

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22958

Exam Date: 6/5/2012

1. Current Owner: QUAIL HOLLOW HOMEOWNERS ASSN
1145 QUAIL HOLLOW LN
EMMETT ID 83617
(208)365-2449
2. Accompanied by: Ralph Gurney
Phone No: (208) 365-2449
Address: 1145 Quail Hollow Lane, Emmett, ID 83617
Relationship to Permit Holder:

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Emmett Irrigation District – Surface Water
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. 36, Twp 07N, Rge 02W, B.M.
GEM County

Method of Determination: ArcMap (Aerial Photo); GPS N1414056, E2297981; Garmin GPSIII Plus; Datum-NAD83.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
07N	02W	36													2.0				2.0

Total Acres: 2

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
07N	02W	36													X				

Method of Determination: ArcMap (Aerial Photo)

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>
	N/A	5	N/A	Gould	(1 1/2")

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

D. FLOW MEASUREMENTS

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>
N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. Measurements: No Field Measurement. Pressurized irrigation for only developed parcel. Pop-up sprinkler heads lawn and landscape irrigation.

E. FLOW CALCULATIONS

Measured Method (Theoretical HP):

____ Additional Computation Sheets Attached

HP = 5
 Z = 85' (Pump level during test – well log)
 P = 50 psi (VFD reading)

$$Q = 8.8 \times 0.7 \times \text{HP}/Z + (2.31 \times P) = 8.8 \times 0.7 \times 5/85 + (2.31 \times 50)$$

$$Q = 30.8/200.5 = 0.15 \text{ cfs}$$

$$Q(\text{Permit}) = 0.16 \text{ cfs} > 0.15 \text{ cfs}$$

Conclusion – Appears ground water well system can meet the domestic and irrigation requirements.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2 \times 4.5 = 9.0 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.06 \times 260 \times 1.9835 = 30.9 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 9.0 \text{ afa}$$

2. Volume Calculations for Other Uses: (Domestic)

$$V(\text{required}) = 4 \text{ homes} \times 0.6 \text{ af/home} = 2.4 \text{ afa}$$

$$V(\text{diverted}) = 0.10 \times 365 \times 1.9835 = 72.4 \text{ afa}$$

$$V = \text{Smaller of } V(\text{required}) \text{ and } V(\text{diverted}) = 2.4 \text{ afa}$$

G. NARRATIVE/REMARKS/COMMENTS**WATER SYSTEM DESCRIPTION:**

An 8" well, located near the common parcel line of Parcel No.2 and Parcel No.3, provides ground water for domestic and irrigation use for four (4) residential parcels. A 1 ½" PVC main line is stubbed to each parcel for current and future use. At the present time, Parcel No. 4 is the only developed parcel and is connected to the water delivery system for domestic and irrigation use. A pump house, which contains the pump controls and a pressure tank, are located approximately 20' west of the well. The remaining three undeveloped parcels have been sold, but no homes have been constructed.

Domestic use is for four homes. Irrigation use is for lawn and landscaping up to ½ acre per parcel. Since the parcels are approximately 1.7 acres in size, the remaining portion of the parcels will be irrigated by surface water provided by the Emmett Irrigation District. Currently, undeveloped Parcels No.1, 2, and 3 are being irrigated by surface water. Developed Parcel No.4 uses the surface water to irrigate a small pasture behind the home for livestock. The parcels are on a two-week rotation each month for use of surface water for irrigation. Surface water is available 4 – 5 days each week when available.

The water right permit was assigned to the Quail Hollow Homeowners Association by A. Ralph Gurney.

Although only one parcel has currently been developed, a 1 ½" water line has been stubbed into each parcel for current and future water service. Under the Department's "stub-in" policy, water rights can be issued for domestic purposes in subdivisions, including irrigation up to ½ acre per parcel, if the water diversion and distribution systems were in place, including a service line to each parcel, even if water had not yet been put to beneficial use on all the buildable parcels. As stated in Department policy, Memorandum No.18, this development meets the Department's "stub-in" policy requirements, and therefore is qualified for issuance of a water right.

OVERLAP (Place of Use):

Surface water – Emmett Irrigation District. The undeveloped parcels are currently being irrigated by surface water. The developed parcel is irrigating a small pasture with surface water. The well and distribution system is providing water for domestic use and irrigation of the lawn and landscaping for the developed Parcel No.4.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.16	&/or	
Beneficial Use Limit	0.16	&/or	
System Measurement	0.15(theoretical)	&/or	
Proof Fee Amount	0.16	&/or	
Recommended Amount	0.16		

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	0.060 CFS	9.0 AFA
DOMESTIC	01/01 to 12/31	0.100 CFS	2.4 AFA

Totals: 0.160 CFS

2. Recommended Amendments

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

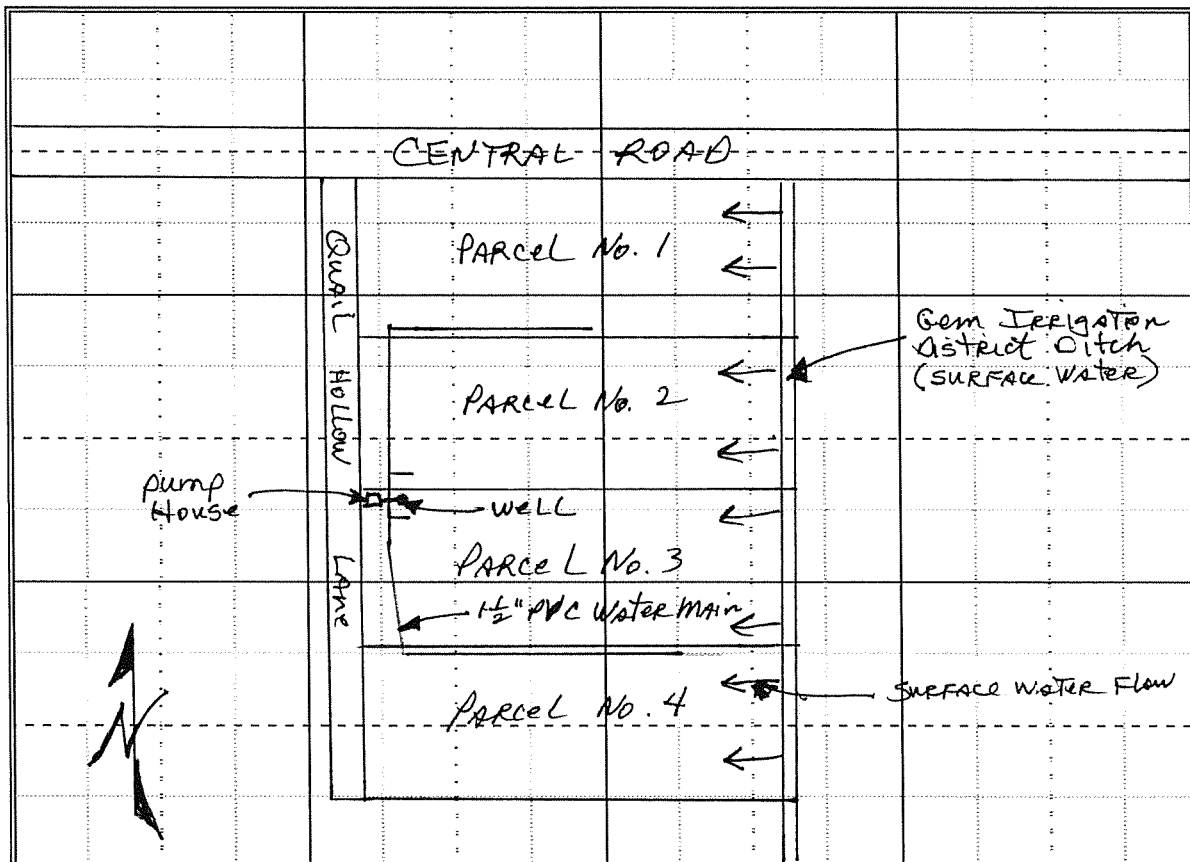
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 7-3-12

Reviewer _____ Date _____

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" = 200

- ☐ 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

65-22958



**IDAHO DEPARTMENT OF WATER RESOURCES
FIELD EXAMINERS
WELL INSPECTION FORM**

1. IDENTIFICATION # _____ (Tag #, etc.)

OTHER APPLICABLE # 65-22958 (Water right #, etc.)

2. OWNER Ralph Gurney Phone _____

Address 1145 Quail Hollow Lane City Emmett

State ID Zip 83617 Email _____

3. WELL LOCATION (GPS required in Degrees Decimal Minutes – use PLS if GPS not available)

Lat. N 1414056 Long. E. 2297981

Twp 07N Rge 02W Sec 36 $\frac{1}{4}$ NE $\frac{1}{4}$ SE

4. WELL CONSTRUCTION ☒ Well log attached ☐ Well log not found

Any obvious construction problems that may be a source for contamination or waste? ☐ Yes ☒ No

If yes, describe below &/or see attached (list any that apply): ☐ Photos ☐ Diagram ☐ Other

5. HYDROLOGIC INFORMATION

Static water if measured 460 ft. ^(well log)

Water temperature if measured _____ °F

Flowing artesian ☐ Yes ☒ No

Pressure if measured 50 (gauge) psi

VFD Resident
54 (gauge)

NOTES _____

INSPECTED BY Rick Collingwood DATE 5/30/12

FIELD EXAM PHOTOS

Water Right Permit: 65-22958

Field Exam Date: 5-30-12

PLS: NE1/4, SE1/4 Section 36, T.07N, R.02W.

Field Examiner: RC



Point of Diversion. Ground water well located between Parcel No.2 and Parcel No.3.



View southwest of well and pump house located next to Quail Hollow Lane between Parcel No.2 and Parcel No.3.



Future Place of Use. View southerly of undeveloped Parcel No.3 which is currently irrigated by surface water from the Emmett Irrigation District. The residence shown, Parcel No.4, is the only current place of use for domestic and irrigation water system.



Future Place of Use. View northeasterly of undeveloped Parcels No. 1 & 2.