

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-10850
Exam Date: 8/17/2017

1. Current Owner:
RIO VISTA WATER CO INC NO 3 C/O GERALD FITCH PRES
PO BOX 761 CALDWELL ID 83606 (208) 459-3512
2. Accompanied by:
Phone No: Tom Mehiel tom@valleyhydro.com 208-941-5989
Address:
Relationship to Permit Holder: Valley Hydro, Water Operator

3. SOURCE:
GROUND WATER

TRIBUTARY:

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 63-9064, 63-8154, 63-8234
2. Other water rights with the same point-of-diversion: 63-9064, 63-8154, 63-8234

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

GROUND WATER L4 (SW¼SW¼) Sec. 10, Twp 04N, Rge 03W, B.M. CANYON County
GROUND WATER L4 (SW¼SW¼) Sec. 10, Twp 04N, Rge 03W, B.M. CANYON County
GROUND WATER L4 (SW¼SW¼) Sec. 10, Twp 04N, Rge 03W, B.M. CANYON County

Method of Determination: GPS, POD overlap, digital PLS map

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	03W	10											X L 4						

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	
04N	03W	10											6.0 L 4						6.0

Total Acres: 6.0

Method of Determination: Historical aerial imagery, tax parcel spatial data

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

x Indicate weir size/pipe as applicable.

x Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

x Aerial Photo Attached (required for irrigation of 10+ acres).

x 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
D0067219		15			4"
16" well		20			4"
6" well		5		Grundfos	2"

*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
None						

2. Measurements:

Theoretical estimates of well capacity only:System Limit = $(8.8 \times 0.7 \times 40 \text{ total hp}) / (110 \text{ ft} + 2.31 \times 65 \text{ psi}) = 0.95 \text{ cfs}$ Total system demand = 1.09 cfs => **combined use limit****E. FLOW CALCULATIONS**

____ Additional Computation Sheets Attached

Measured Method:

Irrigation diversion rate => 6 acres x 0.02 cfs = 0.12 cfs

Domestic diversion rate => 0.23 cfs per Admin AP Memo 22

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 6.0 \text{ acres} \times 4.5 \text{ afa/acre} = 27.0 \text{ afa}$ $V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05 \text{ cfs} \times 260 \text{ days} \times 1.9835 \text{ afa} = 41.8 \text{ afa}$ $V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 27.0 \text{ afa}$

0.12

2. Volume Calculations for Other Uses:

Domestic = 0.6 afa (irrigation listed separately) x 26 homes = 15.6 afa (per Admin AP Memo 22)

G. NARRATIVE/REMARKS/COMMENTS

This permit was approved on October 30, 1989 authorizing the diversion of 0.36 cfs from groundwater for irrigation and domestic use for 26 homes. Proof of beneficial use was submitted on October 25, 1990. Rick Collingwood completed a field exam in July of 1992, but much of the required information was missing from the exam and no license was ever issued. I completed a second field exam on August 17, 2017. I was accompanied by Tom Mehiel of Valley Hydro. Tom is the water system operator for the subdivision.

There are three wells which provide water for the system. GPS coordinates show that all three are located in Gov Lot 4 (SWSW) of Sec 10, T04N, R03W, B.M. Two wells are located in Sub Lot 11 of Block 3 of the Rio Vista Acres Subdivision. One of these is a replacement well drilled in 2014 and is located just east of the pump house. The well is 8" in diameter and 268' deep with a metal tag number of D0067219. Water is diverted from the well at 65 psi using a 15-hp pump set at an unknown depth. Water leaves the well through a 4" mainline into two 1000-gallon storage tanks and is distributed from the tanks throughout the subdivision for use.

The other well located in the same lot is a 12" well with no tag number or report available. The well uses a 20-hp pump to divert water to a 4" mainline at 65 psi. The water is diverted into the same 1000-gallon storage tanks inside the pump house.

The final well is located in Sub Lot 13 of Block 3 of the subdivision. It is a 6" well with a 3-hp pump. The pump is set at an unknown depth and there is no metal tag or well log available.

Three overlapping rights authorize water from the same wells for domestic use for 25 homes. These three rights have priority dates from 1975 to 1977. Currently, there are 63 homes developed in the subdivision. Of these, 50 homes were developed by 1990 (the proof submitted date for this right). I recommend that the domestic use for this right should cover the 25 newest homes built prior to the proof date (based on year built tax parcel data). There was one home built in 1991 which I have assumed was stubbed in at the time proof was submitted. Therefore, the total homes to be authorized under this license is 26. The domestic diversion rate I recommend is 0.23 cfs which comes from Admin AP Memo 22. The domestic volume I recommend is 15.6 afa (0.6 afa per home, no irrigation included under the domestic use.)

I measured 15.2 acres irrigation within the subdivision from 1992 imagery. Information from the backfile suggests that 6.0 acres of irrigation are authorized under the domestic use of the overlapping rights. This right can be licensed for an additional 6.0 acres described on the permit, which includes the lawn surrounding houses covered by the domestic use component and lawn surrounding the pump house. The applicant should apply for the remaining irrigated acreage and the 12 additional homes not covered under existing rights.

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	0.12 CFS	27.0 AF
DOMESTIC	01/01 to 12/31	0.23 CFS	15.6 AF
<u>Totals:</u>		0.35 CFS	42.6 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 ☐ None

I. AUTHENTICATION

Field Examiner's Name Cody [Signature] Date 4/17/18

Reviewer Angela [Signature] Date 4/17/18

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Figure 1 An 8" well drilled in 2014 to replace one of the original wells which is no longer in use. This well has a 15-hp pump which diverts water through a 4" line to 2 1000-gallon tanks.



Figure 2 The metal tag for the well shown above.

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Figure 3 The 16" well with a 20-hp pump. There is no record of this well in the IDWR database. TDH for this well was assumed to be the same as the well in Figure 1 for system capacity calculations.



Figure 4 The pump house which contains the 2 storage tanks and the now-unused original well.

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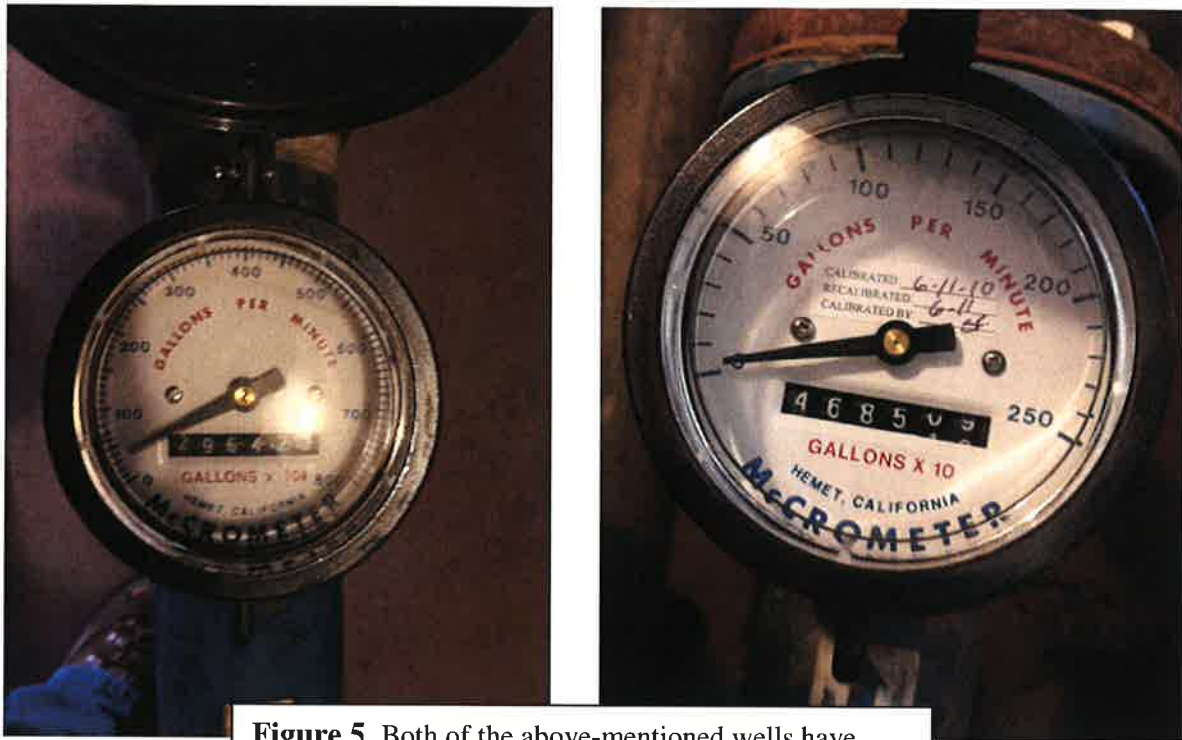


Figure 5 Both of the above-mentioned wells have totalizing flow meters installed which are located in the pump house.

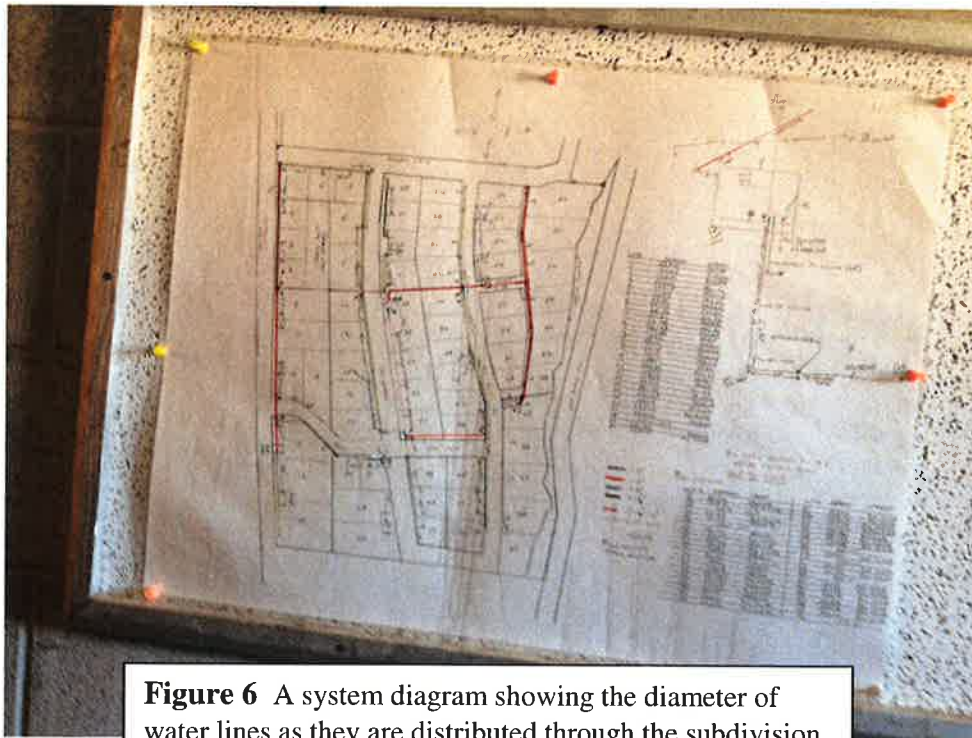


Figure 6 A system diagram showing the diameter of water lines as they are distributed through the subdivision.

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Figure 7 The third well located at the eastern side of the subdivision. As with the second well, TDH for this well was assumed to be the same as the 2014 well.

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IRRIGATION

03W



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

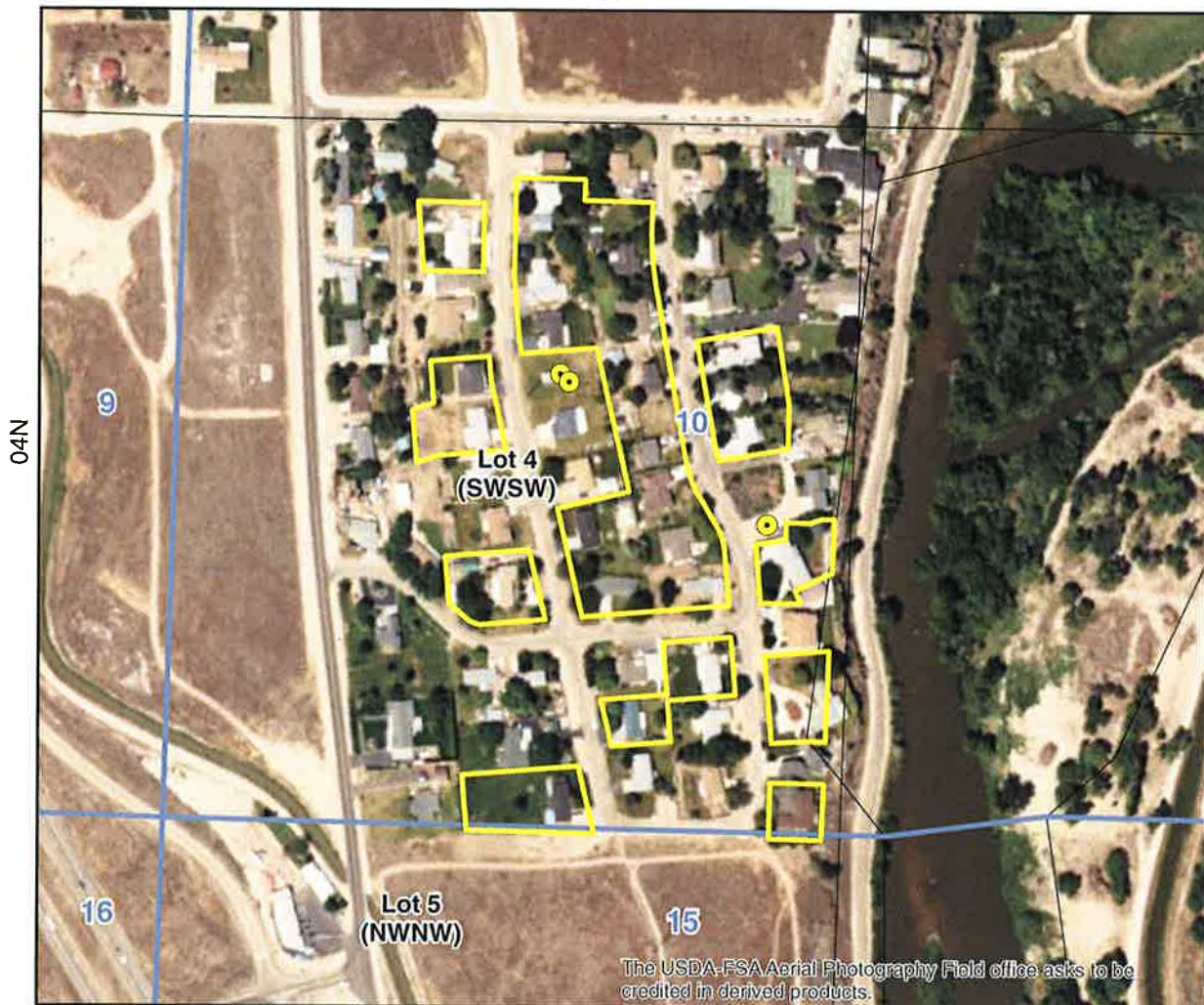
0 0.0425 0.085 0.17 Miles



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DOMESTIC

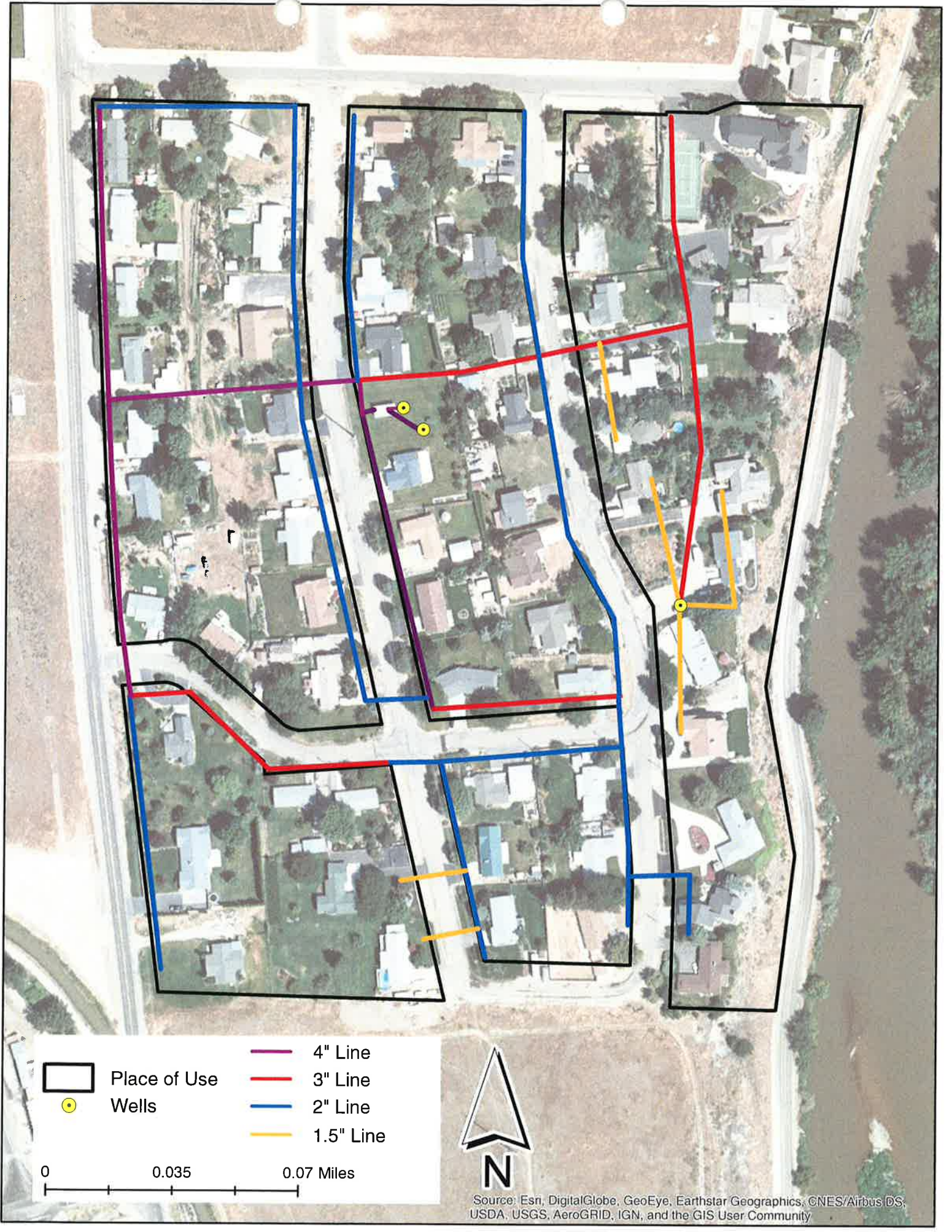
03W



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections

0 0.0425 0.085 0.17 Miles





Place of Use



Wells

- 4" Line
- 3" Line
- 2" Line
- 1.5" Line

0 0.035 0.07 Miles



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Basin/Sequ	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
04N03W10																				
63-10674	CITY OF (GROUND MUNICIPAL																			
63-10850	RIO VIST. GROUND IRRIGATION																			
63-10850	RIO VIST. GROUND IRRIGATION																			
63-12144	CITY OF (GROUND MUNICIPAL																			
63-12304	FARRIS, E WILLOW IRRIGATION																			
63-124N	FARRIS, E BOISE R' IRRIGATION																			
63-125G	FARRIS, E BOISE R' IRRIGATION																			
63-126E	FARRIS, E BOISE R' IRRIGATION																			
63-15812	MC DOWI GROUND DOMESTIC																			
63-15812	MC DOWI GROUND STOCKWATER																			
63-161X	CONSUMI BOISE R' IRRIGATION																			
63-163	CANYON BOISE R' IRRIGATION																			
63-168B	BORTLE, BOISE R' IRRIGATION																			
63-168D	FARRIS, E BOISE R' IRRIGATION																			
63-173	FARRIS, E BOISE R' IRRIGATION																			
63-179B	CANYON BOISE R' IRRIGATION																			
63-198AC	FARRIS, E BOISE R' IRRIGATION																			
63-19910	OEHLER, GROUND DOMESTIC																			
63-20404	DOBSON, GROUND DOMESTIC																			
63-20521	DEROUSS HARTLE\ IRRIGATION																			
63-20521	DEROUSS HARTLE\ STOCKWATER																			
63-20523	DEROUSS GROUND DOMESTIC																			
63-20523	DEROUSS GROUND STOCKWATER																			
63-21761	CANYON BOISE R' IRRIGATION																			
63-22360	CITY OF (GROUND DOMESTIC																			
63-2283	CALDWEL MASON C IRRIGATION																			
63-2322	UNITED S ELIJAH S IRRIGATION																			
63-2322	UNITED S WILSON S IRRIGATION																			
63-23434	GRIFFITH GROUND DOMESTIC																			
63-23434	GRIFFITH GROUND STOCKWATER																			
63-23436	GRIFFITH GROUND DOMESTIC																			
63-23436	GRIFFITH GROUND STOCKWATER																			
63-23494	HODGES, GROUND DOMESTIC																			
63-23494	HODGES, GROUND STOCKWATER																			
63-23543	KRAUS, T GROUND DOMESTIC																			
63-23543	KRAUS, T GROUND STOCKWATER																			
63-23561	KRUGER, GROUND DOMESTIC																			
63-23561	KRUGER, GROUND STOCKWATER																			
63-23562	KRUGER, GROUND DOMESTIC																			
63-23562	KRUGER, GROUND STOCKWATER																			
63-23959	WHITNE\ GROUND DOMESTIC																			
63-254	FARRIS, E BOISE R' IRRIGATION																			
63-255	COUZENS BOISE R' IRRIGATION																			
63-26179	MC DOWI GROUND DOMESTIC																			
63-26179	MC DOWI GROUND STOCKWATER																			
63-26485	POWELL, GROUND DOMESTIC																			
63-26630	TAMURA, GROUND DOMESTIC																			
63-26786	TUNING, GROUND DOMESTIC																			
63-26845	WIECZOR GROUND DOMESTIC																			
63-27103	CHRISTIE\ GROUND DOMESTIC																			
63-27215	HEIMBUC GROUND DOMESTIC																			
63-27353	HAWKIN\ GROUND DOMESTIC																			
63-27661	DAVIS, B I GROUND DOMESTIC																			
63-27661	DAVIS, B I GROUND STOCKWATER																			
63-28269	VAN PAE\ GROUND DOMESTIC																			
63-28370	PETERSO GROUND DOMESTIC																			
63-28419	KINDALL GROUND DOMESTIC																			

Irrigation district rights, no surface water used
 Overlapping water rights

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Basin/Sequence	Owner	Source	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE
04N03W10																		
63-10850	RIO VIST. GROUND WATER												X	X				
63-137A	PIONEER BOISE RIVER						X											
63-15812	MC DOWI GROUND WATER																	
63-19910	OEHLER, GROUND WATER										X							
63-20404	DOBSON, GROUND WATER											X						
63-20521	DEROUSS HARTLEY GULCH CREEK						X											
63-20523	DEROUSS GROUND WATER						X											
63-222C	BALDWIN BOISE RIVER													X				
63-222J	BLACK, V BOISE RIVER													X				
63-222M	BLACK, V BOISE RIVER													X				
63-222N	BLACK, V BOISE RIVER													X				
63-22360	CITY OF GROUND WATER															X		
63-226	BARKER, BOISE RIVER													X				
63-227	BARKER, BOISE RIVER													X				
63-228	BARKER, BOISE RIVER													X				
63-229	BARKER, BOISE RIVER													X				
63-233C	AMERICA BOISE RIVER													X				
63-233L	AMERICA BOISE RIVER													X				
63-23434	GRIFFITH GROUND WATER			X														
63-23436	GRIFFITH GROUND WATER					X												
63-23494	HODGES, GROUND WATER		X															
63-23543	KRAUS, I GROUND WATER									X								
63-23561	KRUGER, GROUND WATER							X										
63-23562	KRUGER, GROUND WATER							X										
63-23959	WHITNEY GROUND WATER											X						
63-26179	MC DOWI GROUND WATER						X											
63-26485	POWELL, GROUND WATER			X														
63-266	BARKER, BOISE RIVER													X				
63-26630	TAMURA GROUND WATER		X											X				
63-267	BARKER, BOISE RIVER													X				
63-26786	TUNING, GROUND WATER		X															
63-268	BARKER, BOISE RIVER													X				
63-26845	WIECZOR GROUND WATER											X						
63-27103	CHRISTIE GROUND WATER						X											
63-27215	HEIMBUC GROUND WATER									X								
63-27353	HAWKIN GROUND WATER																	
63-27661	DAVIS, B GROUND WATER						X											
63-28269	VAN PAE GROUND WATER								X									
63-28370	PETERSON GROUND WATER		X															
63-28419	KINDALL GROUND WATER									X								
63-28605	RE, CONN GROUND WATER		X															
63-299	BARKER, BOISE RIVER													X				
63-300	BARKER, BOISE RIVER													X				
63-30260	DAVIS, D GROUND WATER						X							X				
63-305A	ROBERTS BOISE RIVER													X				
63-31085	CAYLER, GROUND WATER						X											
63-31205	HURLEY, GROUND WATER			X														
63-3317	KUCK, BE GROUND WATER			X														
63-374	PIONEER BOISE RIVER																	
63-5127	DAVENPORT GROUND WATER													X				
63-8154	RIO VIST. GROUND WATER																	
63-8234	RIO VIST. GROUND WATER												X					
63-9064	RIO VIST. GROUND WATER												X					

POD Overlap

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT1. WELL TAG NO. D 0067219Drilling Permit No. 966159-872218Water right or injection well # 63-8154

2. OWNER:

Name Rio Vista Water Co.Address P.O. Box 761City Caldwell State Id. Zip 83606

3. WELL LOCATION:

Twp. 4 North ☒ or South ☐ Rge. 3 East ☐ or West ☒Sec. 10 1/4 S.E. 1/4 S.E. 1/4Gov't Lot _____ County CanyonLat. 43 41.627 (Deg. and Decimal minutes)Long. 116 41.409 (Deg. and Decimal minutes)Address of Well Site Jeanne Dr.

(Write at least name of road - Distances to Road or Landmark)

Lot 33 Blk. _____ Sub. Name Rio Vista Sub.

4. USE:

☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☐ Other _____

5. TYPE OF WORK:

☒ New well ☒ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☐ Air Rotary ☒ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
Bentonite-ceme	230'	3'	92 cubic ft.	pumped

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
8"	+2'	230'	.322	Steel	☒	☐	☐	☒
5"	216'	237'	.258	Steel	☐	☒	☐	☒
5"	242'	253'	.258	Steel	☐	☒	☐	☒
5"	263'	268'	.258	Steel	☐	☒	☐	☒

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____Manufactured screen ☒ Y ☐ N Type Johnson V wireMethod of installation Lowered

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
237'	242'	.030	5'	5"	Stainless	
253'	263'	.025	10'	5"	Stainless	

Length of Headpipe 21' Length of Tailpipe 5'Packer ☒ Y ☐ N Type Removable figure K 6" pipe 4' long

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
8-12 sand	216'	270'	1000 lbs.	Poured

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 95' Static water level (ft) 86'Water temp. (°F) Below 55° Bottom hole temp. (°F) _____Describe access port Well cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
23'	78	1440

Test method:

Pump	Boiler	Air	Flowing artesian
☒	☐	☐	☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
12"	0	5	Topsoil		X
	5	8	Clay hardpan		X
	8	15	Cemented gravel		X
	15	42	Basalt		X
	42	60	sandy clay		X
	60	95	Cemented gravel		X
	95	119	Brown sand	X	
	119	148	Blue gray cemented sand		X
	148	160	Yellow clay		X
	160	181	Blue clay		X
	181	196	Blue gray	X	
	196	215	Yellow clay		X
	215	237	Sandy clay		X
	237	242	Sand	X	
	242	253	Clay		X
	253	263	Sand	X	
	263	270	Sandy clay		X

RECEIVED

JUL 20 2015

WATER RESOURCES
WESTERN REGIONCompleted Depth (Measurable) 268'Date Started: Jun 13, 2014Date Completed: Jun 25, 2014

14. DRILLER'S CERTIFICATION:

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Stevens & SonsCo. No. 153Principal Driller [Signature] Date Jun 27, 2014Driller [Signature] Date Jun 27, 2014

Operator II _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required

PER KEN STEVENS VIA OFFICE VISIT 8/3/15

(BES)



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

February 26, 2018

RIO VISTA WATER CO INC. #3
C/O BERTHA E FITCH
22109 RIO VISTA DRIVE
CALDWELL ID 83607

RE: Water Right Permit No. 63-10850

Notice of Pending Order to Void Permit

Dear Permit Holders,

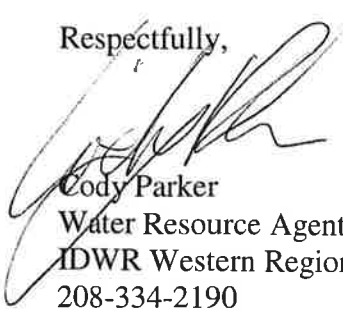
I am writing you today in regard to the water right permit referenced above which authorizes the diversion of 0.36 cfs from groundwater for domestic and irrigation uses. On August 17, 2017 I visited the site to complete the beneficial use field examination for this permit. The field exam is the final step required prior to the Department issuing a final water right license. However, I was unable to collect well and pump information for the well located at 22098 Rio Vista Dr during the exam. This information is required to determine the total diversion capacity of the system to ensure that the system is capable of producing the amount of water authorized for diversion under all of the overlapping water rights. I spoke with both Tom Meheil of Valley Hydro and Terry Fackrell concerning this issue and neither were able to determine the information needed. To continue processing of your water right permit please provide the following information:

- 1) Pump set depth: The depth below ground surface (BGS) that the submersible pump is set.
- 2) Static water level: Depth of water BGS when water is not being pumped
- 3) Pumping water level: Depth of water BGS when the pump is running
- 4) Pump horsepower

Once I receive this information I will resume processing of your water right permit. **I look forward to your reply within thirty (30) days of the date of this letter.** If you do not make a timely reply, I will assume that you have no further interest in pursuing a water right license, and I will take action to void the permit. You may request additional time to provide the requested information if needed.

Please let me know if you have any questions regarding the content of this letter. Thank you for your time, I look forward to hearing from you.

Respectfully,



Cody Parker

Water Resource Agent
IDWR Western Region

208-334-2190

cody.parker@idwr.idaho.gov