

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-13935
Exam Date: 07/03/2019

1. Current Owner:

BEVERLY N GULLEY PO BOX 143 EMMETT ID 83617 (deceased)

2. Accompanied by:

Terry Sheldon, CEO

TJT INC

P.O. Box 278

Emmett, ID 83617

Relationship: present owner of Beverly Gulley's former home

Valerie Wilson

1302 Washington

P.O. Box 611

Emmett, ID 83617

Relationship: Realtor for Terry Sheldon

Robert and Melodee McFadden

8450 Main Street

Letha, ID 83636

Relationship: present owner of the parcel adjacent to Beverly Gulley's former home (split off from original parcel)

Bonnie Diedrich

1725 Boise Avenue

Letha, ID 83636

Relationship: present owner of land on which Beverly Gulley kept her stock (split off from original parcel)

Dan Nelson, IDWR

3. SOURCE: GROUND WATER

Method of Determination: Two artesian wells were found during the field exam. No surface sources were present.

THIS PERMIT NEEDS TO BE SPLIT AS IT CONSISTS OF TWO UNCONNECTED SYSTEMS AND SEPARATE OWNERS. Please read Narrative section on page 3 before continuing, for a more complete understanding.

B. OVERLAP REVIEW**1. Other water rights with the same place of use:****YES Overlap**

Water Right No.	Source	Purpose of Use	Basis
Multiple Lake Reservoir Company rights	Fall Creek	Irrigation from storage, irrigation storage	
Multiple Letha Irrigation & Water Company rights	Payette River	Irrigation from storage, irrigation storage	

Comments: There are multiple irrigation organization rights overlapping the place of use, but there are no shares available to this property.

2. Other water rights with the same point of diversion:**NO Overlap**

Water Right No.	Source	Purpose of Use	Basis

Comments: No other rights use the same point of diversion.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

North property: GROUND WATER SW¼ SW¼, Sec. 36, Twp 07N, Rge 03W, B.M. GEM County

South property: GROUND WATER SW¼ SW¼, Sec. 36, Twp 07N, Rge 03W, B.M. GEM County

Method of Determination: GPS, PLSS

2. PLACE OF USE: Split by system and property owners.

North property: Diedrich (Draft WR # 65-23842)

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N	03W	36											1.5						1.5
													S						

South property: TJT INC (Permit 65-13935), McFarland (Draft WR # 65-23841)

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N	03W	36											1.6						1.6
													0.9						0.9

Total Acres: 4.0

Acres after splitting total the permitted amount. Please see splits charts in the Narrative section of this report.

Method of Determination: Field exam, aerial imagery, parcels, PLSS

3. SUPPORTING DOCUMENTS:

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

X Indicate weir size/pipe as applicable.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be

X 1:24,000 or greater.

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

X Photo of Diversion and System Attached

4. DIVERSION PUMPS

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
PODID 934320 (NORTH WELL)		1		Unknown	
PODID 934318 (SOUTH WELL)	Century	3/4		Goulds	

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
psi gage (NORTH WELL)	Inline	WIKA				
psi gage (SOUTH WELL)	handheld					

2. Measurements:

NORTH WELL: Nozzle pressure 52 psi.

SOUTH WELL: Static artesian well pressure = 38 psi. Pressure tank 46 psi.

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method:

NORTH SYSTEM

The system was running during the field exam. It consists of 3 moveable sprinklers connected to the well with hose. Two of the sprinklers have a 3/16" and a 1/8" nozzle. The third sprinkler has one 3/16" nozzle. The pressure coming from the nozzles was measured at 52 psi. The Flow Rate Calculator Summary (attached) indicates a combined output of .06 cfs. We found 1.5 acres irrigated which is allowed to be irrigated at 0.03 cfs as per Admin Memo #17.

IRRIGATION: 1.5 acres x 0.03 cfs = 0.045 cfs (rounded up to 0.05)

STOCKWATER: .02 cfs for 10 head

TOTAL: 0.07 cfs

SOUTH SYSTEM

The system was not running during the field exam so we calculated a theoretical (attached). An artesian pressure of 38 psi (88 ft of head) was measured without the pump running. We assume that the pressure for the sprinklers will be between 40 and 60 psi since there is a pressure tank and a pressure on/off valve for the home attached to the well. Standard on/off pressures for a domestic well are 40 to 60 psi. Therefore, we used an average pressure of 50 psi to determine the pump flow rate. The pump has a 3/4 hp motor. The diversion rate of .17 cfs (75 gpm) seems reasonable for this system. We found 2.7 acres irrigated (1.6 for Beverly Gulley, 0.9 for McFadden) which is allowed to be irrigated at 0.03 cfs as per Admin Memo #17.

The 2.5 acres on the south side will be distributed as follows:

Beverly Gulley: 1.6 acres x 0.03 cfs = 0.045 cfs (rounded up to 0.05 cfs)

McFadden: 0.9 acres x 0.03 cfs = 0.027 cfs (rounded down to 0.02 cfs).

TOTAL: 0.07 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

NORTH SYSTEM

$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.5 \times 4.5 = 6.75$

$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05 \times 260 \times 1.9835 = 25.8$

$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = \mathbf{6.8 \text{ AF}}$

SOUTH SYSTEM

$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = (1.6 + 0.9) \times 4.5 = 11.25$

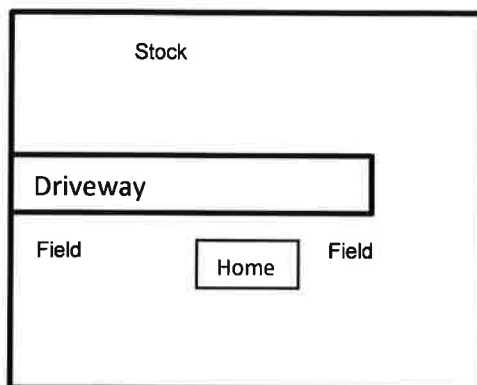
$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.07 \times 260 \times 1.9835 = 36.1$

$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = \mathbf{11.3 \text{ AF}}$

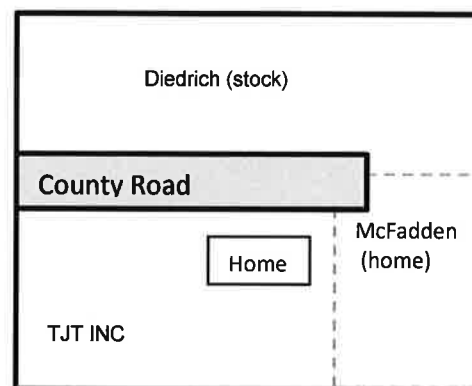
2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

This permit authorizes the diversion of .12 cfs from groundwater to irrigate 4 acres, and .02 cfs of groundwater for stock water for 10 head of beef cattle. Proof of BU was submitted by Beverly Gulley on March 7, 2001. Since that time, the property was subdivided and sold. The subdivision looks approximately like this:



Original (owned by Beverly Gulley)



Current (3 owners)

The field exam was completed on July 3, 2019. I was accompanied by Dan Nelson. We determined that the NORTH WELL (on Bonnie Diedrich property) and the SOUTH WELL (on TJT INC property) are separate systems. The NORTH WELL has never irrigated the land to the south of the dividing road (TJT INC property and McFarland property). The SOUTH WELL has never irrigated the land to the north of the dividing road (Bonnie Diedrich property.) See attached diagram. The NORTH SYSTEM serves only the Bonnie Diedrich property which is pasture and shelter for 10 head of cattle. The SOUTH SYSTEM irrigates only the TJT INC property and the McFadden property. A change of ownership with the required documentation was received from Bonnie Diedrich and Bob McFadden. Bob McFadden also filed a Relinquishment of Water Right for his share of this permit and will pursue his own permit. TJT INC failed to file the Change of Ownership form with the required documentation showing proof of ownership of the entire 1.6 acres.

THIS PERMIT CONSISTS OF TWO SEPARATE SYSTEMS AND INVOLVES 3 PROPERTY OWNERS. Therefore, this permit has been split into 3 draft licenses as described in the table below:

Portion of Split	WR#	Owner	Acres	cfs	af	use	Notes
Northside	65-23842 (New)	Diedrich	1.5	0.05	6.8	Irrigation	Stockwater Rate determined based on 10 head of cattle from Administrative Processing Memorandum #3
			N/A	0.02	0.2	Stockwater	
Southside	65-13935 (Original)	TJT Inc.	1.6	0.05	7.2	Irrigation	Original home site.
	65-23841 (New)	McFadden	0.9	0.02	4.1	Irrigation	Diversion located on TJT Inc. property.
Totals			4	0.14	18.3		Total Diversion Rate and Volume match the permitted amount when added together.

Draft license # 65-13935 now consists of 1.6 acres rather than 4.0. The remaining acres ($4.0 - 1.6 = 2.4$) are divided between draft licenses # 65-23841 and 65-23842.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Diversion	
IRRIGATION	3/01 to 11/15	0.05 CFS	65-13935 (Gulley) TJT INC property
IRRIGATION	3/01 to 11/15	0.02 CFS	65-23841 (McFadden)
IRRIGATION	3/01 to 11/15	0.05 CFS	65-23842 (Diedrich)
STOCKWATER	1/01 to 12/31	0.02 CFS	65-23842 (Diedrich)

Totals: 0.14 CFS 18.3 AF

2. Recommended Amendments: SPLIT PERMIT

 X Change P.D. as reflected above Add P.D. as reflected above None

 X Change P.U. as reflected above Add P.U. as reflected above None

I. AUTHENTICATION Paula Dillon - GIS Analyst II

Field Examiner's Name

Paula Dillon
Paula Dillon, GIS Analyst II

Date

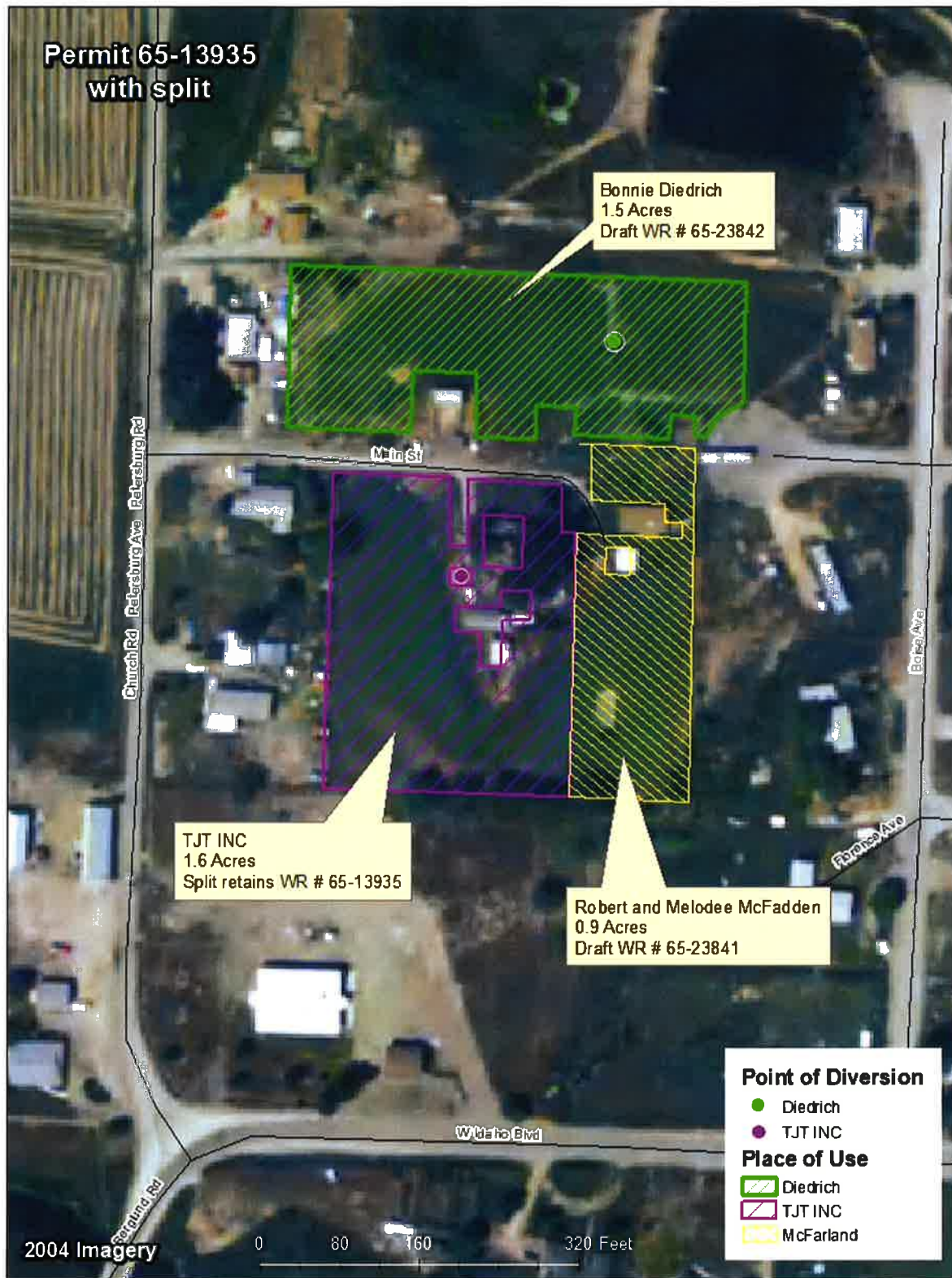
12/24/19

Reviewer

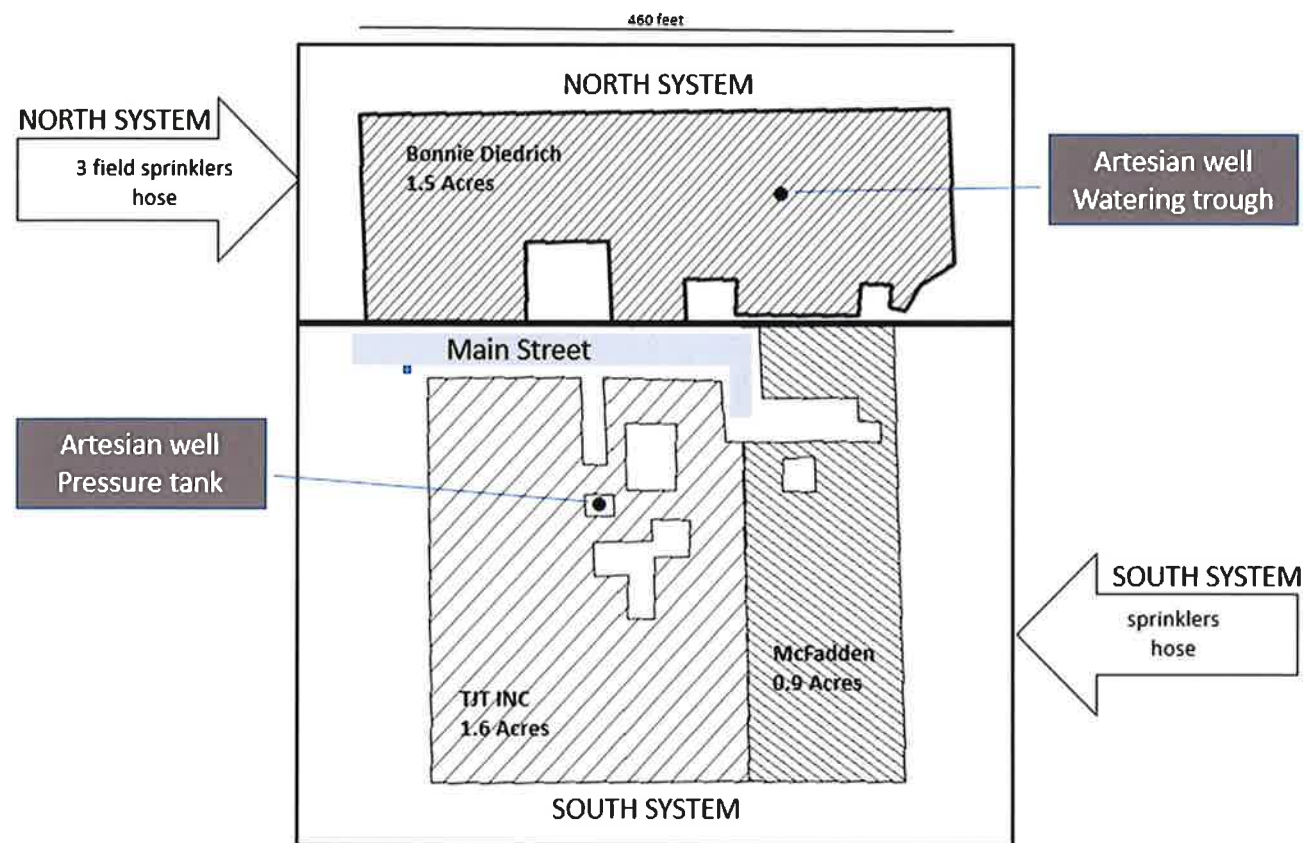
Daniel Nelson
Dan Nelson, Water Right Analyst III

Date

12-24-19



Delivery System Diagram



Flow Rate Calculator Summary

Sprinkler Nozzle Flow Rate Calculator

NORTH WELL

Summary of Methodology

This spreadsheet tool supports the estimation of the flow rate from a sprinkler nozzle or series of sprinkler nozzles. The user can specify up to three different sprinkler nozzle types, and the total number of each of the three types of nozzles. The equation used to calculate the flow rate(s) is a simplified form of the Bernoulli Equation, which along with several supporting relationships, were developed from Hagan et. al. 1987, Jensen 1983, and Lindeburg 1999.

Summary of User Input

	Nozzle Type 1	Nozzle Type 2	Nozzle Type 3
C Value:	1	1	1
Nozzle Press.:	40	40	0
Nozzle Diam.:	0.1875	0.125	0
No. of Nozzles:	3	2	0

Summary of Results and Output

Type 1 Nozzle(s):	0.04	cfs
Type 2 Nozzle(s):	0.01	cfs
Type 3 Nozzle(s):	0.00	cfs
Combined:	0.06	cfs

References

Hagan, R.M., Holte, H.R., & Emlinger, T.W., Irrigation of Agricultural Lands, Agronomy No. 11, 5th Printing, American Society of Agronomy, Madison, WI, USA, 1987.
Jensen, M.E., Design and Operation of Farm Irrigation Systems, Revised Printing, American Society of Agricultural Engineers, 1983.
Lindeburg, Michael R., Civil Engineering Reference Manual, Professional Publications, Belmont, CA, 1999.

Applicant: Name

Date: 7/3/2019

WR Number: 65-13935

Notes: Calculation for North System.

Three sprinklers are typically run:
Sprinklers 1 and 2 have a 3/16" nozzle and a 1/8" nozzle.
Sprinkler 3 has one 3/16" nozzle.

THEORETICAL HORSEPOWER EQUATION WORKSHEET (p. 1/2)

SOUTH WELL

Water Right No.: 65-13935

Reviewer: Paula DeBon & Dan Nelson

Date of Review: 7/8/2019

P/D No.:

PUMP HORSEPOWER
BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

RATE OF FLOW (cfs):

934318
0.75
0
-68
50
0.17
75 gpm

The above calculates the formula =

$$Q = \frac{0.8 \cdot (\text{Efficiency}) \cdot \text{hp}}{\text{depth to water} + 2.31 \cdot \text{psi} \cdot \text{friction}}$$

Assumptions:

80 efficiency.

No friction

Examiner's Notes:

During the field exam we measured an artesian pressure on the well of 38 psi (88 ft of head) without the pump running. We assume that the pressure for the sprinklers will be between 40 and 60 psi since there is a pressure tank and a pressure on/off valve for the home attached to the well. Standard on/off pressures for a domestic well are 40 to 60 psi. Therefore, we used an average pressure of 50 psi to determine the pump flow rate. The pump has a 3/4 hp motor. The diversion rate of .17 cfs (75 gpm) seems reasonable for this system.

Photos

NORTH SYSTEM



Well and hose distribution system.



Watering trough next to well.



Two sprinklers on east end.



Sprinkler on west end, cattle and feed shelter.



Cattle and feed shelter, gates, irrigated field.

SOUTH SYSTEM



Well and pump house



Well, pump and pressure tank



Pressure gage between pump and pressure tank.



Pump specifications.



Pressure tank with pump running = 46 psi



TJT INC property looking north to the Diedrich property.



NW corner of TJT INC property looking SE toward field and home.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

RECEIVED

JUL 11 2019

DEPARTMENT OF
WATER RESOURCES

Notice of Change in Water Right Ownership

1. List the numbers of all water rights and/or adjudication claim records to be changed. If you only acquired a portion of the water right or adjudication claim, check "Yes" in the "Split?" column.

Water Right/Claim No.	Split?	Water Right/Claim No.	Split?	Water Right/Claim No.	Split?
65-13935	Yes ☐		Yes ☐		Yes ☐
65-13935, 65-23841	Yes ☐		Yes ☐		Yes ☐
65-23842	Yes ☐		Yes ☐		Yes ☐
	Yes ☐		Yes ☐		Yes ☐
	Yes ☐		Yes ☐		Yes ☐

2. Previous Owner's Name: Beverly Guley

Name of current water right holder/claimant

3. New Owner(s)/Claimant(s): BONNIE K. DIEDRICH

New owner(s) as listed on the conveyance document

Name connector ☐ and ☐ or ☐ and/or1725 BOISE AVELethaID83636

Mailing address

City

State

ZIP

208-989-6046

Telephone

Email

4. If the water rights and/or adjudication claims were split, how did the division occur?
- ☐ The water rights or claims were divided as specifically identified in a deed, contract, or other conveyance document.
- ☐ The water rights or claims were divided proportionately based on the portion of their place(s) of use acquired by the new owner.
5. Date you acquired the water rights and/or claims listed above: 7/14
6. If the water right described herein has been rented from the Water Supply Bank, rental proceeds will be disbursed in the following manner regardless of any arrangements between the buyer(s) and seller(s) to the contrary:
- Rental payments will go to the lessor(s) of record at the beginning of the rental season.
 - If a change in ownership is processed by the Department during a rental season, rental payment will be made to the person or entity who is the lessor of record at the beginning of that rental season.
 - New lessor(s) of record will receive payment after the following rental season.
7. This form must be signed and submitted with the following **REQUIRED** items:
- A copy of the conveyance document – warranty deed, quitclaim deed, court decree, contract of sale, etc. The conveyance document must include a legal description of the property or description of the water right(s) if no land is conveyed.
 - Plat map, survey map or aerial photograph which clearly shows the place of use and point of diversion for each water right and/or claim listed above (if necessary to clarify division of water rights or complex property descriptions).
 - Filing fee (see instructions for further explanation):
 - \$25 per undivided water right.
 - \$100 per split water right.
 - No fee is required for pending adjudication claims.

8. Signature: Bonnie K. Diedrich

Signature of new owner/claimant

Title, if applicable

Date 7/6/19

Signature: _____

Signature of new owner/claimant

Title, if applicable

Date

For IDWR Office Use Only:

Received by [Signature]Date 7/11/19Receipt No. C101188Receipt Amt. 25

Approved by _____

Processed by _____

Date _____

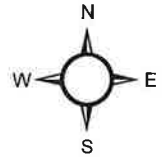
GEM COUNTY

Legend

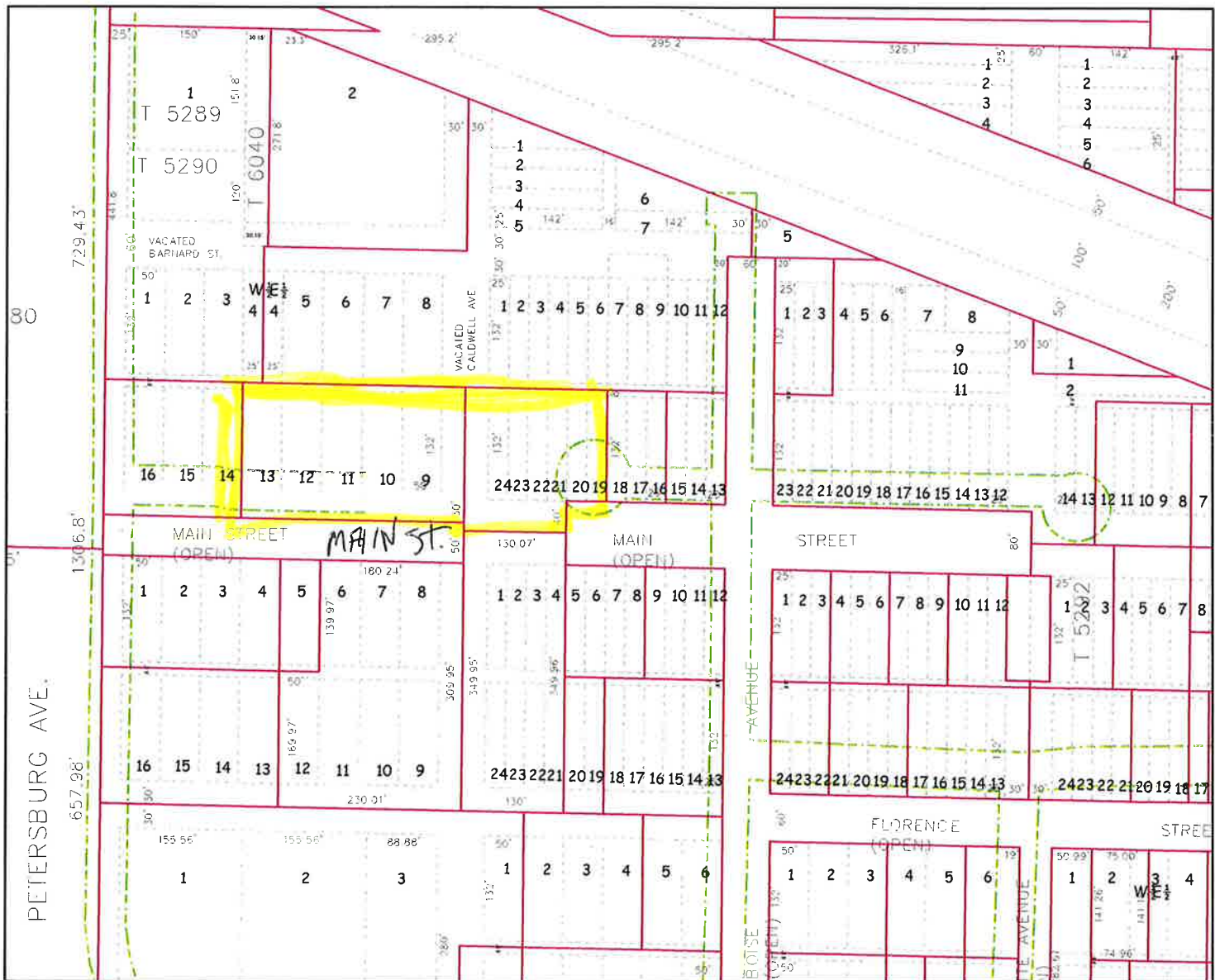
- Emmett_School_District_221
- Existing Mosquito Abatement District Boundary
- Parcels
- paved road
- gravel road

*FRIEDRICH
1725 Boise Ave
Letta, 83636*

*Property on Main St
Letta, Id*



Section 25 in Township 7 North, Range 2 West, and
the West ½ of Section 30, Township 7 North, Range 1 West
Gem County, Idaho
effective 1/1/2019





Pioneer Title Co.
GOING BEYOND

1500 S. Washington Ave., Ste. B
Emmett, ID 83617

ELECTRONICALLY RECORDED-DO NOT
REMOVE THE COUNTY STAMPED FIRST
PAGE AS IT IS NOW INCORPORATED AS
PART OF THE ORIGINAL DOCUMENT

File No. 555065



PERSONAL REPRESENTATIVE'S DEED

This Personal Representative's Deed is made July 18, 2014 by Grantor, John D. Gulley, Personal Representative for the Estate of Beverly Nett Gulley, deceased, being the duly qualified personal representative of such Estate filed in Gem County, State of ID Probate No. CV2012-296, and does for valuable consideration, hereby sell and convey to Bonnie Diedrich-Houston a married woman as her sole and separate property, Grantee, whose address is P.O. Box 1 1725 Boise Ave. Letha, ID 83636 the following described real property situated in Gem County, Idaho:

See Exhibit A attached hereto and made a part hereof.

together with all appurtenances pertaining thereto.

Estate of Beverly Nett Gulley

John D. Gulley
John D. Gulley, Personal Representative
State of N.D., County of McKenzie

On this 29th day of July in the year of 2014, before me, the undersigned, a Notary Public in and for said State, personally appeared John D. Gulley, Personal Representative, known or identified to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same as such Personal Representative.

Brenda L. Berquist
Residing at: Wattford City, ND
Commission Expires: Nov. 2, 2018

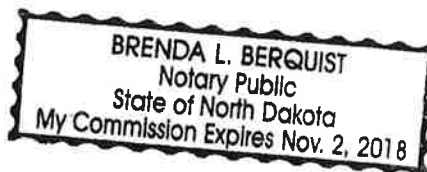


EXHIBIT A

Parcel I:

Lots 19 through 24 in Block 12 of Letha Townsite, together with adjacent vacated streets and alleys, according to the official plat thereof, filed in Book 1 of Plats at Page(s) 21, Records of Gem County, Idaho.

Parcel II:

Lots 9 through 13 in Block 13 of Letha Townsite, together with adjacent vacated streets and alleys, according to the official plat thereof, filed in Book 1 of Plats at Page(s) 21, Records of Gem County, Idaho.

GEM COUNTY ASSESSOR
HOLLIE ANN STRANG
415 E MAIN ST, STE 201
EMMETT, ID 83617

2019
ASSESSMENT NOTICE
GEM COUNTY

THIS IS NOT A BILL.
DO NOT PAY.

5/16/2019

PARCEL DESCRIPTION

07N 03W Sec 36 Letha Townsite Sub Lot
09,10,11,12,13 Blk 13, vac street, alley

Annual - Real Property

For any questions, please notify the Assessor's Office immediately

Assessor's Phone Number: 208-365-2982

PARCEL ADDRESS:

Auto



DIEDRICH BONNIE K
1725 BOISE AVE
LETHA ID 83636-7710

Appeals of your property value must be filed
in writing, on a form provided by the County, by:

6/24/2019

Tax Code Area: TAG 014-0000

Parcel Number: RPL7050013009B

RP00185204

The Gem County Treasurer recently sent out courtesy Property Tax reminders.

ASSESSED VALUE OF YOUR PROPERTY			
CURRENT CATEGORY AND DESCRIPTION	LOTS/ACRES	LAST YEAR'S VALUE	CURRENT YEAR'S VALUE
02 Irr pasture 32 Non-res imp on 1-12,15	1.0930	1,467 960	1,555 960
SUBTOTAL:	1.0930	2,427	2,515
LESS EXEMPTION:		0	0
NET TAXABLE PROPERTY VALUE:	1.0930	2,427	2,515
These values may not include personal property values. Taxes are based on the values shown on this Notice and on the Budgets of the taxing districts			

Please call 208-365-3272 with TAX questions.

BUDGET HEARING INFORMATION			
TAXING DISTRICTS		PHONE NUMBER	DATE OF PUBLIC BUDGET HEARING
0020 COUNTY 9020 SCHOOL #221 9021 SCH BOND DEBT 9023 SCH SUPPLM 9024 SCHOOL EMERGENCY LEVY 9060 COUNTY FIRE #1 9070 MOSQUITO DIST.		208-365-4561 208-365-6301 208-365-6301 208-365-6301 208-365-6301 208-365-2012 208-365-5628	AUGUST 26, 2019 JUNE 12, 2019 JUNE 12, 2019 JUNE 12, 2019 JUNE 12, 2019 AUGUST 8, 2019 AUGUST 20, 2019

THIS IS NOT A BILL. DO NOT PAY.

GEM COUNTY ASSESSOR
HOLLIE ANN STRANG
415 E MAIN ST, STE 201
EMMETT, ID 83617

2019
ASSESSMENT NOTICE
GEM COUNTY

THIS IS NOT A BILL.
DO NOT PAY.

5/16/2019

PARCEL DESCRIPTION

07N 03W Sec 36 Letha Townsite Sub Lot
19,20,21,22,23,24 Blk 12, vac street, alley

Annual - Real Property

For any questions, please notify the Assessor's Office immediately

Assessor's Phone Number: 208-365-2982

PARCEL ADDRESS:

Auto



DIEDRICH BONNIE K
1725 BOISE AVE
LETHA ID 83636-7710

Appeals of your property value must be filed
in writing, on a form provided by the County, by:

6/24/2019

Tax Code Area: TAG 014-0000

Parcel Number: RPL7050012019A

RP00183021

The Gem County Treasurer recently sent out courtesy Property Tax reminders.

ASSESSED VALUE OF YOUR PROPERTY			
CURRENT CATEGORY AND DESCRIPTION	LOTS/ACRES	LAST YEAR'S VALUE	CURRENT YEAR'S VALUE
02 Irr pasture 10H Homesite	0.6980	937 2,900	993 8,000
SUBTOTAL:	0.6980	3,837	8,993
LESS EXEMPTION:		0	0
NET TAXABLE PROPERTY VALUE:	0.6980	3,837	8,993
These values may not include personal property values. Taxes are based on the values shown on this Notice and on the Budgets of the taxing districts			

Please call 208-365-3272 with TAX questions.

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