

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

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. 22-140191. Owner WALTERS READY MIXPhone No. 208-356-5491Current address PO BOX 390 REXBURG, ID. 834402. Examiner's name CASS JONESEXAM DATE 5/15/173. Accompanied by JAMES WALTERS

Email _____

Address PO BOX 390 REXBURG, ID. 83440Relationship to permit holder SUPERVISORPhone No. 208-356-54914. Source GROUND WATER

tributary to _____

B. OVERLAP REVIEW1. Other water rights with the same place of use 22-140252. Other water rights with the same source and point of diversion 22-14025**C. DIVERSION AND DELIVERY SYSTEM**

1. Point(s) of Diversion:

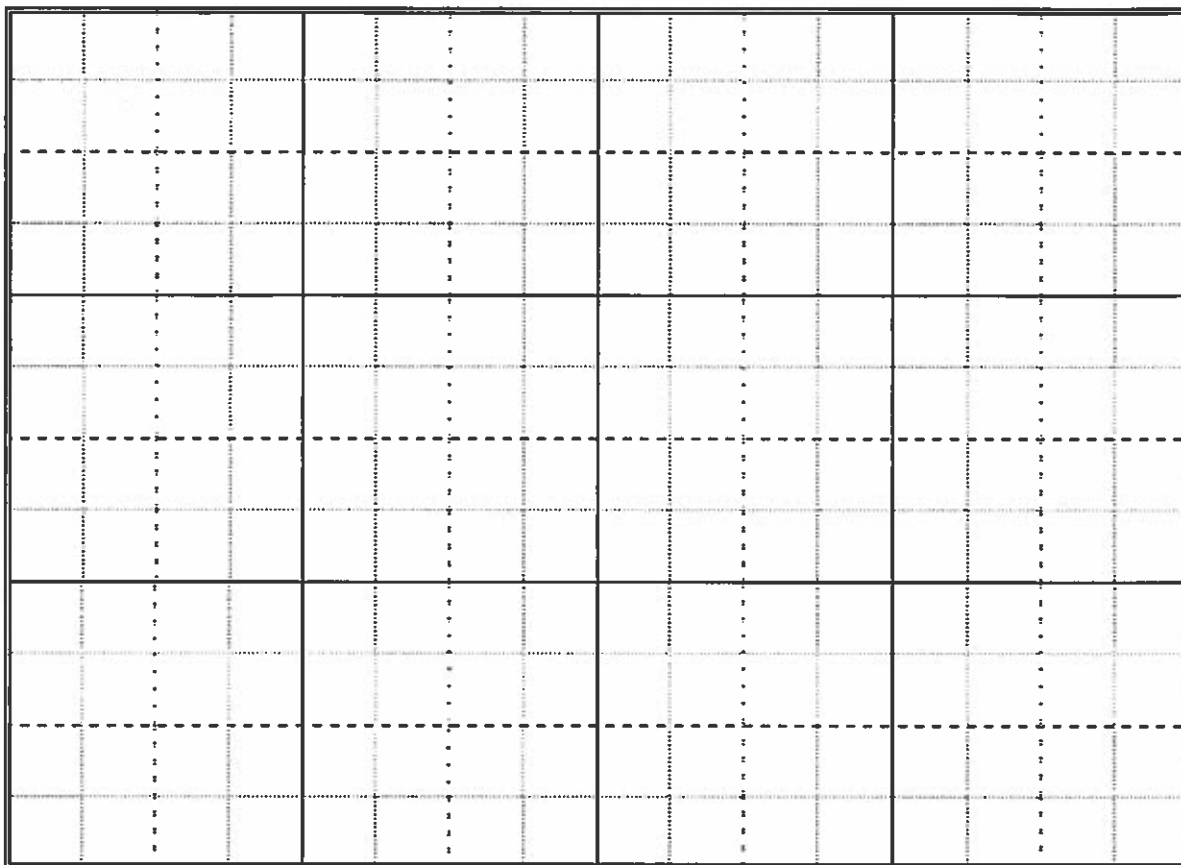
Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
			SW	NE	14	05N	39E	MADISON	GPS

2. Place(s) of Use:

Method of determination _____

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	39E	14			X														

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.



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

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	BMR USA	200	9000343		

*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
Panametrics Flow Meter	Ultra S.	GE	PT878			2017

2. Measurements: _____

Measurement was taken on a 10" carbon steel pipe with a thickness of 0.138". Measurement was taken by a GE Panametrics Flow Meter. The maximum instantaneous flow rate was 2835 gpm or 6.31 cfs.

E. NARRATIVE/REMARKS/COMMENTS

Pump feeds into a 10" straight pipe that leads to the gravel washing station ~50' away. Water is sprayed over the gravel to wash it and is then collected into a bin below. It goes through a couple settling bins before it is then pumped to the settling pond ~300' to the east. There are covers over each washing station, as well as wire brushes, to help keep the evaporative losses to a minimum.

A Seametrics AG2000-1000 has been installed onto the system. SN: 022016002129. The meter read 129.22 af at the time of inspection.

A GE Panametrics Flow Meter was used to calculate the flow. The maximum instantaneous flow rate was 2835 gpm or 6.31 cfs.

The pond covers ~5.2 acres and is ~20' deep at its deepest point. Using the pond volume calculation formula a volume of 41.6 af was the determined capacity of the pond. Maximum pond depth was provided by permit holder.

Facility is used from April 1-October 31, 9 hours a day, five days a week. This is an average of 152 days a year and 1368 hours of operation.

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?

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

GE Panametrics Flow Meter

A maximum instantaneous flow of 2835 gpm, or 6.31, was achieved.

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____ $V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____ $V = \text{Smaller of } V_{IR} \text{ and } V_{DR} =$ _____

2. Volume Calculations for Other Uses:

Industrial Storage Calculation:

 $(5.2 \text{ acres}) \times (20' \text{ max depth}) \times (0.4) = 41.6 \text{ af}$

Industrial Volume Calculation:

 $4.99 \text{ cfs} \times 7.4805 \text{ gal} = 37.33 \text{ gal/s} \times 60 \text{ s} = 2239.8 \text{ gal/m} \times 60 \text{ m} = 134388 \text{ gal/h} \times 1368 \text{ h} = 183842784 \text{ gal} / 325850 \text{ gal} = 564.19 \text{ af}$ **H. RECOMMENDATIONS**

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Industrial	01/01	12/31	4.99 cfs	564.19 afa
Industrial Storage	01/01	12/31		41.6 afa
Totals:			4.99 cfs	605.79 afa

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**I. AUTHENTICATION**Field Examiner's Signature _____ Date 05/19/17

SEAL

Reviewer _____ Date _____



Idaho Department of Water Resources

Water Right
22-14019
(INDUSTRIAL STORAGE)

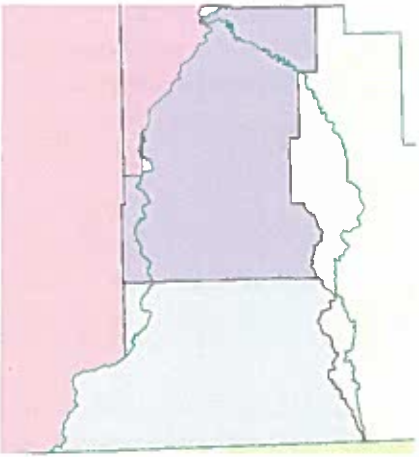
- Place of Use
- Point of Diversion
- State Outline
- Townships
- PLS Sections



Prepared by Jones, Cass

Background: 2015 Aerial Photography

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Diversion Rate Test

Date/Time	300394 (Delila) Ch 1 Velocity ft/s	300394 (Delila) Ch 1 Volume gal/m	300394 (Delila) Ch 1 Fwd Totalizer gal
5/15/2017 15:55	9.532998774	2211.172701	4888.416911
5/15/2017 15:56	9.519175682	2207.966444	7085.27174
5/15/2017 15:57	9.535299119	2211.706264	9285.159722
5/15/2017 15:58	12.15180905	2818.603997	11842.89384
5/15/2017 15:59	12.18851543	2827.118016	14652.29461
5/15/2017 16:00	12.17134683	2823.135771	17468.59337
5/15/2017 16:01	12.21511837	2833.288549	20288.52442
5/15/2017 16:02	12.21502591	2833.267103	23110.76488
5/15/2017 16:03	12.2338655	2837.636935	25938.52337
5/15/2017 16:04	12.22472488	2835.516775	28758.79898
5/15/2017 16:05	12.19855902	2829.447621	31581.36179



Picture of the system. Washing station on the top left. Installed Seametrics 2000-1000 flowmeter.



Serial number and model of installed flow meter.



Close up of washing station, highlighting the shade covers and brushes to help reduce evaporative losses.



After gravel is washed it goes through a series of three settling tanks.



Pipes rung from washing station to discharge Site.



Water being discharged into the pond.



Flow measurement taken.