

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-11289

Exam Date: 06/12/2024

1. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? X Y N
- a. X Irrigation of 5 acres or less
- b. N/A Storage of up to 14.6 AF for stockwater purposes only
- c. X Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less.
- d. N/A Other < >
2. Current Owner: **CHRIS CAMPBELL Mailing Address: 217 CEDAR ST#286, SANDPOINT, ID 83864**
- Owner of Record Correct? X Y N
- Address of Record Correct? X Y N
- If No Explain: Physical address of the application is **1090 SUNNYSIDE RD, SANDPOINT, ID 83864**

3. Beneficial Use Fees have been paid: X Y N Receipt No: **C118324**

4. **SOURCE:** Groundwater

Method of Determination: **ArcMap GIS and Tax Parcel Data.**

Change in Source: Y X N

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
96-7011	LAKE PEND OREILLE	MUNICIPAL	License, with Claim filed in CFRBA
96-8953	LAKE PEND OREILLE	MUNICIPAL	License, with Claim filed in CFRBA
96-11288	LAKE PEND OREILLE	IRRIGATION & STOCKWATER	Permitted with Statement of Completion filed

Comments: Both licensed Water Rights with Claims filed in the CFRBA Adjudication are for the Oden Water Assn Inc. for municipal use. The source is Lake Pend Oreille on these claims and the source for this water right #96-12289 is groundwater from a well that was installed in the late 90's or early in 2000. Water Right #96-11288 is also being reviewed for licensing and has a direct overlap for irrigation and stockwater uses. I spoke with the applicant and the well is primarily used for domestic and stockwater uses. The irrigation is the primary use for Water Right 96-11288 but the uses are listed as back up for the systems if needed.

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

Water Right No.	Source	Purpose of Use	Basis
NONE			

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SE¼ SE¼, Sec. 4, Twp 57N, Rge 01W, B.M. BONNER County

Method of Determination: **ArcMap GIS and information provided by the Applicant.**

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	
57N	01W	9	0.2 L1																0.2
57N	01W	4																3.8	3.8

Total Acres: 4.0

PLACE OF USE: STOCKWATER

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
57N	01W	9	X L1																
57N	01W	4																X	

PLACE OF USE: DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
57N	01W	9	X L1																
57N	01W	4																X	

Method of Determination:

3.

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

☒ 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

☒ 1:24,000 or greater.☒ Aerial Photo Attached (required for irrigation of 10+ acres).☒ 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
UNKNOWN	FRANKLIN	3		GOULDS	18GS30

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. **Measurements:** I spoke with Chris Campbell on June 11th, 2024 and he sent the pump information to me along with his other Water Permit's Statement of Completion for 96-11288. He said he knows the well is 400 feet deep and the pump is a 3 HP. With this information and using a standard PSI of 45, I did a Theoretical Pump Equation and arrived at a rate of 0.04 cfs which is 19 gpm based on department rounding standards.

Irrigation:

Measurement = 4 ac x 0.03 cfs = 0.12 cfs based on department rounding standards.

Permit allowed = **0.12 cfs**

Domestic:

Measurement = 1 home authorized a diversion rate of 0.04 cfs based on Administrator's Memorandum, Application Processing No. 22: Definition of "Domestic".

Permit allowed = **0.04 cfs**

Stockwater:

Measurement = 10 Head of Mixed Stock x 12 gpd x 365 days = 43,800 gals/325,850 gal per acre foot = 0.1 AF

Permit allowed = **0.02 cfs**

Comments: SEE ATTACHED THEORETIC PUMP EQUATIONS.

The applicant provided the invoice for the purchase of the pump he recently replaced. It is a Goulds 18GS30 pump end and a Franklin 3 HP motor. I did a Theoretic Pump Equation (TPE) and the pump produces approximately 18.8 gpm or 0.04 cfs. This agrees with the information I found online for this model of pump. I have derived a total diversion rate of 0.04 cfs which is recommended as the maximum diversion rate for licensing purposes for this Right. This would allow up to 28.9 AF total volume annually and I am recommending a total of 12.7 af annually due to what the pump produces..

The irrigation beneficial use was designated at 0.12 cfs based on Administrative Memo – Application Processing No. 17, which authorizes up to 0.03 cfs per acre for small acreage irrigation. The pump only allows 0.04 cfs but the applicant has another water right from a surface water source to irrigate which can make up the difference as they water rights overlap uses for stockwater and irrigation.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4 \text{ ac} \times 3.0 \text{ afa} = 12 \text{ af}$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 12 \text{ af}$$

The annual volume for this stockwater right is limited to = 0.1 AF based on the following calculation:

- 10 head mixed stock x 12 gpd x 365 days = 43,800 gals / 325,850 gal per af = **0.1 af** considering department rounding standards.

The annual volume for this domestic right is limited to = **0.6 AF** based on 1 home for domestic use with separate irrigation.

- 2. Volume Calculations for Other Uses: Maximum Diversion Volume equals 12 af (irrigation) + 0.6 af (domestic) + 0.1 af (stockwater) = 12.7 af considering department rounding standards.

G. PURPOSE OF USE

Irrigation Y N # Stock 10 head mixed stock Domestic # of Homes: 1

Other: N/A Change in Purpose of Use? X N

Method of Determination: Tax lot data, and information assessed on the Statement of Completion form and received from applicant.

H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-house examination. Overlapping water right concerns have been evaluated and I've recommended addition of condition X35 based on POU overlap between Rights 96-11288 & 96-11289.

I used ArcMap aerial imagery, Google Earth software, and Bonner County GIS tax parcel maps to evaluate the irrigation POU, which equals a total of 4 acres located in 57N01W Sec 4 SESE and also in 57N01W Sec 9 NENE Gov't Lot 7. The diversion rate(s) and volume(s) have been discussed above, but I'm recommending licensing with a maximum diversion rate of 0.04 cfs and maximum diversion volume of 12.7 af.

I removed condition 046 during licensing review. All other conditions shall be carried to license approval.

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	04/01 to 10/31	0.04 CFS	12 AF	
STOCKWATER	01/01 to 12/31	0.02 CFS	0.1 AF	
DOMESTIC	01/01 to 12/31	0.04 CFS	0.6 AF	
<u>Totals:</u>		0.04 CFS	12.7 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

Tammy Alleman – Water Resource Agent

Field Examiner's Name Tammy Alle Date 6/26/24

Reviewer Chase Bell Date 6/27/24

THEORETICAL PUMPING EQUATION(S) FOR WR# 96-11289

Theoretical Pumping Equation is estimated to lift 400 ft, and running at 45 psi.

PUMP EQUATION

WATER RIGHT No. 96-11289

Pump in River		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	$HP \cdot 8.8 \cdot \text{Eff} / H$	3	504.0816	0.8	400	45
Q = 0.042 cfs 18.8 gpm						

Sandpoint Pump and Power
54399 N. Old US Highway 95
Athol, ID 83801
208-263-0536



Invoice

BILL TO
Chris Campbell
1090 Sunnyside Rd
Sandpoint, ID 83864
(208) 255-8833

SHIP TO
Chris Campbell
1090 Sunnyside Rd
Sandpoint, ID 83864
(208) 255-8833

INVOICE #	DATE	TOTAL DUE	DUE DATE	ENCLOSED
2472	05/23/2024	\$4,346.50	06/07/2024	

DESCRIPTION	QTY	RATE	AMOUNT
Goulds 18GS30 Pump End A2438332	1	1,410.00	1,410.00
Franklin 3HP 1PH Motor	1	1,700.00	1,700.00
1-1/4" 250 PSI Poly Pipe	10	2.60	26.00
1-1/4" Ford Fitting Male	2	110.00	220.00
1-1/4" Cam Lock Fittings	1	54.00	54.00
1-1/4" Gate Valve	1	56.00	56.00
1-1/4"x2" Galvanized Nipple	1	3.50	3.50
#8 Flat Jacket Cable	13	4.00	52.00
#8 Splice Kit	1	15.00	15.00
Misc. Electrical and Hardware	1	10.00	10.00
Two Technician Labor	4	200.00	800.00

5-22-2024. Drove to job and installed parts listed above.
System is good to go.

...sent on completion.
*A 5% late penalty will be added to all
invoices not paid within due date

BALANCE DUE

\$4,346.50

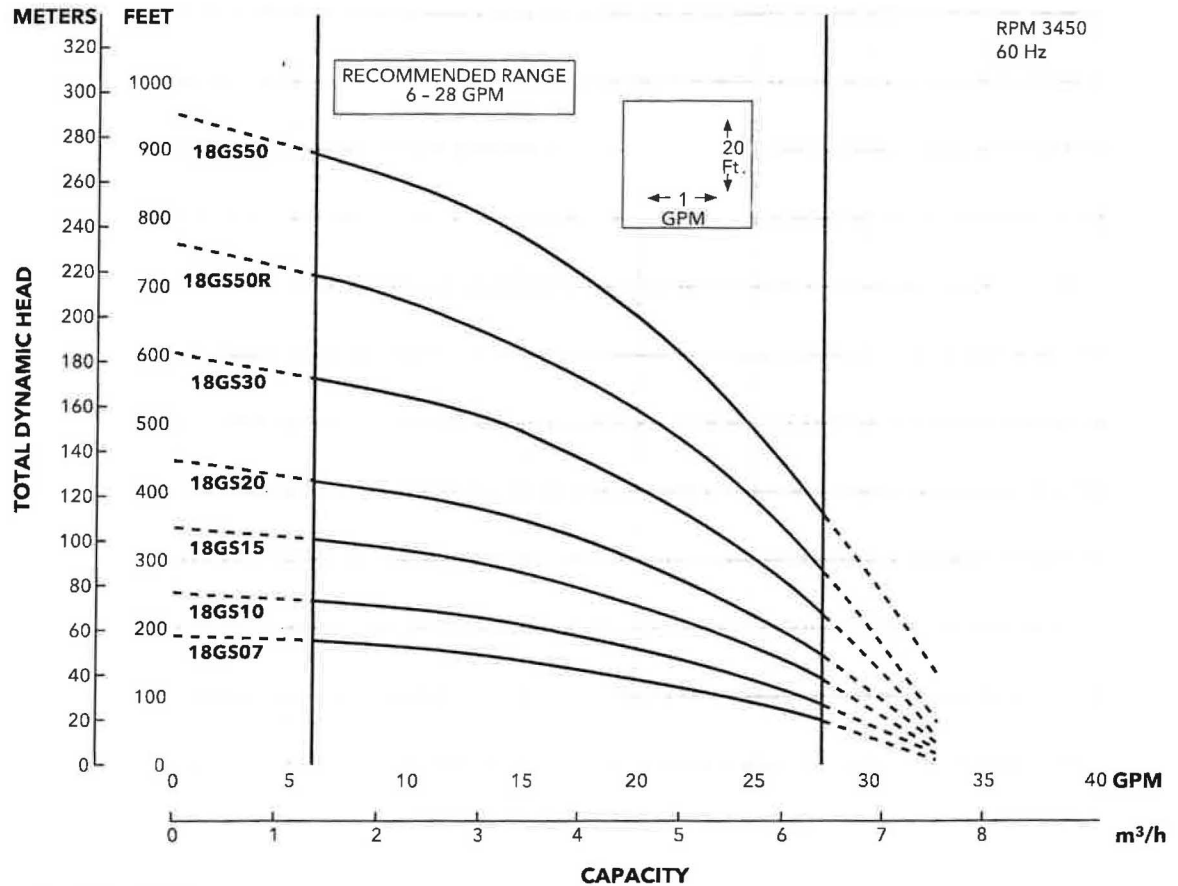
LAKE
ATZEL

PAID

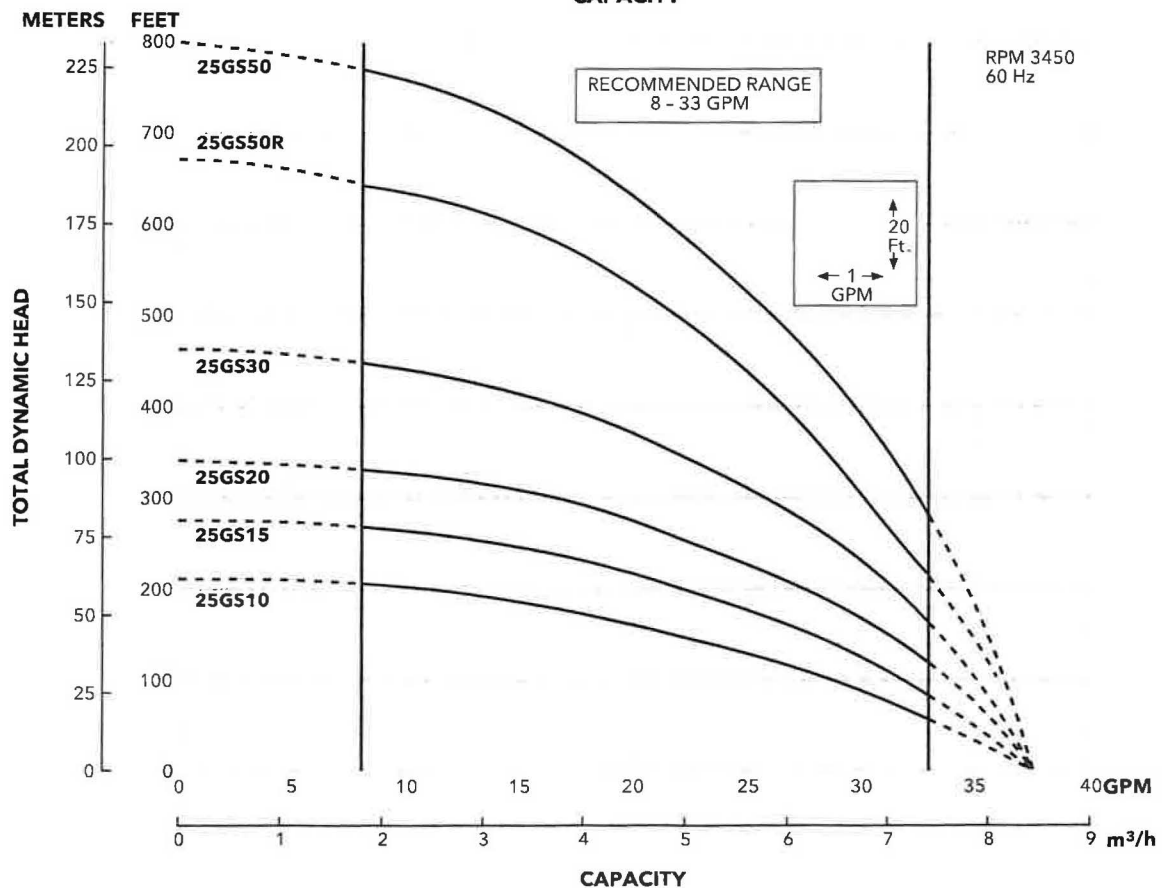
WATRUST #
1008
5-25-24

Residential Water Systems

Model 18GS

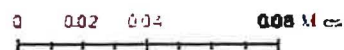
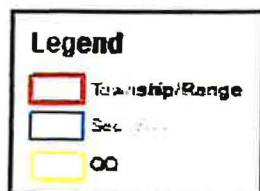


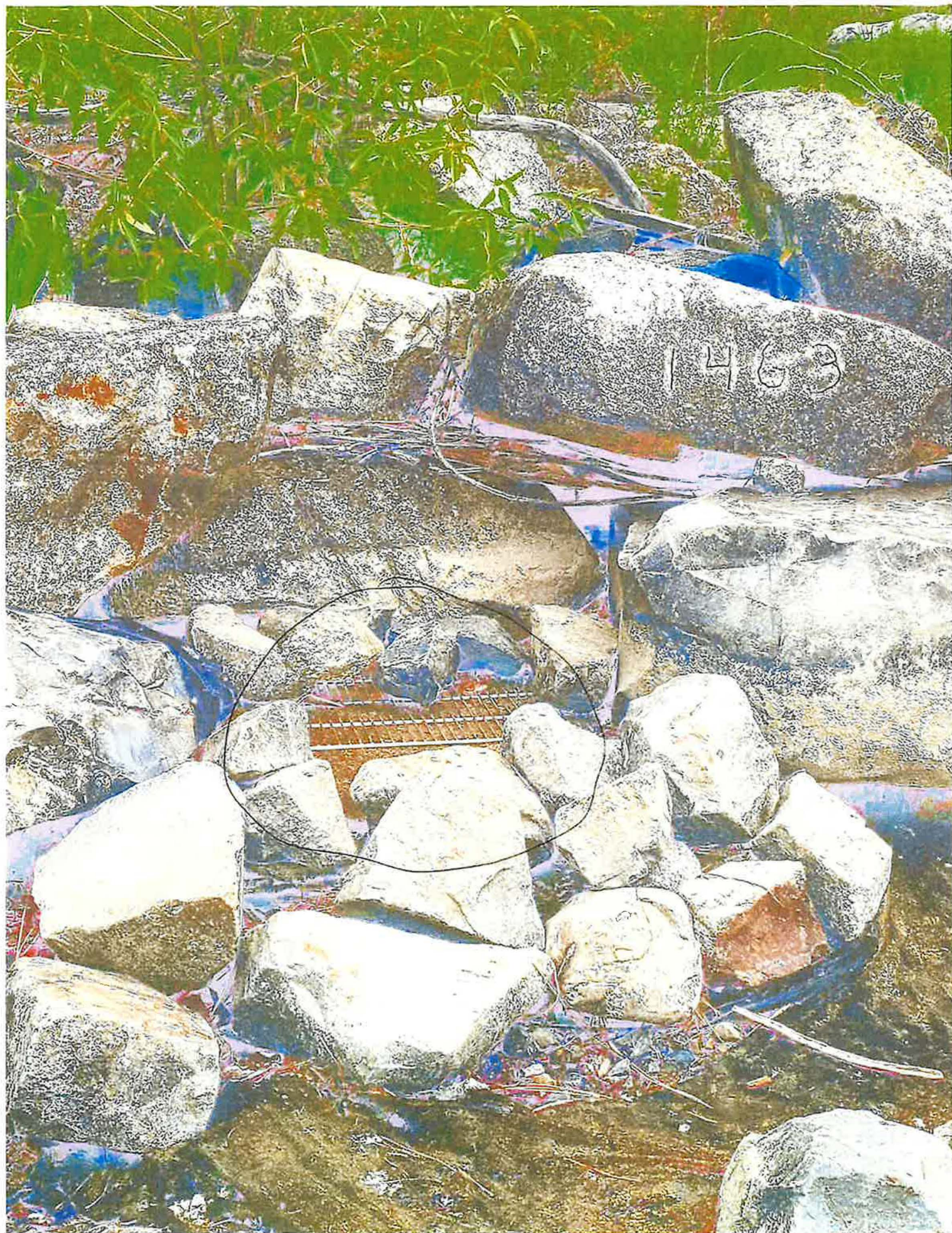
Model 25GS



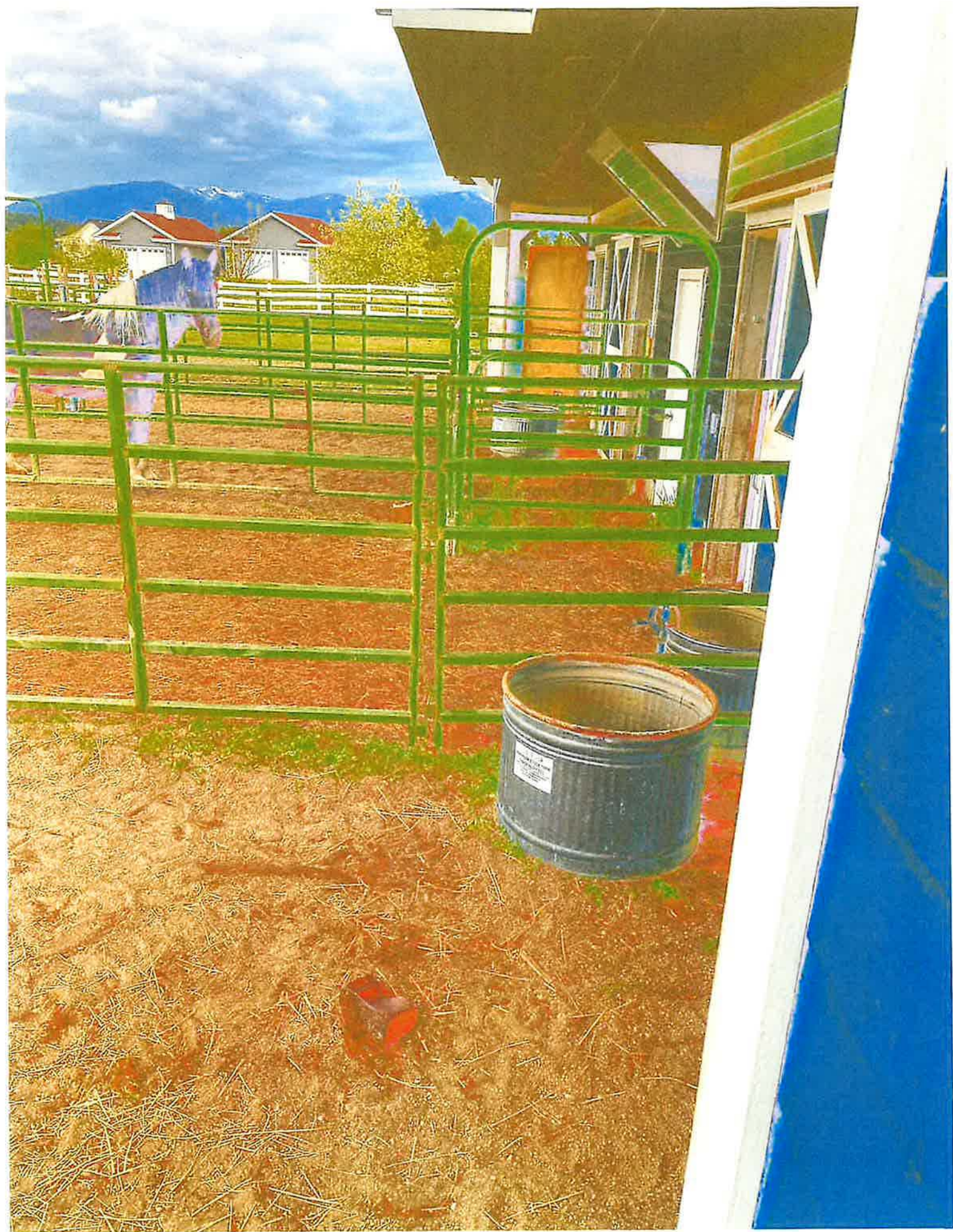
IRRIGATION IN SESE SECTION 4 & NENE GOV LOT 1

RP57N01W049651A









SITE MAP

