

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-9215
Exam Date: 07/20/2016

1. Current Owner:

VINCENT PATRICK HUGHES & JOAN CATHERINE HUGHES LIVING TRUST
7074 W PRAIRIE AVE
POST FALLS ID 83854

2. Accompanied by: Mr. Fran Hughes

Phone No (208) 755.0955

Address: 7074 W PRAIRIE AVE

Relationship to permit Holder: Family Member / Operator

3. **SOURCE:**

GROUND WATER

B. OVERLAP REVIEW1. Other water rights with the same place of use: NONE

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

2. Other water rights with the same point-of-diversion: NONE

Water Right No.	Source	Purpose of Use	Basis

Comments: Decreed Water Right 95-2082 (Domestic and Stockwater) is located on the farmstead, but does not overlap, the **95** acres shown for Irrigation in this Right (95-09215).

C. DIVERSION AND DELIVERY SYSTEM: A 75 HP variable flow pump is used to draw water from a 16 inch diameter well to a combination of surface main lines, wheel lines, & hand lines for irrigating 95 acres.

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NW¼, NE¼, Sec. 30, Twp 51N, Rge 04W, B.M., KOOTENAI County

Method of Determination: Maps' Post Falls' U.S. Geological Survey 7.5 Quadrangle (Topographic 1981) and 'Coeur d'Alene' U.S. Geological Survey 7.5 Quadrangle (Topographic 1981), ArcMap™ Geographic Information System (GIS) software, Garmin GPS receiver

Point of Diversion (Driveway approximately 30 feet in front of building housing well, control, box and well head.) GPS Coordinates -116 Degrees, 52' 54.4 West Longitude, 37 Degrees, 44' 37.0 North Latitude (eight satellites visible).

PLACE OF USE: IRRIGATION-

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
51N	04W	30	34.0	35.0	22.0	4.0													95.0

Total Acres: 95.0

Method of Determination:

3.

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

☒ X Indicate weir size/pipe as applicable.☒ X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.☒ X Aerial Photo Attached (required for irrigation of 10+ acres).☒ X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0033679	Newman	75	F20538 (3 Phase-Variable Flow)	FMC Corp. Peerless	Size 8x8x16

D. FLOW MEASUREMENTS (none: See Theoretical Measurements (Pump Equations) below)

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
None						

PUMP EQUATIONS WATER RIGHT 95-9215 16" Well D0033679					
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q = $\frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	75.0	392.517	0.8	300	40
Q =	1.347 CFS	604.7 GPM			

2. Measurements:

E. FLOW CALCULATIONS

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = (95.0 \text{ Acres}) \times (3.0 \text{ AF per Acre}) = 285.0 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (CFS)} \times (\text{Days in Irrigation season}) \times 1.9835] = (1.35 \text{ CFS} \times 246 \times 1.9835) = 658.7$$

$$= 658.7 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 285.0 \text{ AF}$$

2. Volume Calculations for Other Uses:

(Not Applicable)

G. NARRATIVE/REMARKS/COMMENTS

Exam conducted July 20, 2016. The water system consists of a 16 inch diameter well that is connected to a combination of stationary main lines and wheeled or hand carried irrigation pipe lines, with attached sprinkler heads, that are assembled and operated in varying configurations. The system is used to irrigate 95 acres owned by the Vincent Patrick Hughes and Catherine Hughes Living Trust.

The 328 feet deep, 16 inch bore diameter well (Tag D0033679) is equipped with a three phase, 75 HP, pump that can provide water at variable Cubic Feet per Second (CFS) flow rates. The well can be operated using varying amounts of electrical power and various combinations of main line(s), wheel line(s), and hand lines. Well CFS output and Pounds per Square Inch (PSI) can be adjusted using a control box, located inside a former milking parlor building on the Hughes farmstead, to control amprees and pressure. A pressure gauge is located on piping near the well head. The well has a flowmeter that has not been been calibrated or checked in a long time. Flowmeter records were not available during the Exam. A IDWR portable flowmeter was not available for conducting flow measurements during the Exam.

One wheel line on the East side of the Irrigation Place Of Use (POU) (Approximately 1725 feet in length) was operating using water from the well during the Exam. Puddles and muddy areas were visible in recently irrigated areas, near connection points on the main line, along the path taken by the operating wheel line during the Exam. A second wheel line was connected to a branch main line but not operating during the Exam. Several assembled hand lines were also present but not operating during the Exam. Sufficient Irrigation Lines and equipment, in serviceable condition, were present to irrigate all of the Irrigation POU on the date of the Exam.

The Irrigation POU was occupied by pastures and food plots (Canola mix) that are used by cattle in a high intensity, rotational grazing, system. Cattle seen during the Exam are restricted to a small area of pasture by electric fences that are disconnected and moved to a new area after the fenced-in area is grazed down. Parts of the intensively grazed area give the appearance of not having been irrigated recently, until irrigation is resumed, and plants recover. Circles showing areas of bare ground or sparse vegetation appear in some 2009 Google Earth™ images of the irrigated POU. These appear to be spots where cattle were concentrated around a portable manger or feeding spot for round hay bales.

100 acres of irrigation are shown on Permit 95-09215. A total of 95 acres of the Hughes Living Trust Property were under active irrigation during the Exam, occupied by idle Irrigation equipment, or appeared to have been recently irrigated during the Exam. Following the Exam, Google Earth™ and ArcMap™ 2009 images of the POU were reviewed. The images indicate that irrigation was underway on the same areas as found during the on-site field exam conducted on July 20, 2016.

No Water Right Overlap Exists. The remaining portion (4 acres) of the Hughes property is occupied by driveways, parking areas, the home and other buildings (Hay barn, former milking parlor building, sheds, etc.) and a row of small trees / shrubs that block view of the farm buildings from Prairie Avenue. Prairie Avenue borders the North edge of the Irrigation POU. Portions of this area receive domestic water from Units Water Association, including 0.5 acre for lawn and garden irrigation, and stockwater through Right 95-2082. Concrete structures and parts of an old irrigation canal (part of the defunct surface water Post Falls irrigation system) are present in the Irrigation POU for Water Right 95- 09215 and are no longer used.

Review of the Driller's Report for the well, the theoretical equation shown above, 2009 imagery and, the evidence seen during the field exam indicate that the irrigation system is capable of irrigating the entire 96 acres. The water Right License is recommended for a total of 1.35 Cubic Feet per Second (CFS) and 285.0 Acre Feet (AF) to irrigate 95 acres.

The CFS rate for the Irrigation beneficial use is restricted by well pump capacity to 1.35 CFS. The Permit 95-09215, and Statement of Completion indicate 2.0 CFS, however, the theoretical calculation indicates that a flow rate of 1.35 CFS from the well is warranted for licensing. **Recommended Annual Volume for Irrigation is 285.0 AF** (95.0 AC. X. 3.0 AF = 285.0 AF). **Recommended CFS for Irrigation (restricted by well pump capacity) is 1.35 CFS.**

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/15 to 11/15	1.35 CFS	285.0 AF
<u>Totals:</u>		1.35 CFS	285.0 AF

2. Recommended Amendments

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

I. AUTHENTICATION

Shaun Maxey - Water Resource Agent, Senior

Field Examiner's Name Shaun M. Maxey Date 11/16/2021
 Reviewer Adi Fink Date 11/16/2021

State of Idaho
Department of Water Resources
Attachment to Water Right Field Exam
95-9215

Delivery System Diagram (Not To Scale)

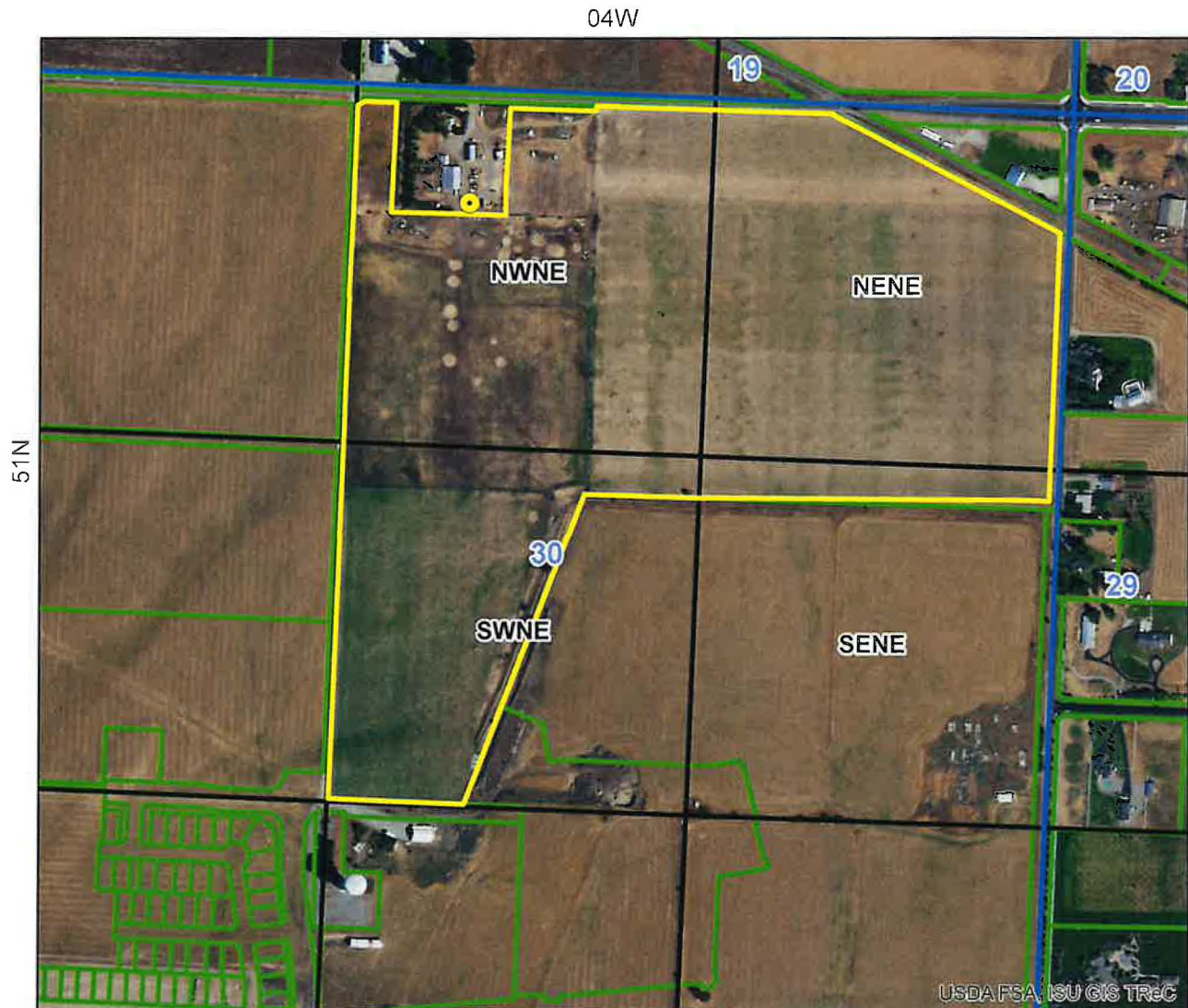


0 0.05 0.1 0.2 Miles

- Point of Diversion (Well in Building)
 - Place Of Use Boundary
 - Taxlots
 - Abandoned Irrigation Canal & Reservoir
 - Main Line (On ground)
 - Wheel Line (Positions Vary)
 - Hand Line (Positions Vary)
- Tax parcel information provided by Kootenai County.
- N

State of Idaho
Department of Water Resources
Attachment to Water Right Field Exam
95-9215

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



- Point of Diversion
- Place Of Use Boundary
- PLS Sections
- Quarter Quarters
- Taxlots

0 0.075 0.15 0.3 Miles



Tax parcel information provided by Kootenai County.

2268

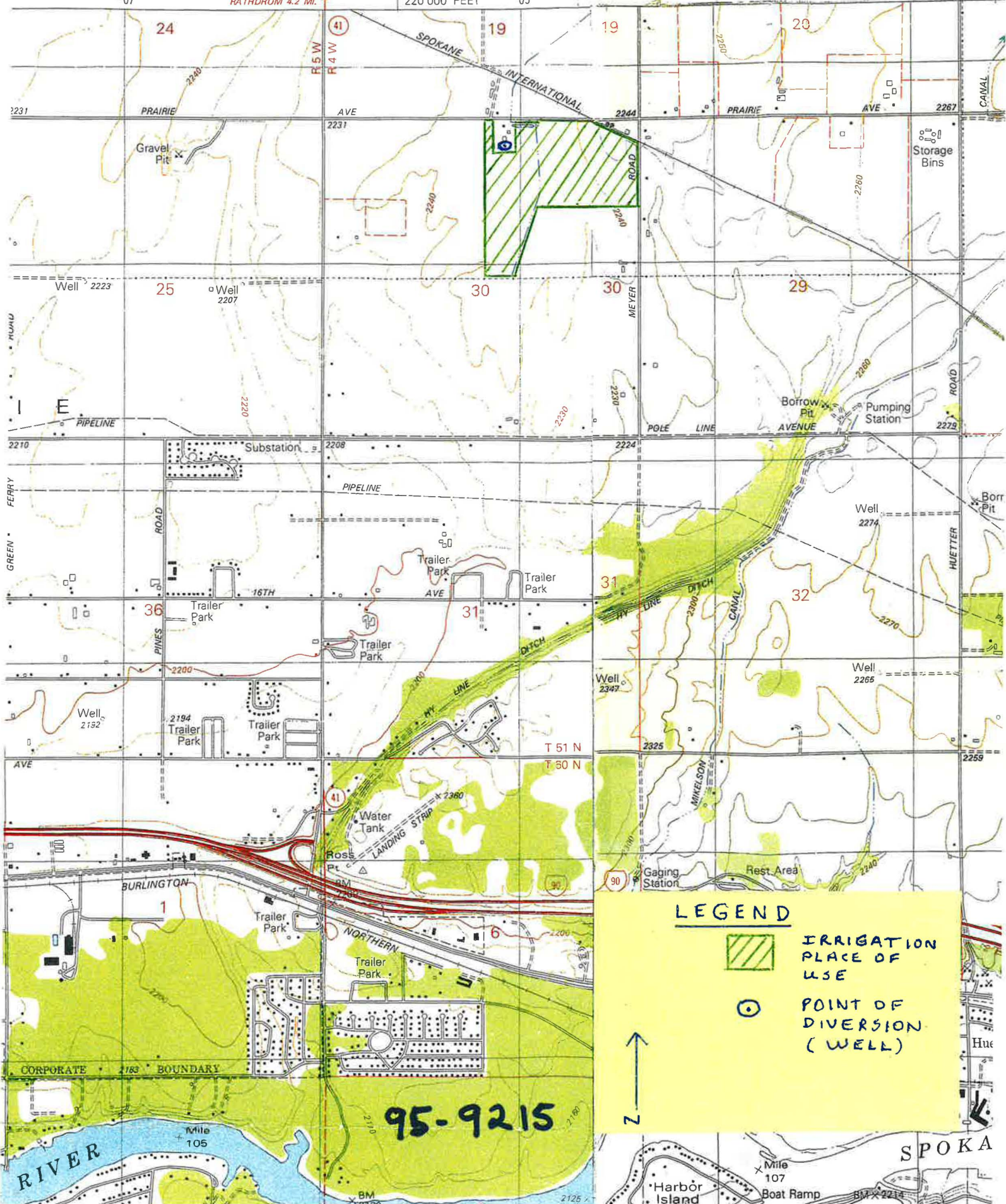
507

RATHDRUM 4.2 MI.

220 000 FEET

509

116°5



95-9215

		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	75	392.517	0.8	300	40
Q =		1.347 cfs	604.7 gpm			

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

1. WELL TAG NO. D 00033679
DRILLING PERMIT NO. 813426
Water Right or Injection Well No. 95-9215

12. WELL TESTS:

Yield gal./min.	Drawdown	Pumping Level	Time
1311	1'6"	253'6"	1/2 HR
1416	1'6"	253'6"	1/2 HR
1424	1'6"	253'6"	7 HR

Water Temp. 48° Bottom hole temp. _____
Water Quality test or comments: Excellent - Clear - No Sand

Depth first Water Encounter 300

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
20"	0	23	Sand & Gravel		X
20"	23	63	Sand & Gravel, Cobble		X
16"	63	65	Sand & Gravel		X
16"	65	300	Sand & Gravel, Cobble		X
16"	300	312	Gravel 4" minus 3090, 1" minus 4090, Coarse Sand		X
16"	312	328	2090, Fine Sand 1090		X
16"	328		Gravel 1" minus 2090 coarse		X
16"			Sand 3090, Med sand 4090		X
16"			Fine Sand 1090, Some Silt		X

2. OWNER: Hughes Living Trust
Name Hughes Living Trust
Address 7074 W. Prairie Avenue
City Post Falls State ID Zip 83854
3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk, Sub. or Directions to well.
Twp. 51 North ☒ or South ☐
Rge. 04 East ☐ or West ☒
Sec. 30 1/4 NW 1/4 NE 1/4
Gov't Lot _____ County Kootenai
Lat: _____ Long: _____
Address of Well Site 7074 W. Prairie Avenue
1000 FT. South Shop City Post Falls, ID
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

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

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

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

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bentonite	60	4	4800 lb.	Temp Surface Pipe
Cement Grout	4	0	400 lb.	Temp Surface Pipe

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 60 FT.
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16" + 2	301	328		A53-B	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type K-Packer Top Screen Assembly

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method NA
Screen Type & Method of Installation Alloy Stainless, Pull Back

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
299	300			14"	A53-B	☒	☐
325	328			14"	A53-B	☒	☐
300	325	60 + 100		14"	Stainless Steel	☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
<u>NA</u>	<u>A</u>			

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

51N 4W 30

14. DRILLER'S CERTIFICATION

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

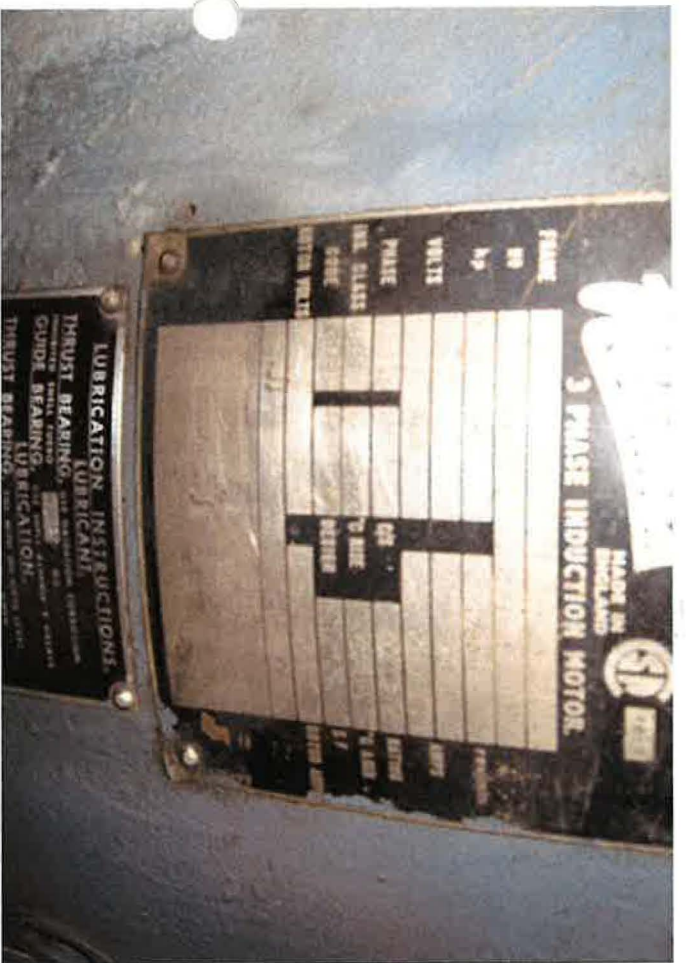
Company Name C.J. Warren & Son Drilling Firm No. 436

Principal Driller Charles J. Warren Date 9/22/04

and Driller or Operator II C. J. Warren Date 9/22/04

Operator I _____ Date _____

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



95-9215 75 HP Pump Data plate



95-9215 Well Tag



95-9215 Flowmeter



45-4215 East Place of Use

95-9215

95-9215 hand line

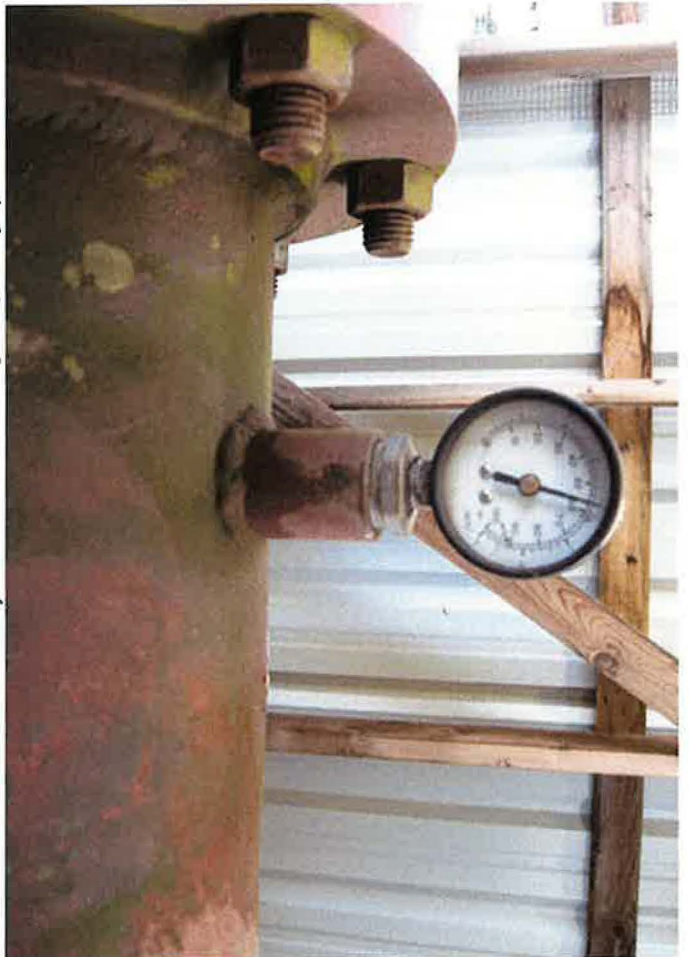


95-9215 Main Line from well connect to wheel line



95-9215 Main Line from well connect to wheel line

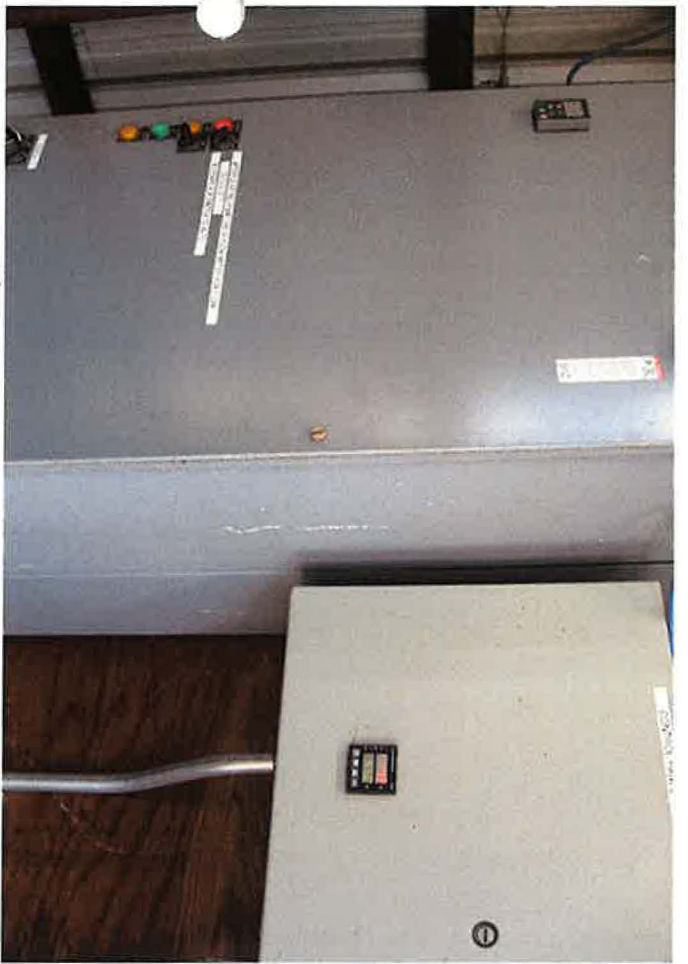
95-9215 pressure gauge



95-9215 Operating East wheel line



95-9215



95-9215 Variable Amp PSI control box



95-9215 Unused remains post falls investigation dist

95-9215

August 2009

Prairie Ave

7074 W Prairie Ave

The Hughes Farm

N Meyer Rd

N Meyer Rd

Legend

-  ? ? The Hughes Farm
-  7074 W Prairie Ave

Google Earth

Image USDA Farm Service Agency

1000 ft



May 2009

W Prairie Ave

7074 W Prairie Ave
The Hughes Farm

N Meyer Rd

Meyer Rd

Legend

-  ? ? The Hughes Farm
-  7074 W Prairie Ave

Google Earth

Image U.S. Geological Survey

1000 ft



April 5, 2016

MEMORANDUM FOR RECORD

SUBJECT: Response to Field Exam 2nd Notice (Permit 95-9215)

I received an incoming voicemail message from Erica Hughes today concerning a Field Exam Notice that I had sent to Fran, Vincent, or Joan Hughes regarding Permit 95-9215. Ms. Hughes indicated that they had not started irrigation yet and definitely want to retain the water right.

I left two voicemail messages at the Hughes Farm telephone number provided by Ms Hughes voicemail (208) 610.8266. I asked in the second voicemail that the Hughes call me and my office and provided my telephone number. I have not received a response yet.



Shaun M. Maxey
Sr. Water Resources Agent
IDWR, Northern Region

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

VINCENT P HUGHES ETUX TRUSTEES
 FRAN HUGHES OR VINCENT HUGHES OR JOAN HUGHES
 7074 W PRAIRIE AVE
 POST FALLS ID 83854



9590 9403 0148 5086 1873 06

2. Article Number (Transfer from service label)

7014 2120 0001 6004 1683

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☒ Agent☐ Addressee

B. Received by (Printed Name)

FRAN HUGHES

C. Date of Delivery

3-28

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type

- | | |
|--|---|
| ☐ Adult Signature | ☐ Priority Mail Express® |
| ☐ Adult Signature Restricted Delivery | ☐ Registered Mail™ |
| ☒ Certified Mail® | ☐ Registered Mail Restricted Delivery |
| ☐ Certified Mail Restricted Delivery | ☐ Return Receipt for Merchandise |
| ☐ Collect on Delivery | ☐ Signature Confirmation™ |
| ☐ Collect on Delivery Restricted Delivery | ☐ Signature Confirmation Restricted Delivery |
| ☐ Insured Mail | |
| ☐ Insured Mail Restricted Delivery (over \$500) | |

PS Form 3811, April 2015 PSN 7530-02-000-9053

Domestic Return Receipt

UNITED STATES POSTAL SERVICE



First-Class Mail
 Postage & Fees Paid
 USPS
 Permit No. G-10

RECEIVED
 MAR 30 2016
 IDWR/NORTHERN

Sender: Please print your name, address, and ZIP+4® in this box*

Shawn
 DEPT OF WATER RESOURCES
 7600 N MINERAL DR - STE 100
 COEUR D'ALENE ID 83815-7703

USPS TRACKING#



9590 9403 0148 5086 1873 06



State of Idaho

DEPARTMENT OF WATER RESOURCES

Northern Region, 7600 Mineral Drive, Suite 100, Coeur d'Alene, Idaho 83815

Phone: (208) 762-2800 FAX: (208) 762-2819 www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

March 22, 2016

Vincent P. Hughes ETUX Trustees
Fran Hughes or Vincent Hughes or Joan Hughes
7074 W Prairie AVE
Post Falls, ID 83854

FIELD EXAM NOTICE

RE: PERMIT NO. 95-9215

To Whom It May Concern:

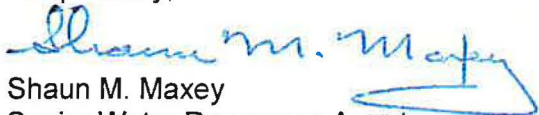
Please telephone or contact me at the Idaho Department of Water Resources (IDWR) address shown above by not later than April 22, 2016 to schedule a Field Exam at the property for Water Right Permit 95-9215. A map and copy of the Permit are enclosed. I will begin action to void the Permit if you do not reply to this notice to schedule an Exam.

The Examination is required to verify water use in order to issue a Water Right License. Please be advised that you, or a person familiar with the Permit and water system for the property, will need to operate the system under normal conditions for all of the Permit purposes during the Examination.

A Field Exam Notice was sent to the Hughes Living Trust dated August 11, 2015. No returned mail notice or response to this Notice was received. Please complete and return the enclosed Address Change form to me if your permanent mailing address has changed.

I can be reached at (208) 762.2816 if you have any questions.

Respectfully,


Shaun M. Maxey

Senior Water Resources Agent
Idaho Department of Water Resources, Northern Region

Enclosure
Copy of Permit 94-9215
IDWR Map
Change in Address Form

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Postage	\$ 7.70 ⁵
Certified Fee	3.45
Return Receipt Fee (Endorsement Required)	2.80
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 6.95 ⁵



Sent To
VINCENT P HUGHES ETUX TRUSTEES
FRAN HUGHES OR VINCENT HUGHES OR JOAN HUGHES
7074 W PRAIRIE AVE
POST FALLS ID 83854



State of Idaho

DEPARTMENT OF WATER RESOURCES

Northern Region, 7600 Mineral Drive, Suite 100, Coeur d'Alene, Idaho 83815

Phone: (208) 762-2800 FAX: (208) 762-2819 www.idwr.idaho.gov

August 11, 2015

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

Hughes Living Trust
ATTN: Fran Hughes
7074 W Prairie AVE
Post Falls, ID 83854

FIELD EXAM NOTICE

RE: PERMIT NO. 95-09215

Ms. Hughes:

I will be in the area of your water use for Permit 95-09215 during the period **August 31-through September 4th 2015** to conduct Field Exams to convert temporary Water Right Permits into permanent licensed Rights. You have already paid for your Exam for Permit 95-09215.

Please contact me to schedule a visit to your Place of Use property to complete the Exam. A person able to operate your system, including irrigation equipment under normal conditions, will need to be present during the Exam.

I can be reached at (208) 762.2816.

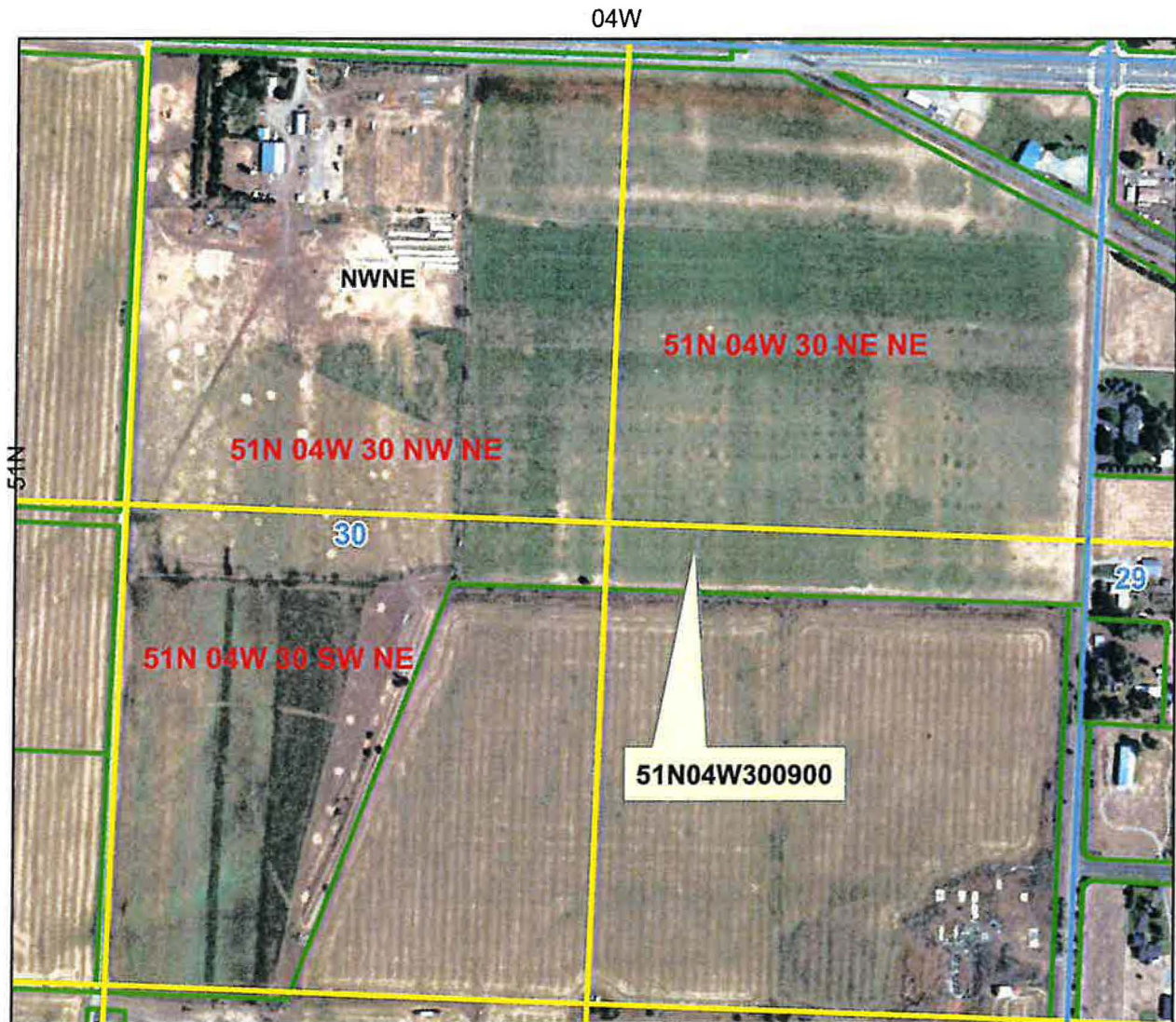
Respectfully,


Shaun M. Maxey
Sr. Water Resource Agent

Idaho Department of Water Resources, Northern Region

Enclosure
Copy of Permit 95-09215

State of Idaho
Department of Water Resources
Field Exam Notice
95-09215



0 0.05 0.1 0.2 Miles

-  PLS Sections
-  Taxlots



Prepared By: Maxey, Shaun

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

CHANGE IN ADDRESS

This form can be used to notify the Department of a change in
address of the owners of record for the listed water rights.

(Please print or type)

Water Right Number(s): _____

Name(s): _____

Old Mailing Address: _____

New Mailing Address: _____

Telephone Number: _____

Email: _____

Signature(s) of Owner(s) _____

(Include your title if on behalf of company or organization.)

Date: _____

Send a signed original to your closest regional office:

IDWR Northern Region
7600 N. Mineral Dr., Suite 100
Coeur d'Alene, ID 83815-7763
(208) 762-2800

IDWR Western Region
2735 Airport Way
Boise, ID 83705-5082
(208) 334-2190

IDWR Eastern Region
900 N. Skyline Dr., Suite A
Idaho Falls, ID 83402-1718
(208) 525-7161

IDWR Southern Region
650 Addison Ave W, Suite 500
Twin Falls, ID 83301-5858
(208) 736-3033

Site Provided by...
govemmax.com 1.13**Parcel**Parcel Number
1 of 1**Property Info****Parcel**

Print View

Parcel Map →

Searches

Address

Parcel Number

Owner

AIN

Functions

Home

Department Index

Assessor Home

Parcel Number	AIN	Situs Address
51N04W300900	126051	7074 W PRAIRIE AVE, POST FALLS

Owner Information

Owner Name	HUGHES VINCENT P ETUX TRUSTEES
Owner Address	7074 W PRAIRIE AVE POST FALLS ID 83854

Transfer Date**Document #****Deed Book/Page****Location / Description**

Tax Authority Group	073000	Current Legal Desc.	TAX #3146 30 51N 04W
Situs Address	7074 W PRAIRIE AVE, POST FALLS		
Acreage	103.1470		