER 1 FOR MANUAL COW WASHING, 2 FOR AUTOMATIC, OR 3 IF
SPRINKLERS ARE USED TO FLUSH HOLDING PEN AND WASH COWS - 1
NUMBER OF MILKINGS PER DAY ----- 2

CALCULATIONS

DIVERSION RATE FOR STOCKWATER (CFS):

MILKING CATTLE @35 GPD/HD ----- 0.04
MILKING CATTLE (NUMBER OF CATTLE ROUNDED UP) * --- 0.06
NONMILKING CATTLE @12 GPD/HD ----- 0.00
NONMILKING CATTLE (NUMBER OF CATTLE ROUNDED UP) * --- 0.00
TOTAL (BASED UPON ROUNDED NUMBERS) ----- 0.06

DIVERSION VOLUME (AFA):

STOCKWATER

MILKING CATTLE @35 GPD/HD ----- 2.4
MILKING CATTLE (NUMBER OF CATTLE ROUNDED UP) * --- 3.9
NONMILKING CATTLE @12 GPD/HD ----- 0.0
NONMILKING CATTLE (NUMBER OF CATTLE ROUNDED UP) * --- 0.0
TOTAL (BASED UPON ROUNDED NUMBERS) ----- 3.9

COMMERCIAL

WASHING OF BULK TANK AND RELATED EQUIPMENT ----- 0.4
PARLOR FLOOR AND MILKHOUSE FLOOR ----- 0.1
CATTLE WASHING BASED UPON METHOD OF WASHING ----- 0.1
TOTAL ----- 0.6

TOTAL DIVERSION VOLUME ----- 4.5

CONSUMPTIVE USE VOLUME (AFA):

STOCKWATER

MILKING ----- 0.6
NONMILKING ----- 0.0
TOTAL ----- 0.6

COMMERCIAL ----- 0.4

TOTAL CONSUMPTIVE USE ----- 1.0

THEORETICAL FLOW ESTIMATION WORKSHEET

REQUIRED PUMP INFORMATION

	PUMP 1	PUMP 2	PUMP 3
PUMP HORSEPOWER (HP) -----	1.00	~~2.00~~	0.00
LIFT (FT) -----	87	~~100~~	0
DISCHARGE PRESSURE (PSI) -----	37	~~40~~	0
FRICTION LOSSES (FT) -----	0.0	~~1.0~~	0.0

CALCULATIONS

THEORETICAL FLOW RATE (CFS) * -----	0.04	~~0.06~~	0.00
DIVERSION VOLUME (AFA) ** -----	25.9	~~74.3~~	0.0

* PUMP EFFICIENCY WAS ASSUMED TO BE 70%.

* DIVERSION VOLUME IS THE ABSOLUTE MAXIMUM VOLUME BASED ON THE
THEORETICAL FLOW RATE ASSUMING PUMP RUNS CONTINUOUSLY EVERY
DAY OF THE YEAR.

* NUMBER OF CATTLE ROUNDED UP TO AGREE WITH EXISTING TABLES.

30-8183



lagoon



cattle
yards

36-8183



P.D.



500 gal stor. tank



milking
barn

