

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATIONPermit No. 15-14385

1. Owner Jack Petty Phone No. 208-756-1206
 Current address 10 Morgan Rd Salmon, ID
 2. Examiner's name Denise Kidman EXAM DATE 9-14-2012
 3. Accompanied by Jack Petty Email _____
 Address 10 Morgan Rd Salmon, ID
 Relationship to permit holder Owner Phone No. 208-756-1206
 4. Source Ground water tributary to _____

B. OVERLAP REVIEW

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

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

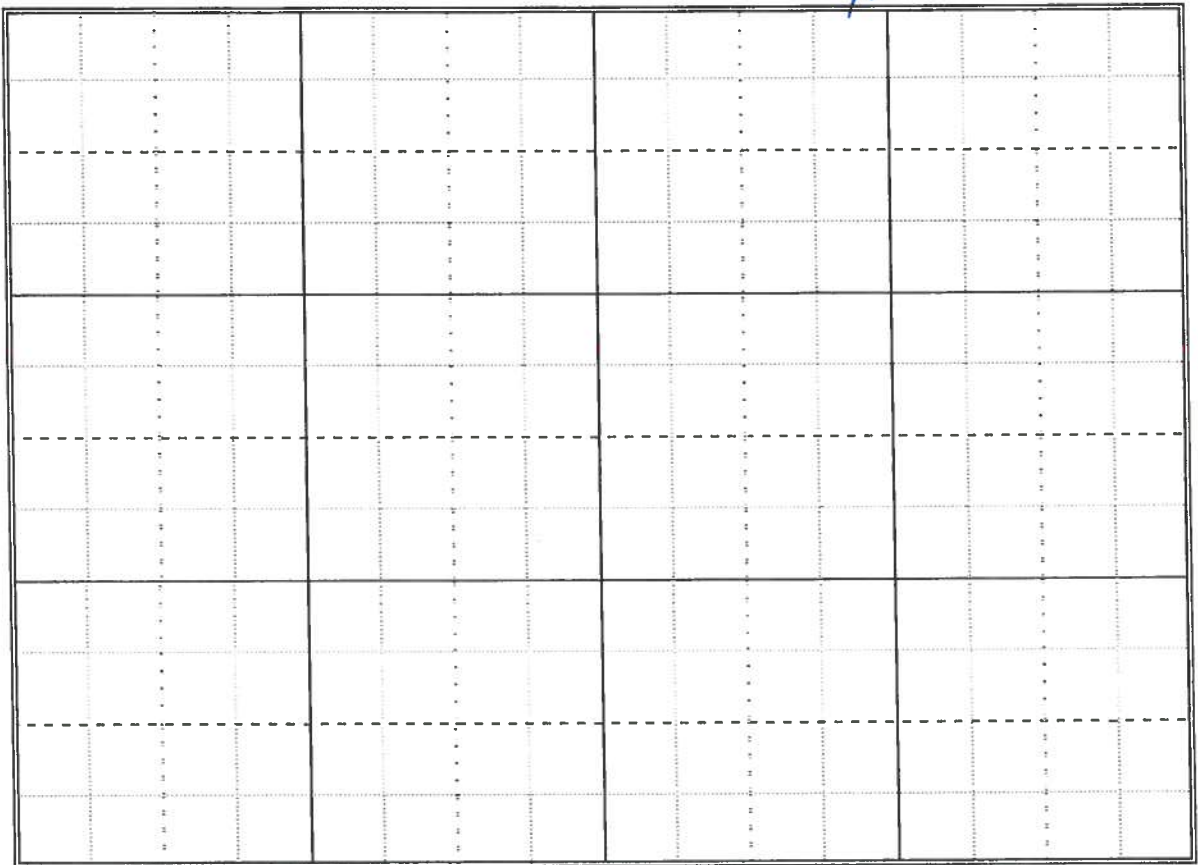
Ident. No.	Gov't Lot	1/4	1/4	1/4	Sec	Twp	Rge	County	Method of Determination/Remarks
			NE	NW	32	21N	22E	Lemhi	D0051555

2. Place(s) of Use:

Method of determination On site visit

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
21N	22E	32					1.1											1.1	

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



Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0051555	Unknown	175	Unknown	Unknown	
	Submersible				

*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
No physical measurement @ exam						

2. Measurements: None taken. Well discharge piping not suitable (buried) for polysonic measurement.

E. NARRATIVE/REMARKS/COMMENTS

Water right 75-14385 was permitted for the irrigation of 1.3 acres which was based on the lot size. The irrigation for this right was developed & is currently irrigating 1.1 acres of lawn and garden.

Water line has been run from the well to the front yard for 10 sprinkler heads. The delivery system for the back yard is hoses with sprinklers hooked to the well.

It is recommended that this right be licensed for 1.1 acres, 0.03 cfs and 39 gfa.

Statement of Completion was submitted without a filing fee. The filing fee was collected on the day of exam. Receipt # JEC38025 for \$50.00

POD GPS N 45° 46' 44.7" W 113° 53' 09.5"
IDWR Tag # D0051555

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS☒ Additional computation sheets attached

Measured Method:

Theoretical Calculation = 0.08 cfs
 Permit Allows = 0.03 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.1 \times 3.5 = 3.9 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 0.03 \times 214 \times 1.9835 = 12.7 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 3.9 \text{ af}$$

2. Volume Calculations for Other Uses:

None

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Irrigation	4-1	10-31	0.03 cfs	3.9 af
Totals:				

2. Recommended Amendments

☐ Change P.D. as reflected on page 1☐ Add P.D. as reflected on page 1

None

☐ Change P.U. as reflected on page 1☐ Add P.U. as reflected on page 1☐ Other**I. AUTHENTICATION**

Field Examiner's Signature

Denise Kudman

Date

09-14-2012

SEAL

Reviewer

James Cefalo

Date

Feb 6, 2013

Delivery System Diagram WR 75-14385



Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

1. WELL TAG NO. D 0051555

DRILLING PERMIT NO. _____

Water Right or Injection Well No. **75-14385**

2. OWNER

Name **Petty, Jack**

Address **10 Morgan Rd**

City **Salmon** State **ID** Zip **83467**

3. LOCATION OF WELL by legal description:

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

Twp. **21** North ☒ or South ☐
Rge. **22** East ☒ or West ☐
Sec. **32** 1/4 **NE** 1/4 **NW** 1/4
10 acres 40 acres 160 acres

Gov't Lot _____ County **Lemhi**

Lat: : : Long: : :

Address of Well Site **10 Morgan Rd**

City **Salmon**

(Give at least one of road or 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	24	350	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
6	+1	60	.250	steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method **star perforator**

Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
40	52	0.1875	125		steel	☒	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight/Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

38 ft. below ground Artesian pressure _____ lb.

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

sanitary well seal

12. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
18		64	2 hours

Water Temp. **cold** Bottom hole temp. **cold**

Water Quality test or comments: **none**

Depth first Water Encounter **38'**

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	3	top soil		☒
	3	24	boulders gravel		☒
6	24	38	gravel cobbles		☒
	38	52	gravel sand	☒	
	52	56	brown clay rock	☒	
	56	64	grey hard clay	☒	

RECEIVED

MAY 07 2008

Department of Water Resources
Eastern Region

Completed Depth **64** (Measurable)

Date: Started **4/14/2008** Completed **4/15/2008**

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 **Harber Drilling Inc** Firm No. **0430**

Principal Driller **Alan Harber** Date **4/15/08**

and Driller or Operator II **Alan Harber** Date **4/15/08**

Operator I _____ Date _____

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

FORWARD COPY TO WATER RESOURCES

Form provided by Forms On-A-Disk - (214) 340-9429 - www.FormsOnADisk.com



View of the front yard that show sprinkler head. (Facing West)



View of the front yard that show sprinkler head. (Facing North West)



View of the front yard that show sprinkler head. (Facing North)



Irrigation well with Tag #D0051555 located at the North East corner of property.



The back yard is irrigated by a hose and sprinkler. (Facing West)



The back yard is irrigated by a hose and sprinkler. (Facing North West)

GROUNDWATER THEORETICAL ANALYSIS

FILE: 75-14385

DATE: 9-14-2012

BY: Denise Kidman

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times \text{HP}) \times (\text{EFF.})}{\text{TDH}}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

$$Q = \frac{(8.8) \times (1.75 \text{ hp}) \times (0.70)}{140.8} = 0.076$$

$$[(38 + 10 \text{ ft}) + (40 \text{ PSI} \times 2.31)] = 140.8$$

LIFT FROM:

Measurement ()

Owner ()

Area estimate ()

Well Logs (X)

Booster (Y) (N)

PSI FROM:

Measurement ()

Owner ()

Estimate (X)

Owner Gage ()

NOTES ON PUMP:

Motor Make, Serial or ID

Pump Make, Serial or ID, rating

REMARKS: Well log was used to determine static water level.

If static level is known on small systems up to 10 Hp, then 10' below the static level is used for lift.

38ft static level + 10ft = 48ft lift

Standard sprinklers operate @ approx. 40-60 psi - used 40 psi for these calculations.

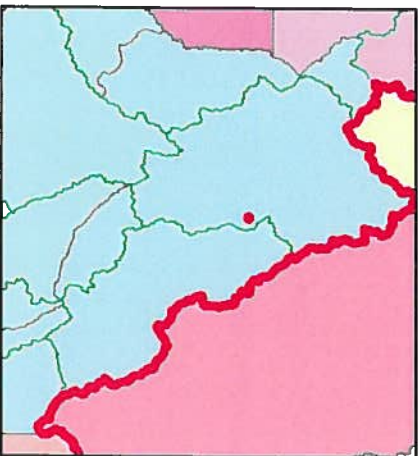
Referenced - Theoretical Dynamic pumping level Diagram for Wells (Included with report)



Idaho Department of Water Resources

Water Right
75-14385
(IRRIGATION)

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

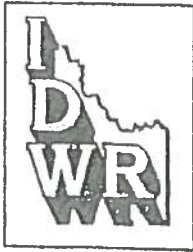


Lemhi County
IDWR Basin 75

Prepared by Kidman, Denise

2009 Aerial Photography





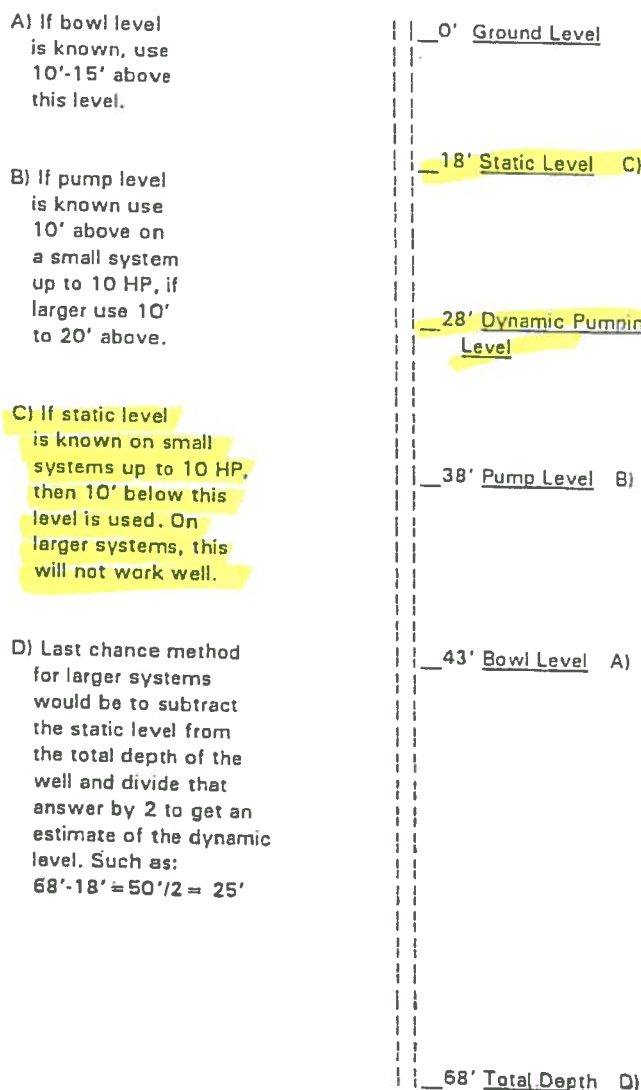
THEORETICAL DYNAMIC PUMPING LEVEL DIAGRAM FOR WELLS

(8/95)rdh

Many considerations may be needed to estimate the dynamic pumping level when you cannot measure it or cannot get the information from either the claimant or the installer of the pump.

Some are: Type of pump, large or small system, type of aquifer, bowl level, pump level, static level and depth of well.

The diagram shown below gives a practical example from A to D, in order of best to least preferred methods, of how you could base your estimate for finding the dynamic pumping level. This is not an absolute or complete set of methods for obtaining your estimates, use only as a guide:



Exp. Duration:

BW - +10' = 43 PSI

SW - +10' = 43 PSI

SW - +10' = 43 PSI

Process	Basin Sequence	Draft	Owner	Source	POD/POU	NENW
Adjudication Claim	75-14180		SUNSET HEIGHTS WATER DISTRICT	SEVENMILE CREEK	POU	15.0
Adjudication Claim	75-14608		TYACKE, MICHAEL JOSEPH	HYDE CREEK	POU	15.0
Adjudication Claim	75-14609		TYACKE, MICHAEL JOSEPH	HYDE CREEK	POU	15.0
Adjudication Claim	75-14610		TYACKE, MICHAEL JOSEPH	SEVENMILE CREEK	POU	15.0
Adjudication Claim	75-14611		TYACKE, MICHAEL JOSEPH	SEVENMILE CREEK	POU	15.0
Adjudication Claim	75-4394		TYACKE, MICHAEL JOSEPH	POPE DITCH	POU	15.0
Adjudication Recommendation	75-14180		SUNSET HEIGHTS WATER DISTRICT	SEVENMILE CREEK	POU	25.0
Adjudication Recommendation	75-14608		TYACKE, MICHAEL JOSEPH	HYDE CREEK	POU	25.0
Adjudication Recommendation	75-14610		TYACKE, MICHAEL JOSEPH	UNNAMED STREAM	POU	25.0
Water Permit	75-14264	N	BAILEY, DAVID L; BAILEY, TAMARA L	GROUND WATER	POD	X
Water Permit	75-14264	N	BAILEY, DAVID L; BAILEY, TAMARA L	GROUND WATER	POU	X
Water Permit	75-14385	N	PETTY, JACK	GROUND WATER	POD	X
Water Permit	75-14385	N	PETTY, JACK	GROUND WATER	POU	1.3
Water Right	75-10769	N	GREGSON, JERROLD M	GROUND WATER	POD	X
Water Right	75-10769	N	GREGSON, JERROLD M	GROUND WATER	POU	X
Water Right	75-14385	Y	PETTY, JACK	GROUND WATER	POD	X
Water Right	75-14385	Y	PETTY, JACK	GROUND WATER	POU	1.1
Water Right	75-4108	N	POPE DITCH CO	SALMON RIVER	POU	X
Water Right	75-4393	N	HYDE, ALTHEA R; HYDE, GEORGE L	HYDE CREEK	POU	15.0
Water Right	75-4394	N	HYDE, ALTHEA R; HYDE, GEORGE L	POPE DITCH	POU	15.0
Water Right	75-4395	N	HYDE, ALTHEA R; HYDE, GEORGE L	SEVENMILE CREEK	POU	15.0
Water Right	75-7381	N	GREGSON, JERROLD M	GROUND WATER	POD	X
Water Right	75-7381	N	GREGSON, JERROLD M	GROUND WATER	POU	4.0
Water Right	75-7391	N	MORGAN, DENIS L; MORGAN, DOROTHY L	GROUND WATER	POD	X
Water Right	75-7391	N	MORGAN, DENIS L; MORGAN, DOROTHY L	GROUND WATER	POU	X
Water Right	75-7392	N	BAILEY, DAVID L; BAILEY, TAMARA L	GROUND WATER	POD	X
Water Right	75-7392	N	BAILEY, DAVID L; BAILEY, TAMARA L	GROUND WATER	POU	X

Comment Report

75-14385

1. dkidman 2/6/2013 Field Report Narrative

Comment: Water right 75-14385 was permitted for the irrigation of 1.3 acres which was based on the lot size. The irrigation for this right was developed and is currently irrigating 1.1 acres of lawn and garden. Water line runs from the well to the front yard to 10 sprinkler heads. The delivery system for the back yard is hoses, with hand sprinklers, connected to the well.

Statement of completion was submitted without a filing fee. The filing fee was collected on the day of the exam. Receipt E038025 for \$50.00.

POD GPS- N 45 46 44.7, W 113 53 09.5. IDWR Tag #D0051555

It is recommended that this right be licensed for 1.1 acres, 0.03 cfs and 3.9 afa.

2. dkidman 2/6/2013 9:07:33 AM POD

Comment: Updated Shape

3. dkidman 2/6/2013 9:09:33 AM POU

Comment: Updated Shape

4. eretelle 5/30/2007 POD

Comment: Updated shape

5. eretelle 5/30/2007 POU

Comment: Updated Shape

6. dkidman 2/6/2013 8:55:26 AM POD

Comment: Updated Shape

7. dkidman 2/6/2013 8:56:45 AM POU

Comment: Updated Shape

8. scox 11/20/2006 3:37:09 PM Special Administration Area Notes

Comment: Special Administration Areas : Salmon R excluding Mid F (Wild and Scenic Watershed)

Exempt: Y

Reason:

Doc Attached:

Explanation:

9. scox 1/23/2007 Evaluation Memorandum

9. scox 1/23/2007 Evaluation Memorandum

Comment: The potential to reduce the quantity of water under existing water rights: This a proposed well for irrigation use for .03 cfs for 1.3 acres. There should not be a potential of reduction in the amount of water due to most wells are producing 30 gpm. Based on existing well information in the area there is more than an adequate supply of water for proposed well.

The sufficiency of the water supply for the proposed appropriation: The quantity of water needed is normal for the amount of irrigation.

The good faith nature of the application: Applicant plans on having project finished by the end of 2007.

The adequacy of the financial resources of the applicant: The cost to drill the well is \$2000.00 with the yearly maintenance of \$50.00.

The local public interest in the public water resource: Comment letters from Idaho Fish & Game and Id DEQ have been received by the Department and they have no concerns or objections at this time.

The conservation of water resources in Idaho: This is a beneficial use, this is for .03 cfs, for irrigation of 1.3 acres.

Impacts to the economy of the local area or watershed: None anticipated at this time.

10. scox 2/5/2007 Legal Notice Remarks

Comment: This application proposes the diversion and use of water from ground water tributary of the Salmon Wild & Scenic River. The decreed minimum stream flow rights for the federal Wild & Scenic Rivers are subordinate to certain categories of water use and to specific amounts of water use established after the minimum stream flow. The water use proposed in this application will benefit from the subordination provision because the diversion rate of .03 cfs and 1.3 acres will be applied to the subordination amounts specified in the decree for the Wild & Scenic River listed above.

11. eretelle 5/30/2007 permit review

Comment: No WD

In Wild & Scenic Area - spreadsheet & ad ok

No protests

DEQ and F&G comments ok

No PoD overlaps - new well

No PoU overlaps - 75-7381 and -7392 on other properties

Recommend approval as suggested by IDWR Eastern