

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 67-15088

Priority: January 22, 2013

Maximum Diversion Rate: 2.00 CFS

This is to certify, that STEVEN E RYALS
2429 LAPPIN LN
COUNCIL ID 83612

has applied for a permit to appropriate water from:

Source: GROUND WATER

and a permit is APPROVED for development of water as follows:

BENEFICIAL USE

IRRIGATION

PERIOD OF USE

03/15 to 10/31

RATE OF DIVERSION

2.00 CFS

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE1/4NW1/4 Sec. 8, Twp 12N, Rge 02W, B.M., WASHINGTON County

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	
12N 02W 8		40.0	40.0		40.0			20.0									140.0

Total Acres: 140

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **May 01, 2018**.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.
4. Any well used as a point of diversion for this right shall be cased with impermeable casing into or through the first confining layer below ground surface to prevent diversion of water having a direct hydraulic connection to surface water sources within the Weiser River Basin.
5. Any well used as a point of diversion for this right shall include a measuring tube or other suitable method to allow measurement of water levels. The right holder shall measure water levels for any well used as a point of diversion for this right monthly for any calendar year during the first five irrigation seasons in which water is diverted in connection with this right and shall make the records available to the department upon request. One measurement shall be in April for each year this right is being used.

State of Idaho
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6. The right holder shall install a measuring device acceptable to the department on any point of diversion authorized under this right. The measuring device shall be capable of displaying instantaneous diversion rates and totalized volume measurements. The right holder shall record rate and volume measurements monthly for any calendar year during the first five irrigation seasons in which water is diverted in connection with this right and shall make the records available to the department upon request. One measurement shall be in April for each year this right is being used.
7. Upon notification by the department, the right holder shall conduct a pump test and/or shall participate in a monitoring plan subject to department approval prior to being implemented. This may be done by the right holder or in conjunction with another party.
8. After notification by the department, the right holder shall annually submit a measurement report to the department. The report shall include the rate, volume and water level data for any irrigation well authorized by this right and all data from any observation well that could be required in a pump test and/or monitoring plan.
9. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
10. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.0 afa per acre at the field headgate for irrigation of the place of use.
11. The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.
12. Violation of any condition of this right is cause for the Director to cancel or revoke the approval.
13. This right does not grant any right-of-way or easement across the land of another.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 29th day of May, 20 13.



JOHN WESTRA

Western Regional Manager



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

May 29, 2013

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

STEVEN E RYALS
2429 LAPPIN LN
COUNCIL ID 83612

RE: Permit No.67-15088

Permit Approval Notice

Dear Permit Holder:

The Department of Water Resources has issued the enclosed permit authorizing you to establish a new water right. Please be sure to thoroughly review the conditions of approval and remarks listed on your permit.

The permit is a PRELIMINARY ORDER issued by the Department pursuant to Section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless a party petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

As a permit owner you must commence the excavation or construction of the diverting works within one year of the date the permit was issued, and you must proceed diligently until the project is completed. The date shown under condition no. 1 is the date when the project must be completed.

The Department will send you a 'Proof Due Notice' approximately 60 days prior to the above referenced date requesting you to file either a Proof of Beneficial Use form or a Request for Extension of Time form.

The right to drill a well is not a part of this permit to appropriate water. Beginning in July of 1987, a statute was enacted which requires a drilling permit for new well construction and deepening of existing wells. If the well(s) proposed for use under this water right permit were drilled or deepened after July 1, 1987, a separate drilling permit must be obtained from this Department. Please contact the Ground Water Protection Section located here at this office or our regional office nearest you.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

If you have any questions, please contact me at (208)334-2190.

Sincerely,



Rachel Sommer
for.

John Westra
Western Regional Manager

Enclosures

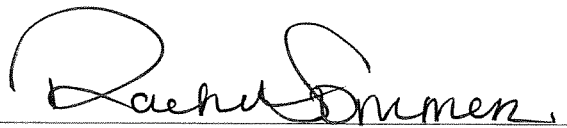
CERTIFICATE OF SERVICE

I hereby certify that on May 29, 2013 I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER(Approved Permit) to the person listed below:

RE: WATER RIGHT NO.

67-15088

**STEVEN E RYALS
2429 LAPPIN LN
COUNCIL ID 83612**

A handwritten signature in black ink, reading "Rachel Sommer", is written over a horizontal line.

**Rachel Sommer
Administrative Assistant I**

EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER

(To be used in connection with actions when a hearing was not held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "Preliminary Order" issued by the department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after: (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) The petition for reconsideration is disposed of; or
- (b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

MEMORANDUM

TO: File

FROM: Steve Lester 

DATE: May 16, 2013

RE: Application 67-15088, Ryals

This application replaces prior application 67-14912 also for Ryals. The older application was voided in 2009 for failure to provide information IDWR requested. The site is just east of Heck permit 67-14750 that included numerous concerned neighbors (although no protests). This area has little ground water development of any significance. Information about the aquifer is limited.

Ryals asked for this new application to be expedited. It could be expedited if the owner provided good reasons for this action – see IDWR 3/14/2013 letter. The applicant replied in a 3/18/2013 letter. He also called to note that Heck did not respond to Ryals request for comments. This latter requirement of the 3/14 IDWR letter was therefore waived. Expedited processing followed the letters and telephone conversations.

Regarding local public interest, comment letters were sent to surrounding well owners (mostly domestic) involved in the Heck permit process plus other well owners fairly close to Ryals but more removed from Heck. Nobody commented or protested.

The 4/29/2013 SPF report provides reasonably good although not conclusive information about water availability and injury, the two key issues identified by IDWR for this situation. The report estimates about 240 afa consumptive use if the application is fully developed.

Ryals' application proposes about half the amount of water approved for Heck. The lack of any response to legal notices and comment letters plus the SPF report support approving this application subject to reasonable conditions of approval.

Proposed Conditions of Approval

5 years to file proof.

Standard conditions:

26A (start 1 year), 046 (new well), R64 (rate/volume per acre), 121 ("fish flows").

Other conditions similar to the Heck approval follow:

* Any well used as a point of diversion for this right shall be cased with impermeable casing into or through the first confining layer below ground surface to prevent diversion of water having a direct hydraulic connection to surface water sources within the Weiser River Basin.

* Any well used as a point of diversion for this right shall include a measuring tube or other suitable method to allow measurement of water levels. The right holder shall measure water levels for any well used as a point of diversion for this right monthly for any calendar year during the first five irrigation seasons in which water is diverted in connection with this right and shall make the records available to the department upon request. One measurement shall be in April for each year this right is being used.

* The right holder shall install a measuring device acceptable to the department on any point of diversion authorized under this right. The measuring device shall be capable of displaying instantaneous diversion rates and totalized volume measurements. The right holder shall record rate and volume measurements monthly for any calendar year during the first five irrigation seasons in which water is diverted in connection with this right and shall make the records available to the department upon request. One measurement shall be in April for each year this right is being used.

* Upon notification by the department, the right holder shall conduct a pump test and/or shall participate in a monitoring plan subject to department approval prior to being implemented. This may be done by the right holder or in conjunction with another party.

* (01M, modified) After notification by the department, the right holder shall annually submit a measurement report to the department. The report shall include the rate, volume and water level data for any irrigation well authorized by this right and all data from any observation well that could be required in a pump test and/or monitoring plan.

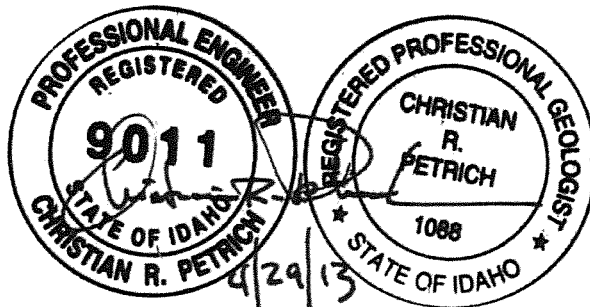
* Violation of any condition of this right is cause for the Director to cancel or revoke the approval.



SPF WATER
ENGINEERING

MEMORANDUM

DATE: April 29, 2013
TO: Steve Lester,
Idaho Department of Water Resources
FROM: Christian R. Petrich, Ph.D., P.E., P.G.
CC: Steve Ryals
RE: *Application for Permit 67-15088*



A. Introduction

This memorandum responds to your March 22, 2013 request for additional information regarding Application for Permit 67-15088. Specifically, you requested information about the following:

1. The adequacy of groundwater supply for the combination of the proposed application and potential withdrawals authorized for Heck under Permit 67-14750;
2. Potential impacts to other well owners (Hagedorn, Classen, Neckels, Compton, McClay, Davis, Ellison, Schnell, and Wolfe) shown on a map included with your information request.

This memorandum provides the following:

1. Description of Application for Permit 67-15088;
2. Map showing proposed Points of Diversion (PODs) and Place of Use (POU) for Application 67-15088. Also shown on this map are PODs and POUs listed under Permit 67-14750 (Heck) and PODs, POUs, and/or property locations for water rights/wells owned by Hagedorn, Classen, Neckels, Compton, McClay, Davis, Ellison, Schnell, and Wolfe;
3. Brief description of hydrogeologic conditions in the vicinity of Application 67-15088 based on drillers' reports and other available information;
4. Assessment of local groundwater supply; and
5. Evaluation of potential impacts from pumping under Application 67-15088 on water levels in nearby wells.

RECEIVED

APR 30 2013

WATER RESOURCES
WESTERN REGION

B. Description of Application for Permit 67-15088

Application for Permit 67-15088, filed under the name of Steven E. Ryals on January 22, 2013, requests authorization to divert 2.0 cfs for the irrigation of 140 acres¹ in the NENW, NWNE, SWNE, and SENW of Section 8 in Township 12N Range 2W of Washington County (Figure 1). Groundwater will be diverted from a well in the NENW of Section 8 and used to serve a center-pivot irrigation system.

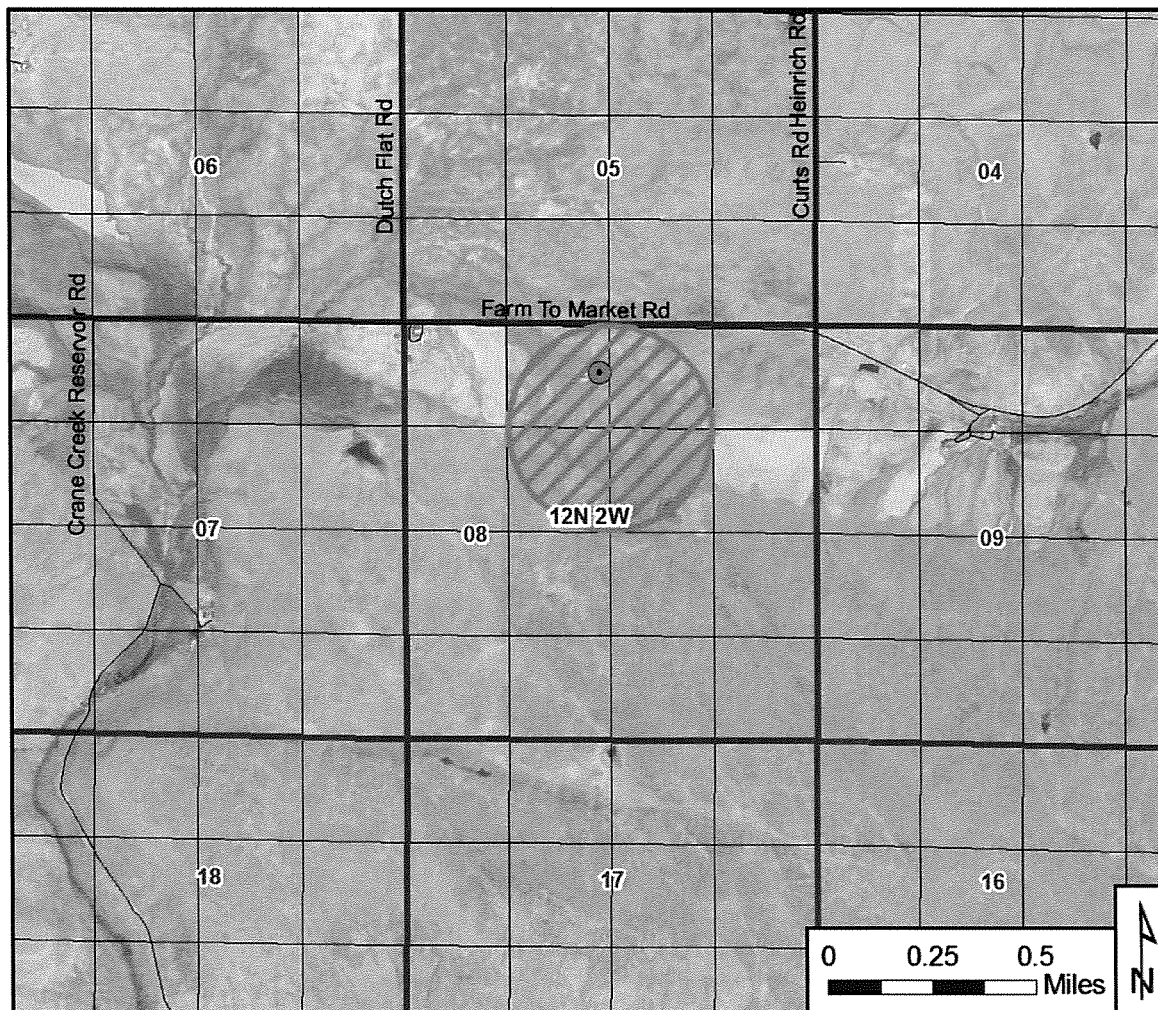


Figure 1. Application for Permit 67-15088.

¹ My understanding from the Applicant is that the actual irrigated area will be 120 acres; all relevant calculations in this memorandum reflect this number.

Assuming an average annual consumptive use of 2.0 feet/acre per year², the average annual consumptive volume under Application 67-15088 (if approved) would be approximately 240 acre-feet. The equivalent uniform flow rate to supply a volume of 240 acre-feet over an irrigation season of 231 days (March 15 through October 31) would be approximately 0.52 cfs (235 gpm).

C. Water Rights in Vicinity of Application 67-15088

Your letter of March 22, 2013 requests information about potential impacts on water rights held by property owners shown on page 3 of your letter. Water rights in the vicinity of Application 67-15088 (including those highlighted in your letter) are shown in Figure 2. POU locations are based on information listed in the IDWR online water rights database. Not all of the properties (e.g., Hagedorn, Classen, Neckels, and Compton) shown in Figure 3 of your March 22, 2013 have active or recorded water rights. The locations of properties with apparent exempt (e.g., domestic) uses were based on Washington County tax-lot data. POD locations in Figure 2 are based on (1) IDWR water-right database information or (2) residence locations for apparent domestic wells.

D. Hydrogeology

Geology in the vicinity of the Application 67-15088 (Figure 3, page 5) has been mapped (Bond and Wood, 1978; Mitchell and Bennett, 1979) as Miocene-age Columbia River basalts and Tertiary sedimentary rocks (late-Miocene stream and lake deposits), with more recent Quaternary alluvium in low-lying areas. The basalt underlies this entire region; Tertiary sediments in the Dutch Flat area are likely underlain by the same Miocene basalt present at or near ground surface in the surrounding areas.

Regionally, the Columbia River basalts contain aquifers present in saturated fractures, joints, breccia zones of individual lava flows, and sand and gravel layers interbedded with basalt flows (Young et al., 1977). The hydraulic conductivity of the basalt is highly variable, although some locations may yield in excess of 1,000 gpm to properly-completed wells. Productive zones in Tertiary sediments are generally limited to layers containing saturated sand (or occasional gravel).

Regional groundwater-level contours indicate flow in a westerly direction toward the Weiser River (Figure 4, page 6). Local mounding is indicated in the Dutch Flat area (shown by the 3,300-foot contour in Figure 4). Groundwater flow in the immediate vicinity of the Application 67-15088 POU appears to be in a southeasterly direction toward Crane Creek Reservoir.

² Assumptions: 50% grain and 50% alfalfa crop mix; ET Idaho (<http://www.kimberly.uidaho.edu>) precipitation deficit estimates based on Council, Idaho (elevation: 3150 feet) weather data.

Recharge to local aquifers within the Tertiary-age sediments likely consists of primarily of infiltration from precipitation and/or seasonal seepage from local streams (e.g., Camp Creek). Recharge to regional aquifers within the Columbia River basalts occurs over a much broader area, and likely includes infiltration of precipitation that falls on the western flank of the West Mountains. Aquifer discharge is to local streams, Crane Creek Reservoir, and (on a regional basis) to the Weiser River.

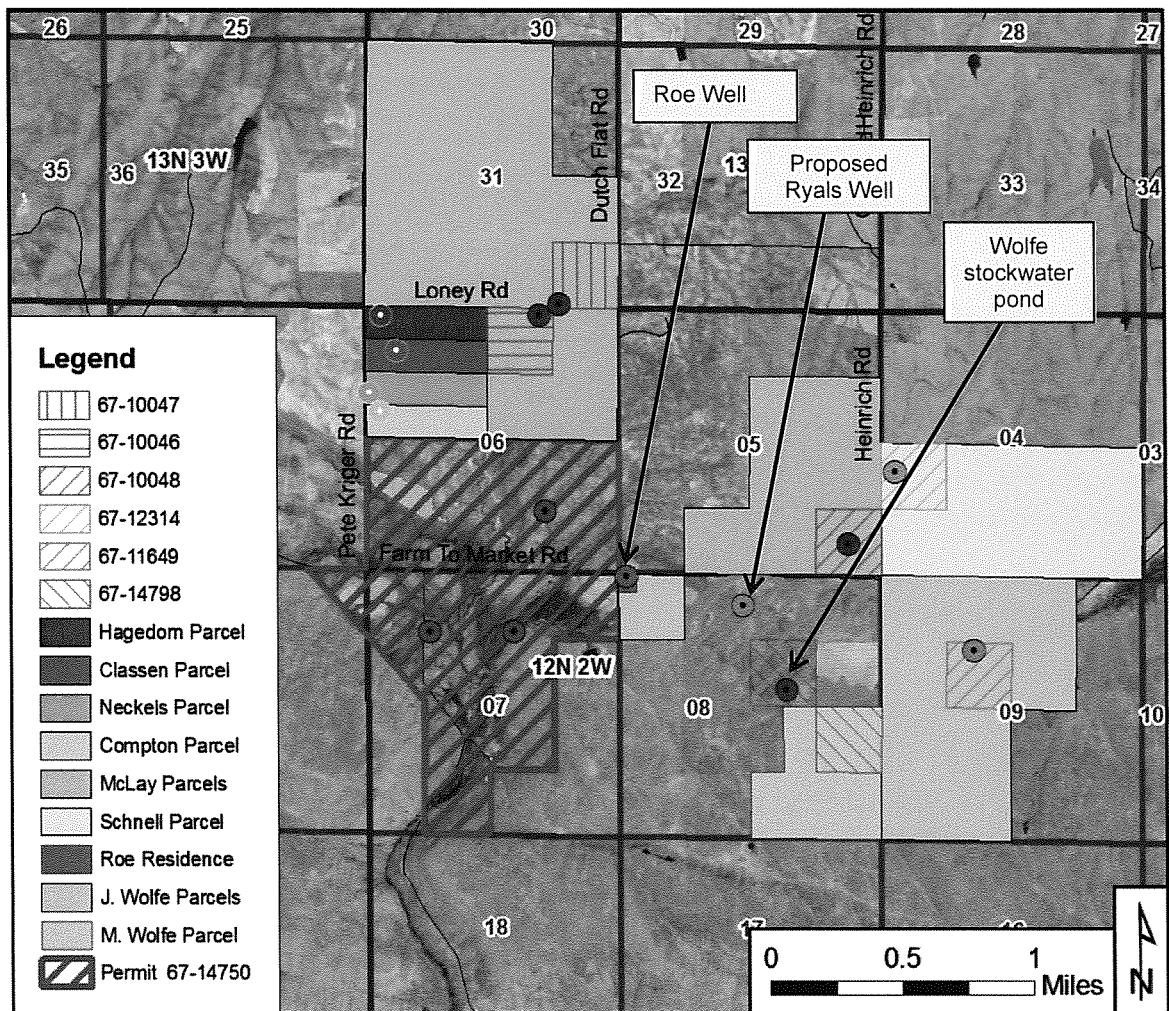
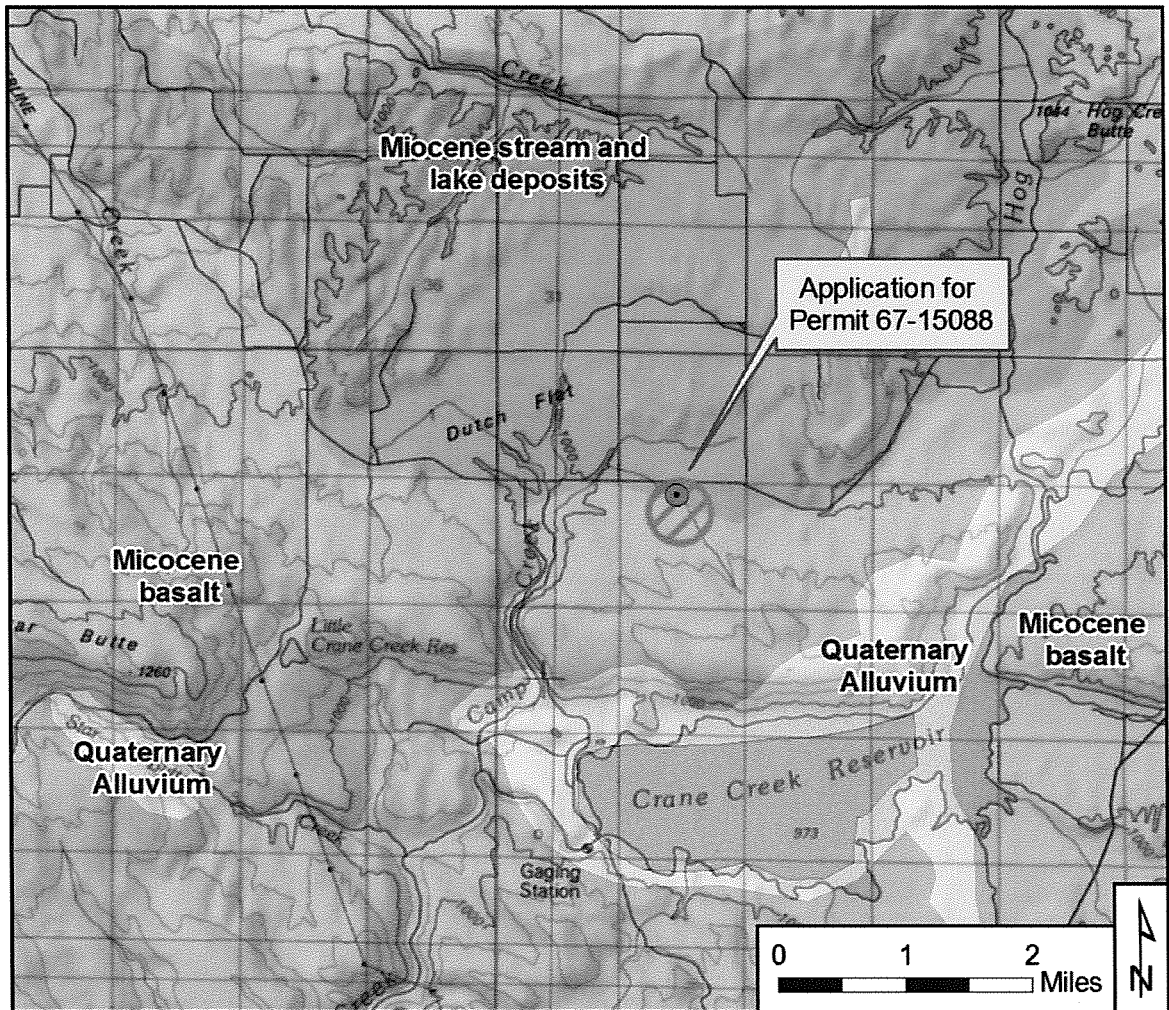


Figure 2. Water rights in the vicinity of Application 67-15088.



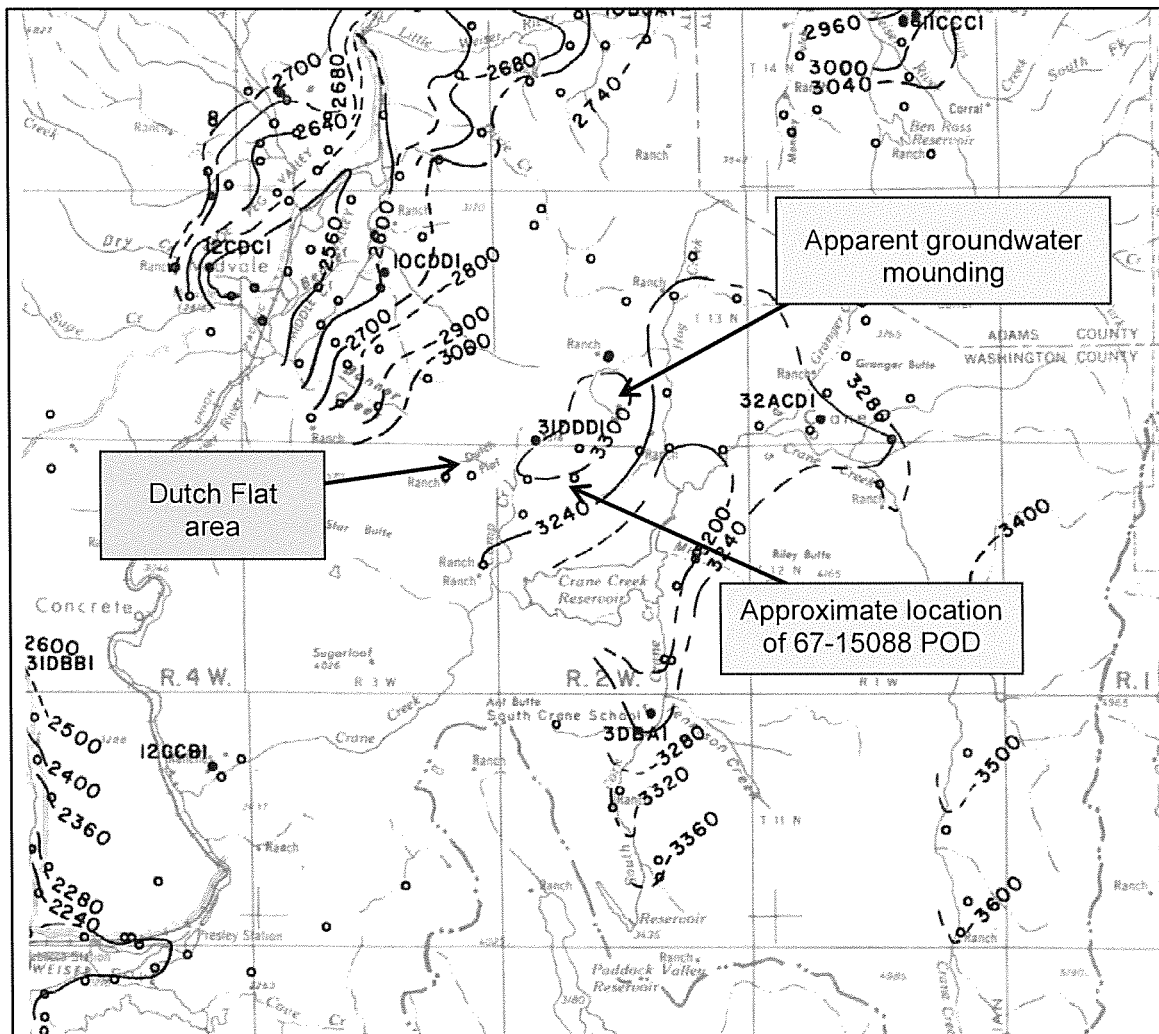
Source: Bond and Wood (1978).

Figure 3. Surficial geology.

The IDWR online well construction database listed 13 drillers' reports³ for wells in and around Section 8 of Township 12N and Range 2W (Attachments A and B). Well depths

³ Drillers' reports for wells in the IDWR database are catalogued based on locations provided by the driller. Some wells may have been omitted from this search because of incorrectly listed well locations, and some wells listed in this search area may be incorrectly located. Furthermore, existing wells for which drillers' reports were not submitted to IDWR are not identified in the IDWR well construction database.

range from 58 to 260 feet below ground surface. The reported initial static water levels range from 16 to 75 feet below ground surface. Estimated production rates range from 5 to 1,000 gpm.⁴



Source: Adapted from Figure 6 in Young et al. (1977).

Figure 4. Groundwater levels.

⁴ Production rates reflect both local aquifer conditions and well design (i.e., most of the wells in this area are designed and constructed as relatively low-production domestic wells).

Drillers' reports from these wells indicate interbedded layers of sand, silt, brown clay, and blue clay. Saturated sand layers are listed as water-producing zones. The Parker Well (located approximately 1 mile northwest of the proposed Ryals Well – see Figure 2) driller's report suggests a highly productive zone in "broken lava" (basalt) at the base of Tertiary sediments (at a depth of approximately 180-190 feet below ground surface).

E. Adequacy of Water Supply

Your letter of March 22, 2013 requested information regarding the adequacy of groundwater supply for proposed application (67-15088) and Permit 67-14750. Permit 67-14750, listed under the name of Dennis L. and/or Chris Heck, authorizes the diversion of 4.0 cfs under a May 18, 2006 priority date for the irrigation of 200 acres in Sections 6, 7, and 12 in Township 12N and Range 2W (Figure 2). File notes⁵ indicate that the Heck application resurrected a portion of previous lapsed Parker Permits 67-8053, 67-8055, and 67-8056.

Groundwater level data collected in 2001, 2002, and 2003 were presented by Hannula (2007) in support of Permit 67-14750 (Heck). Local groundwater levels during this time were relatively stable, suggesting groundwater available for appropriation.

A well test in the area (Parker Well) suggests good seasonal aquifer capacity. A consulting report prepared in support of the Heck application (Hannula, 2007) summarized an aquifer test that was conducted in 2002 in the Parker Well (located in the NWSE of Section 6 – see Figure 2). The well was pumped for 27 days at a rate of approximately 1,100 gpm. Water levels reportedly stabilized near 46 feet below ground surface (representing a drawdown of 32 feet below the initial static water level). After 13 days of recovery, water levels reportedly returned to within 86% of the initial static water level. Hannula noted (based on Driscoll, 1986) that complete recovery generally requires a considerably longer time than the previous pumping period.

Groundwater mounding in the vicinity of the Dutch Flat area suggests that most of the recharge in this area occurs as a result of precipitation infiltration. Thus, the long-term sustainable water supply in local Tertiary sediments depends, in part, on the actual amount of precipitation in this area that becomes aquifer recharge. Assuming that the area represented by groundwater mounding in the Dutch Flat area (shown in Figure 4) is approximately 10 square miles (2.5 miles wide and 4 miles long), the area receives between 18 and 20 inches of annual precipitation (Young et al., 1977), and that approximately 5% of this annual precipitation becomes recharge to Tertiary sediments in

⁵ Memorandum to File 67-14750 from Steve Lester dated July 15, 2008 regarding conditions of approval for the Heck Application (in back file for Permit 67-14750).

this area, the annual recharge would be approximately 500 acre-feet (AF). This amount would be greater if the recharge area is larger than 10 square miles, the recharge rate is greater than 5%, and/or if additional groundwater enters the area as underflow.

Combined demand for 120 acres of irrigation under Application 67-15088 (Ryals) and 200 acres of irrigation under Permit 67-14750 (Heck) for an alfalfa/grain crop mix having a consumptive use of approximately 2 acre-feet per acre⁶ would require approximately 640 acre-feet per year (AFA). This is somewhat greater than the average recharge volume projected above, but given the uncertainty of the recharge estimate, falls within the range of possible sustainable supply. The sustainable water supply available for Application 67-15088 would be greater if recharge is greater than estimated (see above), crops with lesser water requirements are grown, and/or Permit 67-14750 is not fully developed⁷.

Regionally, productive wells have been developed within the Columbia River basalts (i.e., below overlying Tertiary sediments). There is no indication that any wells in or near the Dutch Flat area extend into basalt. However, wells drawing water from lower basalt aquifers might tap water originating from outside of the "mound" area described above. A deeper well completed in basalt, and isolated from overlying sediments with sealed casing, also could present less risk of well interference.

Ultimately the only way to fully assess the local sustainable water supply is to pump groundwater and monitor responses in groundwater levels. Permit 67-14750 (Heck), granted on July 21, 2008, lists several conditions related to monitoring requirements. Such groundwater-level measurements would be useful in assessing local sustainable groundwater supply. However, such data are currently unavailable. It is my understanding that no monitoring data have been received by IDWR, and that no new irrigation under this permit has been observed by IDWR staff.⁸

F. Potential Impacts under Application 67-15088

The proposed POD under Application 67-15088 is approximately a mile further distant from previous protestants Hagedorn, Classen, Nichols, Compton, and McClay (Figure 2). As such, any impacts from the proposed Ryals well on wells owned by the previous protestants will be substantially less than projected for the Heck wells. The impact will also be less because of substantially lower withdrawals under the Ryals application (67-15088) compared to the Heck permit.

⁶ See Footnote 2, page 3.

⁷ Permit 67-14750 (Heck) was granted on July 21, 2008

⁸ Telephone communication with Steve Lester, April 2, 2013.

The closest well to the proposed POD in Application 67-15088 is the Brian Roe well, which is located approximately 0.45 miles west of the proposed POD. The Roe Well is 103 feet deep and draws water from sand layers interbedded with blue-green clay at depths between 61 and 103 feet.

A Theis (1935) analysis was performed to evaluate the potential groundwater-level impacts in the immediate vicinity of the proposed Ryals well under Application 67-15088. Assumptions inherent to the Theis solution are that the aquifer is homogeneous and isotropic, uniform in thickness and areal extent, the aquifer receives no recharge, the pumping well penetrates the full aquifer thickness, water removed by discharge is removed instantaneously, the pumping well is 100 percent efficient, laminar flow exists throughout the aquifer, and that the water table or potentiometric surface has no slope. These assumptions are rarely completely satisfied under field conditions, but this method is commonly used for evaluating aquifer impact under conditions such as those found in the vicinity of the Ryals property.

The amount of drawdown created by pumping a well depends on discharge rate, aquifer transmissivity, aquifer storativity, and duration of pumping. In this case, aquifer parameters (transmissivity of 67,700 gpd/ft and storativity of 0.005) were assumed to be the same as those used in a similar analysis by Hannula (2007), and which were based on the results of a 27-day aquifer test. Also assumed was a pumping rate to produce a consumptively-used volume of 240 acre-feet (0.52 cfs or 235 gpm) over a 231-day irrigation season.

The results of this analysis are shown in Figure 5. Assuming that hydrogeologic conditions in the proposed location of the Ryals well are similar to those in the vicinity of the Parker well (authorized under the Heck permit), the Theis solution projects drawdown after a full season of pumping from the Ryals well as being 2 feet at approximately 0.45 miles from the proposed Ryals well (i.e., the approximate distance of the Roe domestic well). Similarly, the Theis solution projects drawdown as a result of pumping under Application 67-15088 as being less than 1.5 feet at a distance of 1 mile after a full season of irrigation pumping. These are likely conservative estimates, in that the Theis analysis neglects the effects of any recharge or underflow into the affected area (which clearly occur).

Drillers' reports suggest the presence of multiple clay layers separating shallow domestic wells from the likely pumping zone at the base of Tertiary sediments. These clay layers would help protect shallow domestic wells from impacts associated with pumping under Application 67-15088.

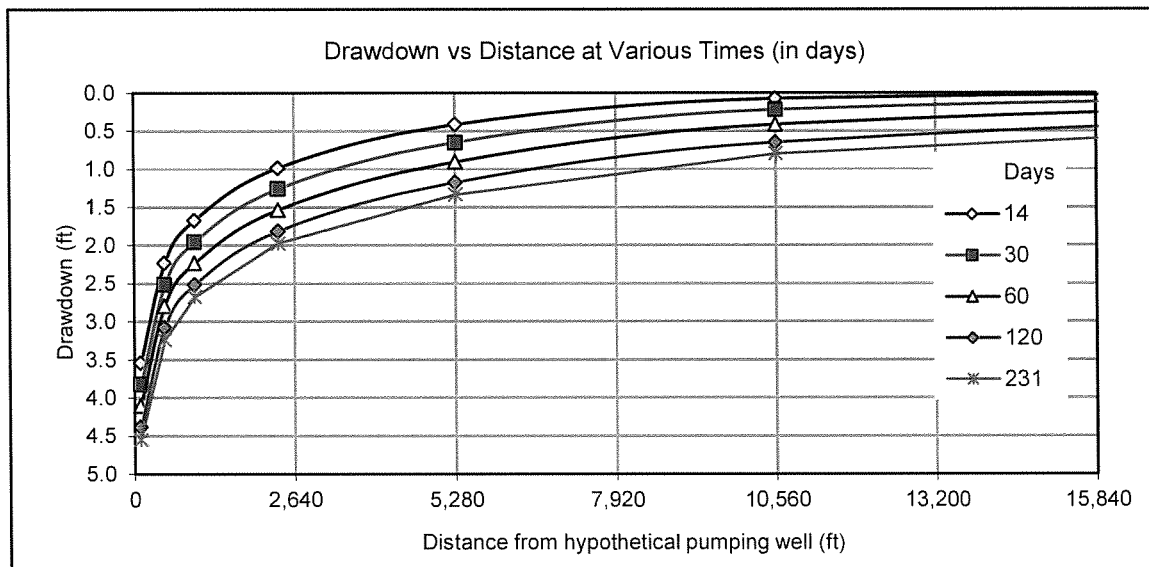


Figure 5. Theis-analysis results.

G. Summary

Insufficient data are available to accurately project the long-term sustainable water supply available for Application for Permit 67-15088. However, it appears that local sustainable supply may be sufficient for combined withdrawals under Application 67-15088 and Permit 67-14750. Ultimately, the long-term sustainable water supply will be determined by (1) pumping under Permit 67-14750 and Application 67-15088 and (2) monitoring of groundwater levels in response to this pumping.

Local well interference drawdown as a result of pumping under Application 67-15088 is conservatively projected to be approximately 2 feet at a distance of 0.5 miles and less than 1.5 feet at a distance of 1 mile. These impacts would be in addition to any of those created by pumping under Permit 67-14750.

The closest well to the proposed POD in Application 67-15088 is the Brian Roe well, which is located approximately 0.45 miles west of the proposed POD. The Roe Well is 103 feet deep and draws water from sand layers interbedded with blue-green clay at depths between 61 and 103 feet. The Theis analysis suggests that short-term (i.e., seasonal) impact from pumping under Application 67-15088 would be approximately 2 feet at this distance. However, clay layers separating the bottom of the Roe Well (and other more distant domestic wells) and the pumping zone under Application 67-15088 will likely serve to minimize the impact associated with pumping under the proposed application.

H. References

- Bond, J.G., Wood, C.H., 1978. Geologic map of Idaho. Idaho Department of Lands, Bureau of Mines and Geology, 1:500,000 scale.
- Driscoll, F.G., 1986. Groundwater and Wells. Johnson Division, St. Paul, MN.
- Hannula, S., 2007. Response to IDWR's Request for Additional Information Regarding Application for Permit 67-14750 (Dennis Heck), Consulting report prepared by ERO Resources Corporation on behalf of Dennis Heck, dated November 6, 2007.
- Mitchell, V.E., Bennett, E.H., 1979. Geologic map of the Boise Quadrangle, Idaho, Geologic Map Series (2 degree Quadrangle). Idaho Bureau of Mines and Geology.
- Theis, C.V., 1935. The relation between the lowering of the piezometric surface and the rate and duration of a well using ground-water storage. Transactions, American Geophysical Union, 16: 519-524.
- Young, H.W., Harenberg, W.A., Seitz, H.R., 1977. Water Resources of the Weiser River Basin, West-Central Idaho, Idaho Department of Water Resources Water Information Bulletin No. 44, prepared by the US Geological Survey in cooperation with IDWR.

Attachment A: Summary of Drillers' Reports

Contact	Use	TW P	RNG	SEC	Tract	Gov Lot	Well Address	Q (gpm)	Static Water Level (ft)	Total Depth (ft)	Casing Depth (ft)	CSG DIA (in)	Constr. Date	Permit Number	Tag Number
BAILEY, H W	Domestic	12N	02 W	8	NENW			30	18	63			5/8/1969	775636	
ROE, BRIAN	Domestic- Single Residence	12N	02 W	8	NWN W		3115 FARM TO MARKET RD	100	17	103	59	6	6/29/1995	739276	
ELLISON, KARAN, ELLISON, PHIL	Domestic- Single Residence	12N	02 W	5	NENE		1791 HEINRICH	40	75	260	254	6	7/1/2005	834299	D0039364
DAVIS, KEVIN	Domestic- Single Residence	12N	02 W	5	NWN W		1 MILE OFF DUTCH FLAT RD 200 YD EAST	50	70	232	221	6	7/19/2004	820106	D0031792
SONEY, ALTA	Domestic	12N	02 W	5	SESE			n/a	72	165			5/7/1969	775634	
SONEY, ALTA	Stock- water	12N	02 W	5	SESE			20	22	62			9/18/1966	800333	
WAY CONSTRUC TION	Domestic- Single Residence	12N	02 W	6		3	PETER KLIEGER RD	20	29	85	18	6	10/13/1998	739630	D0005495
WAY CONSTRUC TION	Domestic- Single Residence	12N	02 W	6	NWNE	3	PETE KLIEGER RD	10	30	100	74	6	10/9/1998	739629	D0005185
HEUKE, FRED	Domestic- Single Residence	12N	02 W	6	NENW			25	34	152	145	6	8/11/1999	739739	D0009990
COMPTON, ROBERT	Domestic- Single Residence	12N	02 W	6	SENW			8	30	96	47	6	7/16/1999	739724	D0009889
WAY CONSTRUC TION	Domestic- Single Residence	12N	02 W	6	SENW		6 MILES SW OF MIDVALE	12	30	110	93	6	10/13/1998	739765	D0010596
WAY, JEFFREY R	Domestic- Single Residence	12N	02 W	6	SENW		1730 PETE KRIGOR RD	5	30	58	40	6	7/8/1998	739557	D0000556
WAY, JEFFREY R	Domestic- Single Residence	12N	02 W	6	SENW		1742 PETE KRIGER RD	10	30	60	40	6	7/2/1998	739556	D0000541

Summary of Drillers' Reports (continued)

Contact	Use	TW P	RNG	SEC	Tract	Gov Lot	Well Address	Q (gpm)	Static Water Level (ft)	Total Depth (ft)	Casing Depth (ft)	CSG DIA (in)	Constr. Date	Permit Number	Tag Number
PARKER, RAY	Exploratio n	12N	02 W	6	SWSES W			n/a	n/a	n/a				739741	
PARKER, RAY	Exploratio n	12N	02 W	6	SWSES W			n/a	n/a	n/a				739742	
PARKER, RAY	Domestic- Single Residence	12N	02 W	6	SWSES W			n/a	n/a	n/a				739743	
PARKER, RAY	Domestic- Single Residence	12N	02 W	6	SWSES W			n/a	n/a	n/a				739744	
PARKER, RAY	Irrigation	12N	02 W	6	NWSE		NE of Farm to Market and Crane Creek Road	1000	16	190	181	10	11/19/2001	772449	D0020305

Attachment B: Drillers' Reports

FORWARD WHITE COPY TO WATER RESOURCES

869744-772449

Form 236-7
11/97 JGE

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

1. WELL TAG NO. D 0020305

DRILLING PERMIT NO. _____

Other IDWR No. 67-08055

2. OWNER:

Name Ray Parker

Address 1634 Crane Cr. Res. Rd

City Midvale State ID Zip 83645

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N		Twp. 12		North ☒	or	South ☐
W		Rge. 2		East ☐	or	West ☒
E		Sec. 6		1/4 NW 1/4 SE 1/4		
S		Gov'l Lot		County Washington		
		Lat:		Long:		

Address of Well Site NE of Farm to Market
and Crane Cr. Rd. City Midvale

(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK: check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES:

Seal/Filter Pack			AMOUNT		METHOD
Material	From	To	Feet or Pounds		
Benotnite	0	25	22		overbore

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
10	+2	181	250	steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS:

☐ Perforations Method _____
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

16 ft. below ground Artesian pressure _____ lb.
 Depth flow encountered 185 ft. Describe access port or control devices: cap

Office Use Only

Inspected by _____

Twp _____ Rge _____ Sec _____

1/4 1/4 1/4

Lat: _____ Long: _____

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
1000+	120	120	2 hr
700-800	80	80	2 hr

Water Temp. 56 Bottom hole temp. 58

Water Quality test or comments: _____

Depth first Water Encounter 35

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water
15	0	2	TOP SOIL	
15	2	25	BROWN SANDY CLAY	
14	25	28	GRAVEL & SAND	
14	28	35	BROWN CLAY	
14	35	36	GRAVEL	X
14	36	46	BROWN CLAY	
14	46	60	BLUE CLAY	
14	60	70	SAND & BL. CLAY LAYERS	X
14	70	115	BLUE CLAY	
14	115	130	SAND & BL. CLAY LAYERS	X
14	130	143	CLAY	
14	143	165	SAND & CLAY LAYERS	X
14	165	170	STICKY BLUE CLAY	
14	170	175	BROKEN BLUE CLAY (150 GPM)	X
14	175	180	STICKY BLUE CLAY	
14	180	190	BROKEN LAVA (800-1000 GPM)	X
14	190		CAVING BIG ROCKS (1500GPM EST.)	X

RECEIVED

DEC 03 2001

WATER RESOURCES
SECTION

Completed Depth 190

(Measurable)

Date: Started 11/12/2001

Completed 11/19/2001

13. DRILLER'S CERTIFICATION:

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

Company Name Treasure Valley Drilling

Firm No. 560

Firm Official

Date 11/30/2001

and

Driller or Operator

Date 11/30/2001

(Sign once if Firm Official & Operator)

OCT-26-01 FRI 09:51 AM

P. 02

Form 235-1
12/16/96 (LDT)

Drilling Permit No. _____

Drilling Permit / D. Tag No. 00020305Water Right Permit No. 67-08055

Injection Permit No. _____

State of Idaho
Department of Water ResourcesAPPLICATION FOR DRILLING PERMIT
(FOR THE CONSTRUCTION OF A WELL)RECEIVED
2057388
OCT 29 2001

1. Owner (please print): Ray or Liz Parker
2. Mailing Address: 1634 Crane Creek Res. Rd.
City: Idaho Falls State: ID Zip Code: 83400 Telephone: 208-355-3208
3. Proposed Well Location: Twp. 12 N Rge. 02 W Sec. 6 NE 1/4 S.E. 1/4
Govt Lot No. _____ County: Washington Lat. _____ Long. _____
Street Address of Well Site: NE of Farm to Market and Crane Creek Road City: _____
Lot, block and subdivision: _____

4. Proposed Use of Well:

- ☐ DOMESTIC: The use of water for homes, organization camps, public campgrounds, livestock (1,000 head or less) and for any other purpose in connection therewith, including irrigation of up to 1/2 acre of land, if the total use is not in excess of 13,000 gpd; or any other uses, if the total use does not exceed a diversion rate of 0.04 cfs and a diversion volume of 2500 gpd.

Domestic does not include water for multiple ownership subdivisions, mobile home parks, commercial or business establishments, unless the use does not exceed a diversion rate of 0.04 cfs and a diversion volume of 2500 gpd.

- NON-DOMESTIC: ☒ Irrigation ☐ Municipal ☐ Industrial
☐ Stock ☐ Test ☐ Other _____
(Over 1,000 Head) (Describe)

☐ INJECTION

- ☐ MONITORING: A well bore schematic and map is required for each blanket permit.
No. of proposed wells: _____

5. Well Construction Information:

- A. ☒ New well ☐ Modify ☐ Replace
- B. Proposed Casing Diameter: 12 3/4 Proposed Maximum Depth: 200'
- C. Anticipated bottom hole temperature:
☒ 85°F or less ☐ 85°F to 212°F ☐ 212°F or more
(Cold Water Well) (Low Temp. Geo. Well) (Geothermal Well)

6. Construction Start Date: 11-4-017. Anticipated Well Driller: Treasure Valley Drilling Driller's Lic. No. 560
NOTE: The actual well driller must be identified prior to drilling.8. Applicant's Signature: Raymond J Parker Date: 10-29-01

Address (if different than owner): _____

City: _____ State: _____ Zip Code: _____ Telephone: _____

Title: Owner
(Owner, Firm Representative, Other)

OCT 26-01 FRI 09:52 AM

P. 03

ACTION OF THE DEPARTMENT OF WATER RESOURCES

This Permit is Approved Date 10/22/01

If approved, this permit authorizes the construction or modification of a well subject to the following conditions. READ CAREFULLY:

GENERAL CONDITIONS:

1. This drilling permit is valid for two (2) months from the above approval date for the start of construction and is valid for one (1) year from the approval date for completion of the well unless an extension has been granted.
2. This permit does not constitute an approval of the District Health Department or the Idaho Department of Health and Welfare which may be required before construction of this well. All wells must be drilled a minimum distance of 100 feet from a drain field. Domestic and Public Water Supply wells must be drilled a minimum of 50 feet and 100 feet respectively from a septic tank.
3. The well shall be constructed by a driller currently licensed in the State of Idaho who must maintain a copy of the drilling permit at the drilling site.
4. Approval of this drilling permit does not authorize trespass on the land of another party.
5. This permit does not constitute other local, county, state or federal approvals which may be required for construction of a well.
6. This drilling permit does not represent a right to divert and use the water of the State of Idaho.
7. If a bottom hole temperature of 85° or greater is encountered, well construction shall cease and the well driller and the well owner shall contact the Department immediately.
8. Idaho Code, S 55-2201 - 55-2210 requires the applicant and/or his contractors to contact "DigLine" (DigLine is a one-call center for utility notification) not less than 2 working days prior to the start of any excavation for this project. The "DigLine" Number for your area is 1-800-342-1585.

SPECIFIC CONDITIONS:

9. Well requires water measurement devices and access to static water level for periodic measurement. Refer to all conditions of approval of WR # 67-08055.

Harold S. Smith
Signature of Approval

Sec. Manager
Title

RECEIVED

REPORT OF WELL DRILLER State of Idaho

MAY 26 1939

State law requires that this report shall be filed with the Department of Reclamation Engineer within 30 days after completion or abandonment of the well.

WELL OWNER:

Name H.W. Bailey
Address Midvale Idaho

Owner's Permit No. _____

NATURE OF WORK (check): Replacement well ☐
New well ☒ Deepened ☐ Abandoned ☐

Water is to be used for: _____

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒
Dug ☐ Other _____

(explain)

CASING SCHEDULE: Threaded ☐ Welded ☒
6 "Diam. from 0 ft. to 35 ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.

Thickness of casing: 1/4 Material: _____

Steel ☒ concrete ☐ wood ☐ other ☐

(explain)

PERFORATED? Yes ☐ No ☒ Type of perforator used: _____

Size of perforations: _____ " by _____ "
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

WAS SCREEN INSTALLED? Yes ☐ No ☒

Manufacturer's name _____

Type _____ Model No. _____

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

CONSTRUCTION: Well gravel packed? Yes ☐

No. ☒ size of gravel _____ Gravel

placed from _____ ft. to _____ ft. Surface seal

provided? Yes ☒ No ☐ To what depth? _____

20 ft. Material used in seal: Benite

Did any strata contain unusable water? Yes ☐

No. ☒ Type of water: _____

Depth of strata _____ ft. Method of sealing

strata off: _____

Surface casing used? Yes ☐ No. ☒

Cemented in place? Yes ☐ No ☐

Locate well in section

Size of drilled hole: 6" Total
depth of well: 63 Standing water
level below ground: 18' Temp. _____
Fahr. 59 ° Test delivery: 30 gpm
or _____ cfs Pump? ☐ Bail ☒
Size of pump and motor used to make test: _____

Length of time of test: _____ Hrs. _____ Min.

Drawdown: 9 ft. Artesian pressure: ft. _____

above land surface _____ Give flow _____ cfs

or _____ gpm. Shutoff pressure: _____

Controlled by: Valve ☐ Cap ☐ Plug ☐

No control ☐ Does well leak around casing? _____

Yes ☐ No ☐

DEPTH MATERIAL WATER

FROM TO YES OR NO

FEET FEET

0 5' TOP SOIL _____

5 30 SAND BROWN Yes

30 32 CLAY YELLOW No

32 48 CLAY BLUE SANDY Yes

48 50 CLAY BROWN No

50 61 CLAY BLUE No

61 63 SAND WHITE COARSE Yes

001017

Work started: 5-7-39

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

RECEIVED

AUG 16 2005

WATER RESOURCES
WESTERN REGION

834299

Office Use Only

Well ID No. 404840

Inspected by

Twp Rge Sec

1/4 1/4 1/4

Lat: : : Long: : :

1. WELL TAG NO. D 0039364

DRILLING PERMIT NO.

Water Right or Injection Well No.

2. OWNER

Name Phil & Karen ELLISON

Address P.O. Box 212

City Midvale State UT Zip 83645

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 12 North ☒ or South ☐

Rge. 5 East ☐ or West ☒

Sec. 5 1/4 NE 1/4 NE 1/4

Gov't Lot 10 Acres County Washington

Lat: N 44:24.629 Long: W 116:35.869

Address of Well Site 1791 Heinrich City Wagon Midvale

(Give at least name of road - Distance to Road or Landmark)

Lt. Blk. Sub. Name

4. USE:

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

5. TYPE OF WORK check all that apply

(Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bentonite	0	21	500	pour
Clay & Bent	21	119	2300	pour & slough

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 255

Was drive shoe seal tested? ☒ Y ☐ N How? H2O

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6.6	1	254	25	steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe 31 1/4 PPR Length of Tailpipe 10

Packer ☒ Y ☐ N Type Double 4 K

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method

Screen Type & Method of Installation St St mesh - fine set

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
245.5	250.5	mesh		5"	St. St	☐	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

25 ft. below ground Artesian pressure lb.

Depth flow encountered ft. Describe access port or control devices:

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
40	NA	125	
50	NA	150	
90	NA	225	

Water Temp. 65 Bottom hole temp. 65

Water Quality test or comments:

Depth first Water Encounter 40

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	3	Brown Sandy Clay		☒
11	3	23	Brown Clay		☒
11	23	35	Firm Brn Sandy Clay		☒
10	35	40	Soft Damp Sandy Clay	☒	
10	40	75	Brown Clay & Sand	☒	
10	75	119	Blue Shale & Sand	☒	
7	119	138	Blue Shale & Sand	☒	
7	138	160	Blue Clay Shale		☒
7	160	161	Sand	☒	
7	161	172	Blue Clay Shale		☒
7	172	176	Cemented Fine Sand	☒	
7	176	212	Blue Clay Shale		☒
7	212	212	Sand	☒	
7	212	216	Blue Clay Shale & CS	☒	
7	216	238	Blue Clay Shale		☒
7	238	238	Fine Cem Sand	☒	
7	238	238	Blue Clay Shale		☒
7	238	252	Blue Clay Shale & CS	☒	
7	252	256	Blue Clay Shale		☒
6	254	256	Blue Clay Shale	☒	
6	256	260	Cem Sand - Sand	☒	
6	260	263	Blue Clay Shale	☒	
6	263	263	Fine sand - Cem Sand	☒	
6	263	267	Blue Clay Shale		☒
6	267	267	Sand - Cem Sand	☒	
6	267	303	Cem Sand - Shale Clay	☒	
6	303	304	Sand	☒	
6	304	313	Cem Sand - Shale Clay	☒	
6	313	314	Sand	☒	
6	314	320	Cem Sand - Shale Clay	☒	

Completed Depth 260.5 (Measurable)

Date: Started 6-23-05 Completed 7-1-05

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 Rob Ogerson, Inc Firm No. 589

Principal Driller [Signature] Date 8-14-05

and Driller or Operator II Date

Operator I Date

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 31792
DRILLING PERMIT NO. _____
Water Right or Injection Well No. _____

2. OWNER: KEVIN DAVIS 550-0172
Name _____
Address P.O. Box 213
City MIDVUE State ID Zip 83645

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 12 North ☒ or South ☐
Rge. 2 East ☐ or West ☒
Sec. 5 1/4 NW 1/4 NE 1/4
Gov't Lot _____ County WASHINGTON

Lat: _____ Long: _____
Address of Well Site 1824 DUTCH FLAT Rd
City MIDVUE

(Give at least name of road - Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>BENT</u> <u>CLAY</u>	<u>0</u> <u>68</u>	<u>68</u> <u>167</u>	<u>2050</u> <u>4000</u>	<u>POUR</u> <u>SLUGS</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 221-5
Was drive shoe seal tested? ☒ Y ☐ N How? H2O

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6</u>	<u>11.2</u>	<u>221.5</u>	<u>250</u>	<u>STEEL</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____

Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

70 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

Office Use Only	
Well ID No. <u>820106</u>	
Inspected by _____	
Twp _____ Rge _____ Sec _____	
1/4 _____ 1/4 _____ 1/4 _____	
Lat: _____ Long: _____	

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>50+</u>	<u>N-A</u>	<u>210</u>	<u>2+ hrs</u>

Water Temp. 60 Bottom hole temp. 60

Water Quality test or comments: _____

Depth first Water Encounter 20

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
11	0	10	Brown Sand Clay		☒
11	10	21	Brown Sand Clay		☒
11	21	22	Hard Dry Clay		☒
11	22	40	Brown Green Sand Clay		☒
10.6	40	76	Brown silty clay	☒	☒
10.6	76	88	Blue Sand Clay		☒
7	88	172	Blue Sand Clay	☒	
7	172	173	Sand. PH	☒	
7	173	228	Blue Sand Clay & Sand	☒	
6	222	228	Blue Sand Clay & Sand	☒	
6	228	230	cem sand & sand	☒	
6	230	232	Blue Sand Clay	☒	

RECEIVED

AUG 18 2004

WATER RESOURCES
WESTERN REGION

Completed Depth 232 (Measurable)
Date: Started 7-15-04 Completed 7-19-04

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 Rob Dawson Inc Firm No. 589

Principal Driller [Signature] Date 2-31-04

and Driller or Operator II _____ Date _____

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

REPORT OF WELL DRILLER
State of Idaho

RECEIVED

MAY 26 1939

Department of Reclamation

State law requires that this report shall be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

WELL OWNER:

Name Miss Alta Seng
Address Madison Idaho

Owner's Permit No. _____

NATURE OF WORK (check): Replacement well ☐

New well ☐ Deepened ☒ Abandoned ☐

Water is to be used for: _____

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒

Dug ☐ Other _____

(explain)

CASING SCHEDULE: Threaded ☐ Welded ☒

6 "Diam. from 12 ft. to 14.5 ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

Thickness of casing: _____ Material: _____

Steel ☒ concrete ☐ wood ☐ other ☐

(explain)

PERFORATED? Yes ☐ No ☐ Type of

perforator used: Don't Know

Size of perforations: _____ " by _____ "

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

WAS SCREEN INSTALLED? Yes ☐ No ☒

Manufacturer's name _____

Type _____ Model No. _____

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

CONSTRUCTION: Well gravel packed? Yes ☐

No. ☒ size of gravel _____ Gravel

placed from _____ ft. to _____ ft. Surface seal

provided? Yes ☐ No ☐ To what depth?

_____ ft. Material used in seal: _____

Did any strata contain unusable water? Yes ☐

No. ☒ Type of water: _____

Depth of strata _____ ft. Method of sealing

strata off: _____

Surface casing used? Yes ☐ No ☒

Cemented in place? Yes ☐ No ☐

Locate well in section

Size of drilled hole: 6 Total

depth of well: 145 Standing water

level below ground: 22 Temp. _____

Fahr. 59 ° Test delivery: _____ gpm

or _____ cfs Pump? ☒ Bail ☐

Size of pump and motor used to make test: _____

3/4" SUBMERGIBLE

Length of time of test: 8 Hrs. Min.

Drawdown: 13 ft. Artesian pressure: ft. _____

above land surface _____ Give flow _____ cfs

or _____ gpm. Shutoff pressure: _____

Controlled by: Valve ☐ Cap ☐ Plug ☐

No control ☐ Does well leak around casing?

Yes ☐ No ☐

DEPTH		MATERIAL	WATER YES OR NO
FROM	TO		

FEET FEET		MATERIAL	WATER YES OR NO
145	150		
150	154	SAND COARSE WHITE	YES
154	160	CLAY BLUE	NO
160	163	SAND COARSE GRAY	YES
163	165	CLAY BLUE	NO

THIS WELL WAS
145' DEEP AND THERE
WAS NO LOG.

IT HAD SOME WATER
BUT PUMPED DRY

001016

RECEIVED
JUN 20 1966

026543

WELL LOG AND REPORT TO THE
STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL: SEE IDAHO STATUTES 42-238

Permit No. _____ Well No. _____ County Washington
Owner Alta Soney
Address Midvale Idaho
Driller Holloway Drilling Co.
Address Ontario Oregon
Well location SE 1/4 - SE 1/4 Sec. 5, T. 12 N. R. 2 E. W.
Size of drilled hole 6"

Locate well in section

NW 1/4	NE 1/4
Sec. _____	
SW 1/4	SE 1/4

Total depth of well 62
Give depth to standing water from the ground 22 Water temp. 59° Fahr.

Test delivery was 20 g.p.m. or _____ c.f.s. Drawdown was 20 feet. Pump? _____ Ball? ☒

Size of pump and motor used to make test _____

Length of time of test _____ hours _____ minutes.

If flowing well, give flow _____ c.f.s. or _____ g.p.m. and of shut off pressure _____

If flowing well, described control works _____

(TYPE AND SIZE OF VALVE, ETC.)

Water will be used for Stock water Weight of casing per lineal foot 17.2

Thickness of casing 1/4" Casing material Steel
(STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 6" - 48 1/2'
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks—seals, grouting, etc.
6"	± 3	46 1/2	48 1/2	
				Well is gravel packed from top to 46

Number and size of perforations 50 - 3/16 x 1/2 located 40 feet to 48 feet from ground

WELL LOG

[illegible]

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

064944

Office Use Only
Proposed by _____
Twp 12N Rge 2 Sec 06
1/4 NW 1/4 NE 1/4
Lat: _____ Long: _____
☒ Air ☐ Flowing Artesian

1. WELL TAG NO. D WAY Construction
DRILLING PERMIT NO. 67-98-W 0080 000
Other IDWR No. _____

2. OWNER:
Name WAY Construction
Address 1065 Looper Lane
City Weiser ID State ID Zip 83672

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N
W
E
S
Twp. 12N North ☒ or South ☐
Rge. 2 East ☐ or West ☒
Sec. 6 1/4 1/4 1/4 1/4
Gov't Lot 30 County Washington
Lat: _____ Long: _____
Address of Well Site 2 miles East of Midvale City MIDVALE
(Give at least name of road + distance to road or landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
<u>Bentonite</u>	<u>0</u>	<u>18</u>	<u>150#</u>		<u>Top Pour</u>

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____
Was drive shoe seal tested? ☒ Y ☐ N How? AIR Pressure

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6"</u>	<u>+2</u>	<u>-17</u>	<u>250</u>	<u>Steel</u>	☒	☐	☒	☐
<u>4 1/2"</u>	<u>-5</u>	<u>-25</u>	<u>160</u>	<u>PVC</u>	☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method SAW
Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>-65</u>	<u>-85</u>	<u>8x4</u>	<u>36</u>	<u>4 1/2"</u>	<u>PVC</u>	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

29 ft. below ground Artesian pressure — lb.
Depth flow encountered _____ ft. Describe access port or control devices: Top of casing

11. WELL TESTS:

☐ Pump ☐ Bailor

Yield gal./min.	Drawdown	Pumping Level	Time
<u>30</u>			<u>1.00</u>

Water Temp. 57° Bottom hole temp. _____
Water Quality test or comments: Good

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water
Depth first Water Encounter 20'

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>8"</u>	<u>0</u>	<u>7</u>	<u>Brown Clay</u>		☒
<u>7 1/2"</u>	<u>7</u>	<u>18</u>	<u>Gray Selenator Rock</u>		☒
<u>6 1/8"</u>	<u>18</u>	<u>20</u>	<u>"</u>		☒
<u>6 3/4"</u>	<u>20</u>	<u>25</u>	<u>Med Hd Sandstone</u>	<u>20</u>	

MICROFILMED

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MAR 08 1999

NOV 04 1998

WATER RESOURCES
WESTERN REGION

RECEIVED

NOV 18 1998

RECEIVED

OCT 21 1998

Department of Water Resources

WATER RESOURCES
WESTERN REGION

Completed Depth 8.5 ft. (Measurable)
Date: Started 10-9-98 Completed 10-13-98

13. DRILLER'S CERTIFICATION

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

Company Name UHLERKOTT DRILLING Firm No. 125

Firm Official Ray Uhlert Date 10-14-98
and _____

Driller or Operator Ann J. Uhlert Date 10-14-98
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO: WATER RESOURCES

064943

1. WELL TAG NO. D 600 5185
 DRILLING PERMIT NO. 67-98-W 0079-000
 Other IDWR No. _____

2. OWNER:
Name WAY Construction (Bruce WAY)
Address 1085 Lofter Lane
City Wesler State TX Zip 73672

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.


 Twp. 12 North ☒ or South ☐
 Rge. 2 East ☐ or West ☒
 Sec. 6 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$
 Gov't Lot 2 ^{10 acres} County Washington ^{40 acres} ^{160 acres}
 Lat: _____ Long: _____
 Address of Well Site: Dutch Flats
8 miles East of City Midvale
 (Give at least name of road or distance to Road or Landmark)
Parcel # 3
 Lt. Bk. Sub. Name

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

[illegible]

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 74 ft
Was drive shoe seal tested? ☒ Y ☐ N How? AIR PRESSURE

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Linear	Welded	Threaded
6"	+2	-7	250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

X Perforations Method SAW
Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Coating	Linear
-80	-100	1/2x4	36	4 1/2	PVC	☐	☒
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

30 ft. below ground Artesian pressure _____ lb.
Depth ft. encountered _____ ft. Describe access port or
control devices: Top of casing

FORWARD WHITE COPY TO WATER RESOURCES

Office Use Only
 Reported by _____
 Twp 12N Rge 2W Sec 06
 _____ 1/4 NW 1/4 NE 1/4
 Lat. : : Long. : :

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
10			1.00

Water Temp. 57° Bottom hole temp. _____
Water Quality test or comments: Good

Depth first Water Encounter 78.4

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

[illegible]

13. DRILLER'S CERTIFICATION

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

Company Name LAHLENNOTT DRILLING Firm No. 125
Firm Official Ray M. Lohr Date 10-11-98
and
Driller or Operator Jim J. Walcott Date 10-11-98
(Sign once if Firm Official & Operator)

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

053916

Office Use Only		
Inspected by _____		
Twp _____	Rge _____	Sec _____
1/4 _____	1/4 _____	1/4 _____
Lat: _____	Long: _____	_____

1. DRILLING PERMIT NO. 67-99 W-0057 200
Other IDWR No. Tag # 0000 9889

2. OWNER: Robert Compton
Name _____
Address 1730 Pete Kriger Rd
City Midvale State Id Zip 83645

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N		Twp. <u>12</u>		North ☒ or South ☐	
W		Rge. <u>2</u>		East ☐ or West ☒	
E		Sec. <u>6</u>		1/4 <u>SE</u> 1/4 <u>NW</u> 1/4	
S		Gov't Lot _____		County <u>Washington</u>	
		Lat: _____		Long: _____	
		Address of Well Site <u>1730 Pete Kriger Rd</u>		City <u>Midvale</u>	
		(Give at least name of road + distance to Road or Landmark)			

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement, etc.)

☐ New Well ☐ Modify ☐ Abandonment ☒ Other replace

6. DRILL METHOD

☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
<u>benonite</u>	<u>4</u>	<u>47</u>	<u>800#</u>		<u>Pour in</u>

Was drive shoe used? ☒ N Shoe Depth(s) 79'
Was drive shoe seal tested? ☒ N How? ball

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6 7/8 + 1.5</u>	<u>79</u>	<u>250</u>	<u>5</u>	<u>Steel</u>	☒	☐	☐	☐
<u>5 7/8</u>	<u>78</u>	<u>96</u>	<u>250</u>	<u>Steel</u>	☐	☒	☐	☐

Length of Headpipe 6' Length of Tailpipe 2'

9. PERFORATIONS/SCREENS

☐ Perforations Method _____
☒ Screens Screen Type 304 Stainless

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>84</u>	<u>94</u>	<u>.020</u>				☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

30 ft. below ground Artesian pressure _____ lb.
Depth foot encountered 86 ft. Describe access port or control devices: Remove Cap

11. WELL TESTS:

☐ Pump ☒ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>8 1/2</u>	<u>35'</u>	<u>65'</u>	<u>1 hr</u>

Water Temp. 56° F Bottom hole temp. 65°

Water Quality test or comments: _____

Depth first Water Encountered 59'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>8"</u>	<u>0</u>	<u>2</u>	<u>Sandy Clay</u>		☒
	<u>2</u>	<u>5</u>	<u>hard pan</u>		☒
	<u>5</u>	<u>29</u>	<u>Silt</u>		☒
	<u>29</u>	<u>33</u>	<u>brown clay</u>		☒
	<u>33</u>	<u>39</u>	<u>Silt with mica</u>		☒
	<u>39</u>		<u>water running in</u>		☒
	<u>39</u>	<u>48</u>	<u>Silt with mica</u>		☒
<u>6"</u>	<u>48</u>	<u>54</u>	<u>Coarse sand & silt</u>		☒
	<u>54</u>	<u>55</u>	<u>Sand not much H₂O</u>		☒
	<u>55</u>	<u>61</u>	<u>blue clay</u>		☒
	<u>61</u>	<u>62</u>	<u>black basalt in clay</u>		☒
	<u>62</u>	<u>66</u>	<u>blue clay</u>		☒
	<u>66</u>	<u>66.5</u>	<u>layer of black</u>		☒
	<u>66.5</u>	<u>80</u>	<u>blue clay</u>		☒
	<u>80</u>	<u>86</u>	<u>fine sand & silt</u>		☒
	<u>86</u>	<u>87</u>	<u>Coarse Sand</u>		☒
	<u>87</u>	<u>96</u>	<u>Silt & lots of mica</u>		☒

RECEIVED

AUG 12 1999

WATER RESOURCES
WESTERN REGION

RECEIVED

AUG 17 1999

Department of Water Resources

Completed Depth 96' (Measurable)
Date: Started 7/12/99 Completed 7/16/99

13. DRILLER'S CERTIFICATION

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

Firm Name Robinson Well Drilling Firm No. 490

Firm Official Ralph Robinson Date 8/12/99

and
Supervisor or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
_____ 1/4 _____ 1/4 _____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. ~~D-10010596~~ D-10010596

DRILLING PERMIT NO. 67-99-W 0097-106

Other IDWR No.

2. OWNER

Name Way Construction
Address 1065 Loder Ln
City Weiser State ID Zip 83672

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
 W E S
 Twp. 12 North ☒ or South ☐
 Rge. 2 East ☐ or West ☒
 Sec. 6 1/4 SE 1/4 NW 1/4
 Gov't Lot 4 10 acres Washing ton 10 acres
 Lat: _____ Long: _____
 Address of Well Site 6 miles SW of
Midvale City Garfield
 (Give at least name of road - Distance to Road or Landmark)

Lt.	Blk.	Sub.	Name
-----	------	------	------

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☐ New Well ☒ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES *Deepened*

[illegible]

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

Was drive shoe seat tested? ☐ Y ☐ N How?

8. CASING/LINER: we Added 65ft to existing

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+2	-93	250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations Method Open Bottom

Screens	Screen Type
---------	-------------

From	To	Slot Size	Number	Diameter	Material

Microfilm
 NOV 3 0 1999

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

30 ft. below ground Artesian pressure — lb.

Depth flow encountered _____ ft. Describe access port or control devices: Top of casing

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gsl./min.	Drawdown	Pumping Level	Time
12			1.00

Water Temp. 58° Bottom hole temp. _____

Water Quality test or comments: Good

12. LITHOLOGIC LOG: (Describe repairs or abandonment) water

[illegible]

13. DRILLER'S CERTIFICATION

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

Company Name UHLERKOTHI, India Firm No. 125

Firm Official Wm J. Van der Date 10 13 98

and
Driller or Operator *[Signature]* Date *10-13-98*

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-1
11/87

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

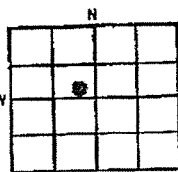
welded on casing Fax 334-2348 Reg

Office Use Only		
Inspected by		
Twp	Rge	Sec
1/4	1/4	1/4
Lat:	:	Long:

1. WELL TAG NO. D 0000549
DRILLING PERMIT NO. _____
Other IDWR No. _____

2. OWNER: JEFF
Name JEFF
Address 905 E. Washington
City IDAHO FALLS State ID Zip 83402

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.



Twp. 12 North ☒ or South ☐
Rge. 2 East ☐ or West ☒
Sec. 6 1/4 SE 1/4 NW 1/4
Gov't Lot 1 County Washington
Lat: 41 Address of Well Site 1740 D. Krieger
City IDAHO FALLS

LL _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
Bentonite	0	18	6 sacks	over bore	

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 40
Was drive shoe seal tested? ☐ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
1"	1	40	250	Steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations

Method

Screens

Screen Type PVC

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
7	5.8	0.70				☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

30 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☒ Pump ☐ Baller ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
5			2 HRS

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
8	0	18	Brown Clay		
6	18	27	Brown Clay		
6	27	37	Sandy Brown Clay		
6	37	38	Brown Silt		
6	38	58	White Sand		

Post-It brand fax transmittal memo 7871 # of pages 2
To: Jackie
From: Jeff
Co. 556
Dept. Steel tag
Fax # 334-2348
Welded on it

Completed _____ Depth 58 (Measurable)
Date: Started 7-7-98 Completed 7-7-98

13. DRILLER'S CERTIFICATION

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

Company Name American Well Drilling Firm No. 544

Firm Official Jackie Date 7-7-98
and
Driller or Operator Jeff Date 7-7-98
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

APPLICATION 67-15088 DISTRIBUTION LIST

BRENT CLAASSEN
1754 PETE KRIGER RD
MIDVALE ID 83645

ROBERT & PATRICIA COMPTON
1730 PETE KRIGER RD
MIDVALE ID 83645

~~KEVIN DAVIS
PO BOX 213
MIDVALE ID 83645~~

KAREN & PHILLIP ELLISON
309 PUTNAM DR
WILMINGTON NC 28411

HAGEDORN FAMILY TRUST
1766 PETE KRIGER RD
MIDVALE ID 83645

DENNIS & CHRIS HECK
15007 WILLIS RD
CALDWELL ID 83607

GERALD & BARBARA MCLAY
1670 LONEY RD
MIDVALE ID 83645

~~WILLIAM NECKELS
1742 PETE KRIGER RD
MIDVALE ID 83645~~

~~BRIAN & RENEE ROE
PO BOX 83
MIDVALE ID 83645~~

ALVIN SCHNELL
1417 S KIMBALL AVE
CALDWELL ID 83605

JIM & CAROL WOLFE
1032 UPPER SOULEN RANCH RD
MIDVALE ID 83645

MARLIN WOLFE
3243 FARM TO MARKET RD
MIDVALE ID 83645

X 4/2/2013 comment, returned mail
letter

NO comments from any others
on this list

-82

PRST FIRST-CLASS MAIL
US POSTAGE PAID
Boise ID
PERMIT# 1

N1-37

836 836 83645

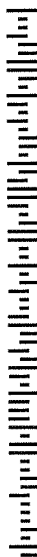


6020130402-145514

6

83645

~~RETURN~~ SERVICE REQUESTED



MT OF WATER RESOURCES

REGIONAL OFFICE

RT WAY

10 83705

ERVICE
TED

RECEIVED
APR 15 2013
WATER RESOURCES
WESTERN REGION

BRIAN & RENEE ROE
PO BOX 83
MIDVALE ID 83645

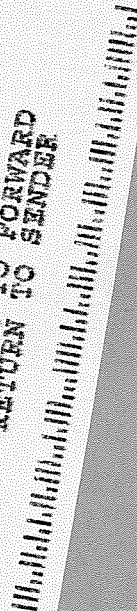
VAC

NIXIE

836453011-1N

RETURN TO SENDER
UNABLE TO FORWARD
RETURN TO SENDER

04/10/13



DEPT OF IDAHO
DIVISION OF WATER RESOURCES
SOUTHWESTERN REGIONAL OFFICE
REPORT WAY
IDAHO 83705

SERVICE
STED

PRST FIRST-CLASS MAIL
US POSTAGE PAID
Boise ID
PERMIT # 1

N1-37

836 836 83645

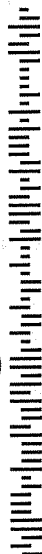


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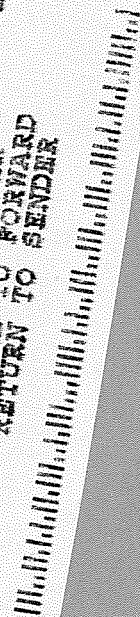


KEVIN DAVIS
PO BOX 213
MIDVALE ID 83645

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WESTERN REGION



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WATER RESOURCES
WESTERN REGION

WILLIAM NECKELS
1742 PETE KRIGER RD
MIDVALE ID 83645

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WATER RESOURCES
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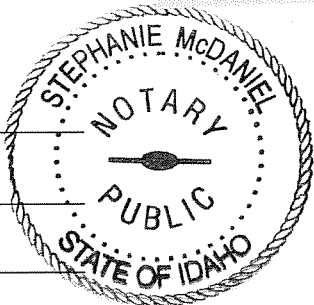
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No.
The following application has been filed to appropriate the public waters of the State of Idaho:

67-15088
STEVEN E. RYALS
2429 LAPPIN LN
COUNCIL, ID 83612
Point of Diversion NENW S8 T12N R02W WASHINGTON
County Source GROUND WATER
Use: IRRIGATION 03/15 to 10/31 2 CFS
Total Diversion: 2 CFS
Date Filed: 1/22/2013
Place Of Use: IRRIGATION
T12N R02W S8 NWNE SWNE NENW SENW
Total Acres: 140
Proposed well about 200 ft. deep to switch from dry land farming.

Permits will be subject to all prior water rights. For additional information concerning the property location, contact Western Region office at (208) 334-2190; or for a full description of the right(s), please see www.idwr.idaho.gov/apps/ExtSearch/WRFiling.asp. Protests may be submitted based on the criteria of Idaho Code § 42-203A. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Way, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before 4/22/2013. The protestant must also send a copy of the protest to the applicant.
GARY SPACKMAN, Director

Published on 4/4/2013 and 4/11/2013

13-2S

OK
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