WR

State of Idaho DEPARTMENT OF WATER RESOURCES Eastern Region • 900 N Skyline Drive, Suite A • Idaho Falls ID 83402-1718 Phone: (208) 525-7161 • Fax: (208) 525-7177 Website: idwr.idaho.gov • Email: easterninfo@idwr.idaho.gov

BRAD LITTLE Governor GARY SPACKMAN Director

May 19, 2020

Logan Ringel and Lori Ann Ringel 4375 N 4500 W Tetonia, ID 83452

RE: Application for Transfer for Water Right 22-389

Dear Applicants:

On June 20, 2018, Luke Marchant filed an Application for Transfer on your behalf, proposing to consolidate the place of use for water right 22-389. The irrigated acres proposed to be changed are located in the SWSE and SESE of Section 6, T05N, R45E. According to parcel records for Teton County, the SWSE and SESE of Section 6 have been subdivided. The subdivided parcels are now owned by Saddle Bluff Ranch HOA and various property owners. Your application stated that the irrigated acres to be transferred were sold to Lucra Investments LLC ("Lucra") in 2005, but that water right 22-389 was withheld from that conveyance. To support your assertion that water right 22-389 was reserved, you provided a plat map dated February 2006. The plat map is an agreement between Lucra and Teton County and does not address the question of whether water right 22-389 was withheld from your conveyance to Lucra. Further, the plat map was created in 2006, after the subject property was conveyed to Lucra.

The Department has requested evidence that you still own the portion of water right 22-389 proposed to be transferred. It has been nearly two years since the application was filed, and no persuasive evidence of ownership has been provided. At this point, I have decided to return your application and refund the filing fee. A refund check of \$740 will be issued to Holden Kidwell Hahn & Crapo, who paid the original filing fee. Please feel free to refile your transfer application when you have assembled proof of ownership.

Sincerely,

James Cefalo

Encl: Transfer Application for Water Right 22-389

Cc (w/o encl): Violet Bell (4433 N 4500 W, Tetonia, ID 83452) Roy Bell (4449 N 4500 W, Tetonia, ID 83452) Luke Marchant (PO Box 50130, Idaho Falls, ID 83405) Rev. 01/15

 \checkmark

 \checkmark

 \square

STATE OF IDAHO **DEPARTMENT OF WATER RESOURCES**

Transfer No.

MINIMUM REQUIREMENTS CHECKLIST TO BE SUBMITTED WITH APPLICATION FOR TRANSFER

JUN 2 0 2018

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An application for transfer must be prepared in accordance with the minimum requirements listed below to be acceptable for processing by the Department. Incomplete applications will be returned. The instructions, fee schedule, Part 2A reports and additional Part 2B forms are available from any Department office or on the Department's website at www.idwr.idaho.gov.

Name of Applicant(s) Logan R. and Lori Ann Ringel; Violet Janiece Bell; Roy J. Bell

Check whether each item below is attached (Yes) or not applicable (N/A) for the proposed transfer.

Yes <u>N/A</u> * Means the item is <u>always required</u> and must be included with the application.

- \checkmark * Completed Application for Transfer of Water Right form, Part 1.
- Signature of applicant(s) or applicant's authorized representative on Application for Transfer Part 1. Include evidence of authority \checkmark * labeled Attachment #3 (see below) if signed by representative.
- Application for Transfer Part 2A. Attach a Part 2A report describing each water right in the transfer as currently recorded. \checkmark
- Complete and attach an Application for Transfer Part 2B for each water right for which only a portion is proposed to be changed \square through this transfer application.
- Application for Transfer Part 3A is always required (see Attachment #7a below); Parts 3B and 3C must be completed for transfer applications proposing to change the nature of use of the water right(s) or proposing changes to supplemental right(s).
- Correct fee submitted with transfer application form. (Fee schedule is on website and instructions for application for transfer.) \checkmark

Attachments to Application - Label each attachment with the corresponding number shown below as Attachment #1-10.

#1 If the applicant is a business, partnership, organization, or association, and not currently registered in the State of Idaho as a $\overline{\mathbf{V}}$ business entity, attach documentation identifying officers authorized to sign or act on behalf of right holder. (See Part 1.)

#2a Water Right ownership documentation if Dept. records do not show the applicant as the current water right owner. ** \square \square

#2b If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation \square showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s).** ** Additional fee(s) required for water right ownership changes; see fee schedule.

- \checkmark #3 Documentation of authority to make the change if the applicant is not the water right owner.
- #4 Power of Attorney or documentation providing authority to sign or act on the applicant's behalf. (See Part 1.)
- #5 If the transfer application proposes to change the point of diversion for a water right affecting the Eastern Snake Plain Aquifer \checkmark (ESPA), attach the results of an ESPA analysis and a detailed mitigation plan to offset any depletions to hydraulically connected reaches of the Snake River. ESPA transfer spreadsheet and model grid labeled cells are available on the Department's website at www.idwr.idaho.gov/WaterManagement/WaterRights/WaterRightTransfers/resources.htm.
- #6 Notarized statement of agreement or a statement on official letterhead signed by an authorized representative from each lien $\overline{}$ holder or other entity with financial interest in the water right(s) or land affected by the proposed transfer. (See Part 1.5.c.)
- #7a Attach a map identifying the proposed point(s) of diversion, place(s) of use, and water diversion and distribution system \checkmark details as described on the application. Include legal description labels. If only a portion of the right is proposed to be changed, identify the current location of the part of the existing right(s) proposed to be changed. (See Part 3A.)
- \checkmark #7b If the transfer application proposes to change the place or purpose of use of an irrigation right attach a Geographic Information System (GIS) shape file, or an aerial photo or other image clearly delineating the location and extent of existing acres and changes to the place of use. If some or all of any right is leased to the Water Supply Bank, you must also show the the specific location and/or acres to be idled at the new, proposed place of use to satisfy lease requirements.
 - #8a If the transfer application proposes to change the nature of use or period of use for one or more rights, provide documentation 1 describing the extent of historic beneficial use for the water rights proposed to be transferred and document how enlargement will be avoided. (See Part 3B.) Additional fee required for proposed changes to nature of use; see fee schedule.
- #8b If the transfer application proposes to change the place of use of a supplemental irrigation right, provide documentation \checkmark regarding the historic use of the supplemental right(s) and availability or reliability of the primary right(s) being supplemented, both before and after the proposed change. (See Part 3C.)

#9 Water Supply Bank information for all rights proposed for transfer and currently leased to the Bank. (Attachment WSB) \square \checkmark

#10 Other. Please describe: NRCS Custom Soil Report indicating high levels of water loss through the soil in area. \square

STATE OF IDAHO DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 1	
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JUN 2 n 2018 Department of Water Resource

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Name of Applicant(s) Logan R. and Lori Ann Ringel; Violet Janiece Bell; Roy J. Bell

Mailing address See Attached Sheet

Eastern Ren

Phone

Email

- If applicant is not an individual and not registered to do business in the State of Idaho, attach documentation identifying officers authorized to sign or act on behalf of the applicant. Label it Attachment #1.
- Attach water right ownership documentation if Department records do not show the transfer applicant as the current water right owner. Label it Attachment #2a.
- If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation **|**√| showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s). Label it Attachment #2b.
- Attach documentation of authority to make the proposed change if the applicant is not the water right owner. Label it Attachment #3.

Provide contact information below if a consultant, attorney, or any other person is representing the applicant in this transfer process.

No Representative	
Name of Representative Luke H. Marchant	Phone (208) 523-0620
Mailing address PO Box 50130, Idaho Falls, ID 83405	Email Imarchant@holdenlegal.com

Send all correspondence for this application to the representative and not to the applicant.

Send original correspondence to the applicant and copies to the representative.

- The representative may submit information for the applicant but is not authorized to sign for the applicant. OR
- The representative is authorized to sign for the applicant. Attach a Power of Attorney or other documentation providing authority to $\overline{}$ sign for the applicant and label it Attachment #4.

I hereby assert that no one will be injured by the proposed changes and that the proposed changes do not constitute an enlargement in use of the original right(s). The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.

Signature of Applicant or Authorized Representative

Luke H. Marchant, Attorney	
Print Name and Title if applicable	

June 20, 2018 Date

Signature of Applicant or Authorized Representative

Print Name and Title if applicable

Date

PURPOSE OF TRANSFER Δ

1. Change point of diversion Change nature of use

Add diversion point(s) Change period of use

Change place of use Other

Describe your proposal in narrative form, including a detailed description of non-irrigation uses to justify amounts transferred 2. (i.e. number of stock, etc.), and provide additional explanation of any other items on the application. Attach additional pages if necessary and label it Part 1A.2.

The purpose of this Application is to change the place of use of Water Right No. 22-389 and split the water right among the respective landowners of the proposed place of use. See attached page for additional information regarding this Application.

Part 1A.2 Transfer Proposal – Additional Information

This Application for Transfer proposes to reduce the place of use of Water Right No. 22-389 by 68 acres but retain the decreed diversion rate of 3.2 cfs. In 2005, a portion of the place of use was sold to Lucra Investments, but the water rights were retained (see attached plat dated February 6, 2006).

Water for 22-389 is delivered through the Bell McCracken Ditch—an open ditch over 2.3 miles long. This ditch experiences significant seepage losses. If the diversion rate for 22-389 is cut, the Applicants are concerned that they will not receive a sufficient supply of water at the place of use to irrigate the ground, which is still flood irrigated.

A custom soil resource report, prepared by the NRCS for the Applicants, shows that the soils in the area where the ditch is located, and at the proposed place of use are primarily of the Alpine-St. Anthony complex, and the Feltonia-Arimo complex. The report shows that both soil profiles are well drained, have a moderately high to high capacity to transmit water, and have low to moderate available water storage. These factors, combined, weigh in favor of not reducing the Applicants' diversion rate.



STATE OF IDAHO DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1 Continued

B. DESCRIPTION OF RIGHTS AFTER THE REQUESTED CHANGES. IF THE RIGHTS ARE BEING SPLIT, DESCRIBE PORTIONS TO BE CHANGED AS THEY WOULD APPEAR AFTER THE REQUESTED CHANGES.

	1.	Right Number	<u>Amount</u> (cfs/ac-ft)	Nature of Use	Period of Use	Source & Tributary
All o	or Part	22-389	1.56 cfs	Irrigation	<u>04/15</u> to <u>10/31</u>	South Leigh Creek/Teton River
~			1.51 CIS	Irrigation		South Leigh Creek/Teton River
4		22-389	0.13	Irrigation		South Leigh Creek/Teton River
			-		to	
					to	
			•		to	V
					to	
					to	
					to	P
	Total	authorized under rights	3.2	_cfs and/or acre	e-feet.	

2. Total amount of water proposed to be transferred or changed ______ cubic feet per second and/or ______ acre-feet per year.

3. Point(s) of Diversion:

No changes to point(s) of diversion are proposed - the following chart is therefore not completed. (Proceed to #4.)
 Attach Eastern Snake Plain Aquifer analysis if this transfer proposes to change a point of diversion affecting the ESPA. Label it Attachment #5.

New ?	Lot	1/4	1/4	1/4	Sec	Тwp	Rge	County	Source	Local name or tag #

4. Place of use: (If irrigation, identify with number of acres irrigated per 1/4 1/4 tract.)

No changes to place of use are proposed - the following chart is therefore not completed. (Proceed to #5.)

Two	Rae	Sec			1/4			NV	V 1/4			SV	1 1/4			SE	1/4		Acre
L.mb	itge	Jec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
05N	45E	6													39.3	35.7			75
					_														

Total Acres (for irrigation use) 75

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Department of Water Resources

STATE OF IDAHO DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1 Continued

5. General Information:

Describe the complete diversion system, including how you will accommodate a measuring device and lockable controlling works should they be required now or in the future:
 Water is diverted out of South Leigh Creak and delivered through the Ball McCreak and Diversity of South Leigh Creak and delivered through the Ball McCreak and Diversity of South Leigh Creak and delivered through the Ball McCreak and Diversity of South Leigh Creak and delivered through the Ball McCreak and Diversity of South Leigh Creak and delivered through the Ball McCreak and Diversity of South Leigh Creak and delivered through the Ball McCreak and Diversity of South Leigh Creak and delivered through the Ball McCreak and Diversity of South Leigh Creak and Diversity of South Leigh

Water is diverted out of South Leigh Creek and delivered through the Bell McCracken Ditch.

b. Who owns the property at the point(s) of diversion? Rocky Mountain Greenhouses, Inc.

If other than the applicant, describe the arrangement enabling the applicant to access the property for the diversion system: Applicant has an oral agreement with the owner of the property to access the point of diversion.

c. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts? **If yes**, \Box attach a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes on official letterhead signed by an authorized representative. Label it **Attachment #6**. List the name of the entity and type of lien:

It is the applicant's responsibility to provide notice to lien holder, trustee, mortgagor, or contract holder of the proposed changes that may impact or change the value of the water rights or affected real property. Any misrepresentation of legal encumbrance on this application may result in rejection of the application or cancellation of an approval.

d. Are any of the water rights proposed for transfer currently leased to the Water Supply Bank?

If yes, complete <u>Attachment WSB</u>.

- Describe the effect on the land now irrigated if the place or purpose of use is changed pursuant to this transfer: This transfer proposes to reduce the authorized place of use from 143 acres to 75 acres, yet retain the full diversion rate to make up for over 2 miles of ditch loss. 68 acres of the original place of use will no longer be irrigated.
- f. Describe the use of any other water right(s) for the same purpose or land, or the same diversion system as right(s) proposed to be transferred at both the existing and proposed point(s) of diversion and place(s) use:
 There are multiple water rights diverted at the same point of diversion into the Bell McCracken Ditch.

g. To your knowledge, has/is any portion of the water right(s) proposed to be changed:

Yes No

	1
	\checkmark
	\checkmark
_	_

- undergone a period of five or more consecutive years of non-use,
- currently leased to the Water Supply Bank,
- currently used in a mitigation plan limiting the use of water under the right, or
- Currently enrolled in a Federal set-aside program limiting the use of water under the rights?

If yes, describe:

Close

IDAHO DEPARTMENT OF WATER RESOURCES Water Right Report

6/20/2018

WATER RIGHT NO. 22-389

Owner TypeName and AddressCurrent OwnerJANIECE BELLCurrent OwnerMACK BELL445 N 450 WTETONIA, ID 83452

Priority Date: 06/15/1897 Basis: Decreed Status: Active

SOUTH LEIGH CREEK TETON RIVER

Beneficial UseFromToDiversion RateVolumeIRRIGATION04/1510/313.2 CFSTotal Diversion3.2 CFS

Location of Point(s) of Diversion:

SOUTH LEIGH CREEK NESESW Sec. 33 Township 06N Range 45E TETON County

Place(s) of use:

Place of Use Legal Description: IRRIGATION TETON County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
05N	45E	6		NESE	40		NWSE	31		SWSE	39		SESE	33

Total Acres: 143

Conditions of Approval:

1. C18 This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.

2. F01 Water is delivered through Bell McCracken Ditch

Dates:

Licensed Date: Decreed Date: 11/24/2008 Enlargement Use Priority Date: Enlargement Statute Priority Date: Water Supply Bank Enrollment Date Accepted: Water Supply Bank Enrollment Date Removed: Application Received Date: Protest Deadline Date: Number of Protests: 0

Other Information: State or Federal: S Owner Name Connector: OR Water District Number: 01 Generic Max Rate per Acre: Generic Max Volume per Acre: Civil Case Number: Old Case Number: Decree Plantiff: Decree Defendant: Swan Falls Trust or Nontrust: Swan Falls Dismissed: DLE Act Number: Cary Act Number: Mitigation Plan: False Close

STATE OF IDAHO DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT PART 3

A. PLAT MAP (See Part 3A of Instructions for application for transfer for complete requirements.)

Attach a map of the diversion, measurement, control, and distribution system. Label it Attachment #7a.

If the transfer application proposes to change the place or purpose of use of an irrigation right attach a Geographic Information System (GIS) shape file, or an aerial photo or other image clearly delineating the location and extent of existing acres and changes to the place of use. Label it Attachment #7b.

If the place of use currently consists of a permissible place of use, then the attachment is not required if the application contains a clear statement that the boundaries for the place of use are not proposed to be changed by the transfer and the total number of irrigated acres within the place of use before and after the transfer is clearly stated.

If any part of the irrigation water right is leased to the Water Supply Bank, you must also specify the location and number of acres that will remain idled for the duration of the lease contract at the new, proposed place of use.

B. CHANGES IN NATURE OF USE (Water Balance)

☐ If you propose to change the nature of use or period of use of all or part of the rights(s) listed in this application, attach documentation describing the extent of historic beneficial use of the portion of the right(s) proposed to be changed. Also attach documentation showing that the portion of the right(s) to be changed will not be enlarged in rate, volume, or consumptive use through the proposed change. Label it Attachment #8a.

C. PLACE OF USE CHANGES TO SUPPLEMENTAL IRRIGATION RIGHTS

If you propose to change the place of use of a supplemental irrigation right, answer below and attach supporting documentation. Label it **Attachment #8b**.

Describe how the supplemental water rights have been used historically in conjunction with other water rights at the <u>existing</u> place of use. Describe the time during the irrigation season that the supplemental rights have been used. Include information about the availability or reliability of the primary right(s) being supplemented, both before and after the change. If the applicant is proposing to change a supplemental irrigation right to a primary right, provide the information required on Part 3B above:

FOR DEPARTMENT USE ONLY

Transfer contains	pages and	attachments.	
Received by	Date	Preliminary check by	Date
Fee paid	Date 6 20 18	Receipted by	Receipt # 044127
Add'l fee paid	Date	Receipted by	Receipt #
Check all that apply: Attachment W	SB 🗌 (copy sent to state of	ffice) Lessor Designation form 🗌 &/or V	W-9 (originals to state office)

Attachment No. 2b Water Right Ownership Documentation – Change of Ownership PLEASE RETURN TO: Robert E. Farnam, Esq. HOLDEN, KIDWELL, HAHN & CRAPO, P.L.L.C. P.O. Box 50130 Idaho Fails, Idaho 83405

Instrument # 2371;	20
TETON COUNTY, IDAHO	
7-6-2015 03:32:00 PM N	o. of Pages: 3
Recorded for : HOLDEN KIDA	NELL HAHN CRAPO
MARY LOU HANSEN	Fee: 16.00
Ex-Officio Recorder Deputy	(A)
Index to: DEED OF DISTRIBUTION	

This area for Recorder's use only.

DEED OF DISTRIBUTION

THIS DEED is made this 2^{et} day of June, 2015, by and between Lori Ann Ringel and Roy Jay Bell, the co-personal representatives of the Estate of Thadmore Mack Bell, deceased, Grantors, and Violet Janiece Bell, a single woman, whose mailing address is 4433 N 4500 W, Tetonia, Idaho 83452, Grantee.

WHEREAS, Lori Ann Ringel and Roy Jay Bell, Grantons, are the duly appointed and acting personal representatives of the Estate of Thadmore Mack Bell, deceased; and

WHEREAS, Violet Janiece Bell, Grantee, is entitled to receive distribution of the property hereafter described in this deed under the terms of the Last Will and Testament of the decedent and pursuant to the provisions of the Idaho Uniform Probate Code;

NOW, THEREFORE, WITNESSETH, that the Grantors, for a valuable consideration, and for the purpose of distributing certain real property from the Estate of Thadmore Mack Bell, deceased, do by these presents hereby distribute, grant, bargain, sell, convey, and confirm unto the Grantee, and to her heirs and assigns forever, an undivided interest in those certain parcels of land, situate, lying and being in Teton County, Idaho, and more particularly described as follows:

Parcel 1:

Part of the North Half Southeast Quarter of Section 6, Township 5 North, Range 45 E.B.M., Teton County, Idaho, being further described as: From the East Quarter Corner of said Section 6, S 00°09' 19" W, 1022.31

feet to the point of beginning, being on the East Section Line of Section 6; Thence S $0^{\circ}09'19''$ W 307.53 feet further along the East Section Line to the Southeast Corner of the North Half Southeast Quarter of said Section 6; Thence N 89°42'56'' W 2649.44 feet along the South Line of the North Half Southeast Quarter to the Southwest Corner of the North Half Southeast Quarter of said Section 6; Thence N 0°03'50''W 294.37 feet along the West Line of the North Half Southeast Quarter to a point; Thence East 2650.57 to the point of beginning.

I - DEED OF DISTRIBUTION Estate of Thadmore Mack Bell Parcel 2:

Part of the North Half Southeast Quarter of Section 6, Township 5 North, Range 45 E.B.M, Teton County, Idaho being further described as:

From the East Quarter corner of said Section 6, S $00^{\circ}09'19''$ W 721.49 feet to the point of beginning, being on the East Section Line; Thence S $0^{\circ}09'19''$ W 300.82 feet further along the East Line of Section 6 to a point; Thence West 2650.57 feet to a point on the West Line of the North Half Southeast Quarter; Thence N $0^{\circ}03'50''$ W 300.82 feet along the West Line of the North Half Southeast Quarter to a point; Thence East 2651.72 feet to the point of beginning.

ALSO TOGETHER with all and singular the tenements, hereditaments, and appurtenances thereunto belonging or in anywise appertaining, the reversion and reversions, remainder and remainders, rents, issues and profits thereof;

SUBJECT to all real property taxes and assessments, all existing patent reservations, easements, rights of way, protective covenants and other matters of record, all applicable zoning ordinances, building codes, laws and regulations, and all encroachments, overlaps, boundary line disputes, claims of easements and other matters that would be disclosed by an accurate survey or inspection of the property.

TO HAVE AND TO HOLD, all and singular the said premises, together with the appurtenances, unto the Grantee, and to her heirs and assigns forever.

Grantee already owns a one-half undivided interest in the above-described property as her one-half of the community property interest; therefore, by virtue of this conveyance, Grantee now owns full interest in the above-described property.

IN WITNESS WHEREOF, the Grantors have hereunto set their hands and seals the day and year first above written.



Fori Can Ringel

Lori Ann Ringel, co-personal representative of the Estate of Thadmore Mack Bell

Roy Jay Bell, co-personal representative of the Estate of Thadmore Mack Bell

2 - DEED OF DISTRIBUTION Estate of Thadmore Mack Bell

STATE OF IDAHO

)ss. County of Bonneville)

)

On the 29^{H} of June, 2015, before me, the undersigned, a notary public, in and for said State, personally appeared Lori Ann Ringel and Roy Jay Bell, known or identified to me to be the persons whose names are subscribed to the within instrument, as copersonal representatives of the Estate of Thadmore Mack Bell, and acknowledged to me that they executed the same as such personal representative.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

Notary Public for Idaho Residing at Idaho Falls

My Commission Expires: 11/12/16



WPDATAREF 18163 Mack Bell Estate Probate closing Deed Distribution house wpd jl

3 - DEED OF DISTRIBUTION Estate of Thadmore Mack Bell

Instrument # 223735 TETON COUNTY, IDAHO 8-30-2012 02:40:00 No. of Pages: 2 Recorded for : AW ENGINEERING MARY LOU HANSEN Fee/15.00 Ex-Officio Recorder Deputy Index to: DEED, WARRANTY

WARRANTY DEED

Warranty deed made this <u>21</u> day of <u>August</u>, 2012 between LOGAN R. and LORI ANN RINGEL, husband and wife, of 11 West 50 South, Driggs, Idaho 83422 and T. MACK BELL and V. JANIECE BELL, husband and wife, of 445 North 450 West, Tetonia, Idaho 83452 referred to as Grantors, and LOGAN R. and LORI ANN RINGEL, husband and wife, of 11 West 50 South, Driggs, Idaho 83422 referred to as Grantees.

Grantors in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, has granted, bargained, and sold, and does hereby grant, bargain, sell and convey, and confirm unto Grantees and their heirs and assigns forever, all the following described real estate situated in Teton County, Idaho:

A PART OF THE N ½ SE ¼ OF SECTION 6, TOWNSHIP 5 NORTH, RANGE 45 EAST, B.M., TETON COUNTY, IDAHO, BEING FURTHER DESCRIBED AS: BEGINNING AT THE EAST ¼ CORNER OF SAID SECTION 6; THENCE S 00°09'19" W, 721.49 FEET ALONG THE EAST LINE OF SECTION 6 TO A POINT; THENCE WEST 2651.72 FEET TO A POINT ON THE WEST LINE OF THE N ½ SE ¼; THENCE WEST 2651.72 FEET TO A POINT ON THE WEST LINE OF THE N ½ SE ¼ TO A POINT; THENCE N 00°03'50" W, 106.22 FEET ALONG THE WEST LINE OF THE N ½ SE ¼ TO A POINT; THENCE N 88°22'00" E, 381.36 FEET TO A POINT; THENCE N 07°11'00" W, 317.32 FEET TO A POINT; THENCE N 88°20'00" E, 118.39 FEET TO A POINT; THENCE N 088°20'00" E, 118.39 FEET TO A POINT; THENCE N 088°20'00" E, 118.39 FEET TO A POINT; THENCE S 89°52'34" E, 2193.93 FEET ALONG THE NORTH LINE OF THE N ½ SE ¼ TO THE POINT OF BEGINNING.

CONTAINS 38.35 ACRES, MORE OR LESS.

SUBJECT TO A 30 FOOT WIDE COUNTY ROAD AND UTILITY EASEMENT ALONG THE MOST WESTERN BOUNDARY OF SAID PROPERTY.

To have and to hold, all and singular the above-described premises together with the appurtenances unto Grantees and their heirs and assigns forever.

And Grantors and their heirs shall and will warrant and by these presents forever defend the premises in the quiet and peaceable possession of Grantees, their heirs, and assigns against Grantors and their heirs and against all and every person and persons whomsoever, lawfully claiming the same.

Grantors have hereunto set their hands on the day and year first above written.

T. MACK BELL

ECE BELL

LOGAN R. RINGE

ri ann

LORI ANN RINGEL

STATE OF

Idaho

Teton

County of

) :SS)

On this day of in the year of 2012, before me, a Notary Public in and for said State, personally appeared T. MACK and V. JANIECE BELL, husband and wife and LOGAN R. and LORI ANN RINGEL, husband and wife, known or identified to me to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

Notary Public

Victor, Idaha Residing at: 01/02/2015

My commission expires:



Instrument # 223736 TETON COUNTY, IDAHO 8-30-2012 02:40:00 No. of Pages: 2 Recorded for : AW ENGINEERING MARY LOU HANSEN Fee: 13:06 Ex-Officio Recorder Deputy Index to: DEED, WARRANTY

WARRANTY DEED

Warranty deed made this <u>21</u> day of <u>August</u> 2012 between ROY J. BELL of 445 North 450 West, Tetonia, Idaho 83452 and T. MACK BELL and V. JANIECE BELL, husband and wife, of 445 North 450 West, Tetonia, Idaho 83452 as Grantors, and ROY J. BELL of 445 North 450 West, Tetonia, Idaho 83452 referred to as Grantee.

Grantors in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, has granted, bargained, and sold, and does hereby grant, bargain, sell and convey, and confirm unto Grantee and his heirs and assigns forever, all the following described real estate situated in Teton County, Idaho:

A PART OF THE N ½ SE ¼ OF SECTION 6, TOWNSHIP 5 NORTH, RANGE 45 EAST, B.M., TETON COUNTY, IDAHO, BEING FURTHER DESCRIBED AS: FROM THE EAST ¼ CORNER OF SAID SECTION 6; THENCE N 89°52'34" W, 2654.49 FEET TO THE CENTER ¼ CORNER OF SAID SECTION 6, THE POINT OF BEGINNING; THENCE S 89°52'34" E, 460.56 FEET ALONG THE NORTH LINE OF THE N ½ SE ¼ TO A POINT; THENCE SOUTH, 290.86 FEET TO A POINT; THENCE S 88°20'00" W, 118.39 FEET TO A POINT; THENCE S 07°11'00" E, 317.32 FEET TO A POINT; THENCE S 88°22'00" W, 381.36 FEET TO A POINT; THENCE S 88°22'00" W, 621.01 FEET ALONG THE WEST LINE OF THE N ½ SE ¼ TO THE CENTER ¼ CORNER, THE POINT OF BEGINNING. CONTAINS 5.77 ACRES, MORE OR LESS.

SUBJECT TO A 30 FOOT WIDE COUNTY ROAD AND UTILITY EASEMENT ALONG THE WESTERN BOUNDARY OF SAID PROPERTY.

To have and to hold, all and singular the above-described premises together with the appurtenances unto Grantee and his heirs and assigns forever.

And Grantors and their heirs shall and will warrant and by these presents forever defend the premises in the quiet and peaceable possession of Grantee, his heirs, and assigns against Grantors and their heirs and against all and every person and persons whomsoever, lawfully claiming the same.

Restriction: The above parcel cannot be further split under the provisions of the Teton County Subdivision Ordinance, Title 9, Chapter 8, Sections 9-8-3B, 9-8-4, and 9-8-5: One Time Only Split of One Parcel of Land, Amended Ordinance September 25, 2007.

Grantors have hereunto set their hands on the day and year first above written.

ROY J. BELL

T. MACK BELL

8.00

V. JANIECE BELL

)

)

:SS

STATE OF

Idaho

Teton

County of

On this <u>Ale</u> day of <u>August</u> in the year of 2012, before me, a Notary Public in and for said State, personally appeared ROY J. BELL, T MACK BELL, & V. JANIECE BELL, known or identified to me to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

Notary Public

Residing at:

Victor, Idaho

My commission expires:

01/02/2015

Attachment No. 4 Power of Attorney Search again

Results (as of 5/4/18)

Luke Hyrum Marchant

Status Active ISB Membership Number 7944 Admittance Date 09/30/2008

Firm Holden, Kidwell, Hahn & Crapo, PLLC Mailing Address PO Box 50130 Idaho Falls, ID 83405

Phone (208) 523-0620 Phone Ext

Fax (208) 523-9518

Email Address Imarchant@holdenlegal.com Website Address www.holdenlegal.com

Need a correction?

Is something not correct? Please use the Address Change Form

The information above is based on the Idaho State Bar records as of the date listed above. To send us an update on your

Attachment No. 7a GIS Maps

WATER RIGHT TRANSER



WATER RIGHT TRANSER



Attachment No. 7b GIS Shapefile

(Will be sent via email upon request from IDWR)

Attachment No. 10 Other



Agriculture

Natural Resources Conservation

Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants Custom Soil Resource Report for Teton Area, Idaho and Wyoming



November 28, 2017

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.so.gov/usda.gov/local/npp?agency-nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal.nrcs/details/soils/contactus// cide=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual solls with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soll behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



	MAPL	EGENÉ)	MAP INFORMATION
Area of In	itarest (AOI)	JF.	Spoil Area	The soll surveys that comprise your AOI were mapped at
	Area of Interest (AOI)	Ę,	Stony Spot	1:24,000.
Soils	Soil Mep Unit Polynoos		Very Stony Spot	Waming: Soil Man may not be yolid at this sector
~	Soll Man Unit Lines	11	Wet Spot	varing, con map may not be valid at this scale.
	Soil Map Unit Prints	Č)	Other	Enlargement of maps beyond the scale of mapping can cause
Special	Point Features		Special Line Features	line placement. The maps do not show the small areas of
(0)	Blowout	Water Fea	tures	contrasting soils that could have been shown at a more detailed
R	Borrow Pit		Streams and Canals	scale.
<u>ست</u> د مند	Clay Snol	Transport	ation	Please rely on the har scale on each man shoot for mon
,AC	Citay Spot	++++	Ralls	measurements.
	Closed Depression	-	Interstate Highways	
X	Gravel Pit		US Roules	Source of Map: Natural Resources Conservation Service
4	Gravelly Spot		Mains Banda	Web Soll Survey URL: Coordinate System: Web Mercator (EBSG-3857)
0	Landfill		Wajor Roads	
Å	Lava Flow		Local Roads	Maps from the Web Soil Survey are based on the Web Mercator projection, which proserves direction and choose but dialecter
J.	Mersh or swamo	Backgroui	Agriel Photosmobu	distance and area. A projection that preserves area, such as the
			Addial Photography	Albers equal-area conic projection, should be used if more
22	Mine of Guarry			accurate calculations of distance or area are required.
0	Miscellaneous Water			This product is generated from the USDA-NRCS codified data as
Э	Perennial Water			of the version date(s) listed below.
1	Rock Outcrop			Spil Survey Area: Taton Area Idaha and Mu
÷	Saline Spol			Survey Area Data: Version 6, Oct 2, 2017
. • •	Sandy Spot			Soil mon units and labeled (as seen all as) (
æ	Severely Eroded Spot			1:50,000 or larger.
÷.	Sinkhole			D-MARKET - 1
\geq	Slide or Slip			Date(s) aenal images were photographed: Sep 24, 2011—Oct 25, 2016
ø	Sodie Spot			
				The orthophoto or other base map on which the soil lines were
				madery displayed on these mans. As a result, some minor
-				shifting of map unit boundaries may be evident

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
13415	Arimo Ioam, 0 to 5 percent slopes	14.6	21.0%
13430	Alpine-St. Anthony complex, 0 to 2 percent slopes	1.4	2.1%
13431	Feltonia-Arimo complex, 0 to 2 percent slopes	53.7	77.0%
Totals for Area of Interest		69.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soll survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic classes rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

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landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a soil series. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into soil phases. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major solls or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.



Teton Area, Idaho and Wyoming

13415-Arimo loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1vggb Elevation: 5,890 to 6,100 feet Mean annual precipitation: 16 to 18 inches Mean annual air temperature: 38 to 44 degrees F Frost-free period: 50 to 90 days Farmland classification: Prime farmland if irrigated

Map Unit Composition

Arimo and similar soils: 75 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arimo

Setting

Landform: Fan remnants, stream terraces Down-slope shape: Linear Across-slope shape: Linear Parent material: Mixed alluvium with loess influence

Typical profile

Ap1 - 0 to 2 inches: loam Ap2 - 2 to 13 inches: loam Bw - 13 to 15 inches: loam Bk1 - 15 to 25 inches: loam Bk2 - 25 to 29 inches: very gravelly sandy loam 2Bkq - 29 to 35 inches: extremely gravelly loamy sand 2C - 35 to 60 inches: extremely gravelly sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 36 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 4c Land capability classification (nonirrigated): 4c Hydrologic Soil Group: B Ecological site: LOAMY 12-16 - Provisional (R013XY001ID) Hydric soil rating: No

13430—Alpine-St. Anthony complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1vghp Elevation: 5,910 to 6,480 feet Mean annual precipitation: 16 to 18 inches Mean annual air temperature: 38 to 44 degrees F Frost-free period: 50 to 90 days Farmland classification: Prime farmland if irrigated

Map Unit Composition

Alpine and similar soils: 50 percent St. anthony and similar soils: 35 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Alpine

Setting

Landform: Fan remnants, stream terraces Down-slope shape: Linear, convex Across-slope shape: Linear, convex Parent material: Mixed alluvium

Typical profile

A1 - 0 to 2 inches: gravelly loam A2 - 2 to 11 inches: very gravelly loam ABk - 11 to 17 inches: extremely gravelly loam Bk - 17 to 25 inches: extremely gravelly sandy loam Bkq - 25 to 31 inches: extremely gravelly loamy sand Bk' - 31 to 35 inches: extremely gravelly loamy sand Bkq' - 35 to 44 inches: extremely gravelly loamy sand Bk1" - 44 to 51 inches: gravelly gravelly loamy sand Bk2" - 51 to 60 inches: gravel

Properties and qualities

Slope: 0 to 2 percent Depth to restrictive feature: More than 80 inches Natural drainage class: Well drained Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum in profile: 75 percent Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Sodium adsorption ratio, maximum in profile: 1.0 Available water storage in profile: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): 4c

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Land capability classification (nonirrigated): 6s Hydrologic Soil Group: B Ecological site: SHALLOW GRAVELLY 12-16 ARTRV/PSSPS (R013XY004ID) Hydric soil rating: No

Description of St. Anthony

Setting

Landform: Swales on fan remnants Down-slope shape: Concave, linear, convex Across-slope shape: Linear, concave Parent material: Gravelly mixed alluvium

Typical profile

A1 - 0 to 7 inches: gravelly loarn A2 - 7 to 12 inches: gravelly loarn Bw - 12 to 23 inches: very gravelly sandy loarn BC - 23 to 47 inches: extremely gravelly coarse sandy loarn 2C - 47 to 60 inches: extremely gravelly loarny sand **Properties and qualities** Slope: 0 to 2 percent Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): 4c Land capability classification (nonirrigated): 4s Hydrologic Soil Group: B Ecological site: SHALLOW GRAVELLY 12-16 ARTRV/PSSPS (R013XY004ID) Hydric soil rating: No

13431-Feltonia-Arimo complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1vlkd Elevation: 5,950 to 6,240 feet Mean annual precipitation: 16 to 18 inches Mean annual air temperature: 38 to 44 degrees F Frost-free period: 50 to 90 days Farmland classification: Prime farmland if irrigated

Map Unit Composition

Feltonia and similar soils: 75 percent Arimo and similar soils: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Feltonia

Setting

Landform: Fan remnants, stream terraces Down-slope shape: Linear Across-slope shape: Linear, convex Parent material: Mixed alluvium with loess influence

Typical profile

 $\begin{array}{l} \mbox{Ap - 0 to 6 inches: loam} \\ \mbox{A - 6 to 12 inches: loam} \\ \mbox{Bw1 - 12 to 20 inches: loam} \\ \mbox{Bw2 - 20 to 27 inches: loam} \\ \mbox{Bw1 - 27 to 36 inches: loam} \\ \mbox{Bk1 - 27 to 36 inches: very gravelly loam} \\ \mbox{Bk2 - 36 to 49 inches: very gravelly loam} \\ \mbox{2Bk3 - 49 to 60 inches: very gravelly loamy sand} \end{array}$

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 35 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 4c Land capability classification (nonirrigated): 4c Hydrologic Soil Group: C Ecological site: LOAMY 12-16 - Provisional (R013XY001ID) Hydric soil rating: No

Description of Arimo

Setting

Landform: Fan remnants, stream terraces Down-slope shape: Linear Across-slope shape: Linear Parent material: Mixed alluvium with loess influence

Typical profile

Ap1 - 0 to 2 inches: loam Ap2 - 2 to 13 inches: loam Bw - 13 to 15 inches: loam

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Bk1 - 15 to 25 inches: loam Bk2 - 25 to 29 inches: very gravelly sandy loam 2Bkq - 29 to 35 inches: extremely gravelly loamy sand 2C - 35 to 60 inches: extremely gravelly sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 36 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 4c Land capability classification (nonirrigated): 4c Hydrologic Soil Group: B Ecological site: LOAMY 12-16 - Provisional (R013XY001ID) Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Physical Properties

Soil Physical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

Available Water Capacity

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in centimeters of water per centimeter of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure, with corrections for salinity and rock fragments. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. It is not an estimate of the quantity of water actually available to plants at any given time.

Available water supply (AWS) is computed as AWC times the thickness of the soil. For example, if AWC is 0.15 cm/cm, the available water supply for 25 centimeters of soil would be 0.15×25 , or 3.75 centimeters of water.

For each soll layer, AWC is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soll component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.



MAP LEGEND

MAP INFORMATION

Area of Interest (AOI) Background The soil surveys that comprise your AOI were mapped at 1:24,000. Area of Interest (AOI) Ma. Aerial Photography elioe Warning: Soll Map may not be valid at this scale. Soll Rating Polygons <= 0.04 Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil > 0.04 and <= 0.08 > 0.08 and <= 0.13 line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed Not rated or not available scale. Soil Rating Lines <= 0.04 Please rely on the bar scale on each map sheet for map measurements, > 0.04 and <= 0.08</p> → > 0.08 and <= 0.13 Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) - . Not rated or not available Soil Rating Points 🖬 <= 0.04 Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the > 0.04 and <= 0.08 > 0.08 and <= 0.13 Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. Not rated or not available This product is generated from the USDA-NRCS certified data as Water Features of the version date(s) listed below. Streams and Canals Transportation Soll Survey Area: Teton Area, Idaho and Wyoming Survey Area Data: Version 6, Oct 2, 2017 Rails ----Interstate Highways ~ Soil map units are labeled (as space allows) for map scales US Routes 1:50,000 or larger. 140,00 Møjor Roads Dale(s) aerial images were pholographed: Sep 24, 2011-Oct Local Roads 25, 2016 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shilling of map unit boundaries may be evident.

Table—Available Water Capacity

Map unit symbol	Map unit name	Rating (centimeters per centimeter)	Acres in AOI	Percent of AOI
13415	Arimo loam, 0 to 5 percent slopes	0.08	14.6	21.0%
13430	Alpine-St. Anthony complex, 0 to 2 percent slopes	0.04	1.4	2.1%
13431	Feltonia-Arlmo complex, 0 to 2 percent slopes	0.13	53.7	77.0%
Totals for Area of Interest		69.8	100.0%	

Rating Options—Available Water Capacity

Units of Measure: centimeters per centimeter Aggregation Method: Dominant Component Component Percent Cutoff: None Specified Tie-break Rule: Higher Interpret Nulls as Zero: No Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average) Top Depth: 0 Bottom Depth: 60 Units of Measure: Inches

Available Water Capacity

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in centimeters of water per centimeter of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure, with corrections for salinity and rock fragments. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. It is not an estimate of the quantity of water actually available to plants at any given time.

Available water supply (AWS) is computed as AWC times the thickness of the soil. For example, if AWC is 0.15 cm/cm, the available water supply for 25 centimeters of soil would be 0.15 x 25, or 3.75 centimeters of water.

For each soil layer, AWC is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil



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component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

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MAP LEGEND

MAP LEGEND	MAP INFORMATION
Area of Interest (AOI)	The soil surveys that comprise your AOI were mapped at 1:24,000.
Soils Soil Rating Polygons Soil Rating Polygons Soli Rating Lines	Warning: Soll Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale. Please rely on the bar scale on each map sheet for map
 Not rated or not available Soil Rating Points <= 0.06 > 0.06 and <= 0.17 Not rated or not available 	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Maps from the Web Soil Survey are based on the Web Mercator
Water Features Streams and Canals Transportation ↔ Rails ← Interstate Highways	projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
الله US Routes Major Roads Locat Roads Background سی Aerial Photography	Soil Survey Area: Teton Area, Idaho and Wyoming Survey Area Data: Version 6, Oct 2, 2017 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.
	25, 2016 The orthophoto or other base map on which the soil lines were compiled and diglized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Available Water Capacity

Map unit symbol	Map unit name	Rating (centimeters per centimeter)	Acres in AOI	Percent of AOI
13415	Arimo loam, 0 to 5 percent slopes	0.17	14.6	21.0%
13430	Alpine-St. Anthony complex, 0 to 2 percent slopes	0.06	1.4	2.1%
13431	Feltonia Arimo complex, 0 to 2 percent slopes	0.17	53.7	77.0%
Totals for Area of Interest			69.8	100.0%

Rating Options—Available Water Capacity

Units of Measure: centimeters per centimeter

Aggregation Method: Dominant Component Component Percent Cutoff: None Specified Tie-break Rule: Higher Interpret Nulls as Zero: No Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average) Top Depth: 0 Bottom Depth: 24 Units of Measure: Inches

Available Water Storage

Available water storage (AWS) is the total volume of water (in centimeters) that should be available to plants when the soil, inclusive of rock fragments, is at field capacity. It is commonly estimated as the amount of water held between field capacity and the wilting point, with corrections for salinity, rock fragments, and rooting depth. AWS is reported as a single value (in centimeters) of water for the specified depth of the soil. AWS is calculated as the available water capacity times the thickness of each soil horizon to a specified depth.

For each soll layer, available water capacity, used in the computation of AWS, is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For the derivation of AWS, only the representative value for available water capacity is used.

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The available water storage for each map unit component is computed as described above and then aggregated to a single value for the map unit by the process described below.

A map unit typically consists of one or more "components." A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated (e.g., available water storage), the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the process is to derive a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for the map units can be generated. Aggregation is needed because map units rather than components are delineated on the soil maps.

The composition of each component in a map unit is recorded as a percentage. A composition of 60 indicates that the component typically makes up approximately 60 percent of the map unit.

For the available water storage, when a weighted average of all component values is computed, percent composition is the weighting factor.



MAP LEGEND		MAP INFORMATION
Area of Interest (AOI) Area of Interest (AOI)	Background Aerial Photography	The soil surveys that comprise your AOI were mapped at 1:24,000.
Soils		
Soil Rating Polygons		Warning: Soil Map may not be valid at this scale.
<= 6.96		
> 6.96 and <= 12.52		misunderstanding of the detail of mapping and accuracy of soll
> 12.52 and <= 18.12		line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed
Nol rated or not available	Ð	scale.
Soil Rating Lines	1624	
<= 6.96		Please rely on the bar scale on each map sheet for map
> 6.96 and <= 12.52		measurements.
> 12.52 and <= 18.12		Source of Map: Natural Resources Conservation Service
 Not rated or not available 		Web Soil Survey URL: Coordinate System: Web Mercator (EBSC-3957)
Soll Rating Points		
= 6.96		Maps from the Web Soil Survey are based on the Web Mercator
> 6.96 and <= 12.52		projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the
> 12.52 and <= 18.12		Albers equal-area conic projection, should be used if more
Not rated or not available		accurate calculations of distance of area are required.
Water Features		This product is generated from the USDA-NRCS certified data as
Streams and Canals		of the version date(s) listed below.
Transportation		Soll Survey Area: Teton Area, Idaho and Wyoming
+++ Raits		Survey Area Data: Version 6, Oct 2, 2017
nterstate Highways		Soil man units are labeled (as source allowe) for mus cooles
US Routes		1:50,000 or larger,
Major Roads		
Local Roads		25, 2016 Sep 24, 2011—Oct
		The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Available Water Storage

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
13415	Arimo loam, 0 to 5 percent slopes	12.52	14.6	21.0%
13430	Alpine-St. Anthony complex, 0 to 2 percent slopes	6.96	1.4	2.1%
13431	Feltonia-Arimo complex, 0 to 2 percent slopes	18.12	53.7	77.0%
Totals for Area of Interest			69.8	100.0%

Rating Options---Available Water Storage

Units of Measure: centimeters Aggregation Method: Weighted Average Component Percent Cutoff: None Specified Tie-break Rule: Higher Interpret Nulls as Zero: No Layer Options (Horizon Aggregation Method): Depth Range (Weighted Sum) Top Depth: 0 Bottom Depth: 60 Units of Measure: Inches

Available Water Storage

Available water storage (AWS) is the total volume of water (in centimeters) that should be available to plants when the soil, inclusive of rock fragments, is at field capacity. It is commonly estimated as the amount of water held between field capacity and the wilting point, with corrections for salinity, rock fragments, and rooting depth. AWS is reported as a single value (in centimeters) of water for the specified depth of the soil. AWS is calculated as the available water capacity times the thickness of each soil horizon to a specified depth.

For each soil layer, available water capacity, used in the computation of AWS, is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For the derivation of AWS, only the representative value for available water capacity is used.

The available water storage for each map unit component is computed as described above and then aggregated to a single value for the map unit by the process described below.



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A map unit typically consists of one or more "components." A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated (e.g., available water storage), the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the process is to derive a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for the map units can be generated. Aggregation is needed because map units rather than components are delineated on the soil maps.

The composition of each component in a map unit is recorded as a percentage. A composition of 60 indicates that the component typically makes up approximately 60 percent of the map unit.

For the available water storage, when a weighted average of all component values is computed, percent composition is the weighting factor.



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MAP LEGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interest (AOI) Solts	The soll surveys that comprise your AOI were mapped at 1:24,000.
Soil Rating Polygons C 4.84 Soil Rating Constant Soil Rating Lines	Warning: Soli Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soli line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.
 < 4.84 > 4.84 and <= 10.37 Not reted or not available 	Please rely on the bar scale on each map sheet for map measurements.
Soll Rating Points	Source of Map: Natural Resources Conservation Service Web Soll Survey URL: Coordinate System: Web Mercator (EPSG:3857)
Not rated or not available Water Features Streams and Canals	Maps from the Web Soil Survey are based on the Web Marcator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more
Transportation ↔ Raile ✔ Interstate Highways	accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
, 🥪 US Routes Mejor Roatis Local Roads	Soil Survey Area: Teton Area, Idaho and Wyoming Survey Area Data: Version 6, Oct 2, 2017 Soil man units are labeled (as soace allows) for man scales
Beckground Aerial Pholography	1:50,000 or larger. Dale(s) aerial images were photographed: Sep 24, 2011—Oct 25, 2016
	The orthophoto or other base map on which the soll lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Available Water Storage

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
13415	Arimo toam, 0 to 5 percent slopes	10.37	14_6	21.0%
13430	Alpine-SL Anthony complex, 0 to 2 percent slopes	4.84	1.4	2.1%
13431	Fellonia-Arimo complex, 0 to 2 percent slopes	10.37	53.7	77.0%
Totals for Area of Interest		69.8	100.0%	

Rating Options-Available Water Storage

Units of Measure: centimeters

Aggregation Method: Weighted Average

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Sum)

Top Depth: 0

Bottom Depth: 24

Units of Measure: Inches

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