

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33335

Exam Date: 4/14/2016

1. Current Owner:
SYMMS FRUIT RANCH INC 14068 SUNNY SLOPE RD CALDWELL ID 83607 (208) 484-5489
2. Accompanied by: Dar Symms
Phone No: 208-459-4821
Address:
Relationship to Permit Holder: Owner

3. SOURCE: GROUND WATER**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: Wilder Irrigation District / Boise Project Board of Control
2. Other water rights with the same point-of-diversion: None.

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

GROUND WATER SE¼NE¼ Sec. 16, Twp 03N, Rge 04W, B.M. CANYON County

Method of Determination: ArcMap imagery and PLSS mapping tools.

2. PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03N	04W	16			35.0	35.0													70.0

Total Acres: 70

Method of Determination: ArcMap map tools using 2015 imagery.

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
D0060057	US Motors	50	S 04 7483750-0002 M 0007	Unk	Unk
Booster #1	Baldor Reliance	20	39K061W669		
Booster #2	Century Pump Motor	15	6-333000-02		

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

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

2. Measurements: None taken.

E. FLOW CALCULATIONS

Measured Method: Theoretical

 X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 70.0 \times 4.5 = 315.0 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.40 \times 260 \times 1.9835 = 722.0 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 315.0 \text{ af}$$

2. Volume Calculations for Other Uses: None.

G. NARRATIVE/REMARKS/COMMENTS

The field exam was conducted April 14, 2016 by WRA Patrick Kelly and was accompanied by Symms Fruit Ranch owner Dar Symms. Symms Ranch is the current owner of permit 63-33335 and county taxlot data suggests current owner to the property associated with the POU.

An irrigation well was found in the SENE QQ as described by the permit. Overlap review did not discover any other water rights associated with the well. A well drillers report was obtained matching tag # D0060057.

A theoretical flow rate was completed since measuring a suitable stretch of pipe was not accessible during the time of the exam. A 50 hp US Motors motor is installed with two booster pumps totaling 35 hp were found in the sprinkler pump house. A range of reasonable pumping levels were used based on well log information. A pressure gauge displayed a reading of 15 psi during the field exam for the open ditch diversion. The sprinkler system was not operating at the time of exam to gain a pressure of the system so a pressure of 50 psi was assumed. Theoretical average flow rate is 2.13 cfs for the pressurized system, and 1.93 cfs for the open ditch.

Permit	1.60 cfs
B.U. Standard Allowance	1.40 cfs
B. U. Proof Fee	\$125 → 1.01 to 2.00 cfs
Theoretical Rate	2.13 cfs
License Recommendation	1.40 cfs

The system is designed so that the well may deliver water to two separate systems. The majority of the property is irrigated by gravity flow ditches. The field east of the main irrigation ditch (along Plum Rd) is elevated and a sprinkler system has been installed. The user can deliver water to either system by a control valve at the well. Waste water is released at the SW corner of the property and moves south across Pear Ln.

The ground water use is supplemental to surface water shares delivered via Wilder Irrigation District.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	1.40 CFS	315.0 AF
	<u>Totals:</u>	1.400 CFS	315.00 AF

2. Recommended Amendments

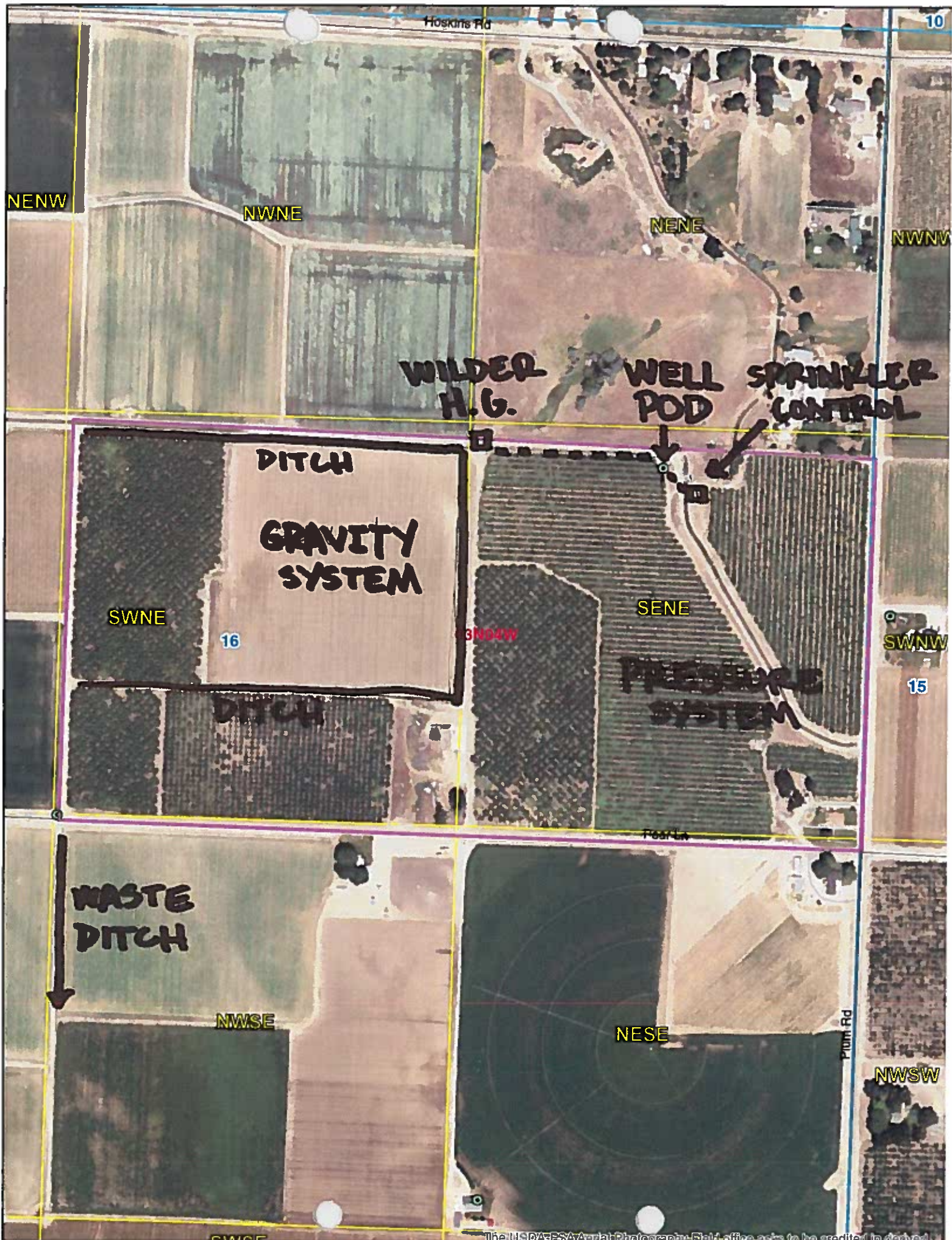
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

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

I. AUTHENTICATION

Field Examiner's Name Patrick Kelly Date 4-14-2016

Reviewer _____ Date _____



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 63-33335
 Reviewer: Patrick Kelly
 Date of Review: 4/14/2016

Pressurized Sprinkler:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	50	50	50
BOOSTER HORSEPOWER	35	35	35
PUMPING LEVEL	75	150	200
DISCHARGE PRESSURE	50	50	50
RATE OF FLOW (cfs)	2.75	1.97	1.66 2.13

Open Ditch:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	50	50	50
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	75	150	200
DISCHARGE PRESSURE	15	15	15
RATE OF FLOW (cfs)	2.81	1.67	1.31 1.93

The above calculates the formula =
$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: 70 efficiency.
 No Friction

A theoretical flow rate was completed since measuring a suitable stretch of pipe was not accessible during the time of the exam. A 50hp US Motors motor is installed with two booster pumps totaling 35 hp were found in the sprinkler pump house. A range of reasonable pumping levels were used based on well log information. A pressure gauge displayed a reading of 15 psi during the field exam for the open ditch diversion. The sprinkler system was not operating at the time of exam to gain a pressure of the system so a pressure of 50 psi was assumed. Theoretical average flow rate is 2.13 cfs for the pressurized system, and 1.93 cfs for the open ditch.

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

913292-861920

1. WELL TAG NO. D00100057 MP
Drilling Permit No. 910563-859200-913292-861920 MP
Water right or injection well # 63-33335

2. OWNER: Symms Fruit Ranch
Name _____
Address 14068 Sunny Slope Rd
City Caldwell State ID Zip 83607

3. WELL LOCATION:
Twp. 03 North ☒ or South ☐ Rge. 04 East ☐ or West ☒
Sec. 16 1/4 SE 1/4 NE 1/4

Gov't Lot _____ County Canyon
Lat. 43 0 35.949 (Deg. and Decimal minutes)
Long. 116 0 48.903 (Deg. and Decimal minutes)
Address of Well Site 21040 Pear Ln, approx .23m N of Pear Ln
& .14m W of Plum Rd City Caldwell
(Circle at least name of road - Distance to Road or Landmark)
Lot. _____ Blk. _____ Sub. Name _____

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

5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:
☐ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other Reverse

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
Bentonite chips	0	324	37,500	Dry pour
Bentonite chips	380	400	5,000	Dry pour

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
16	+2	344	.375	Steel	☒	☐	☒
16	354	429	.375	Steel	☒	☐	☒
16	479	485	.375	Steel	☒	☐	☒

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method _____
Manufactured screen ☒ Y ☐ N Type Johnson Wire Wrap
Method of installation Lower in

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
344	354	.030		16	Mild Steel	
429	479	.030		16	Mild Steel	
485	495	.030		16	Mild Steel	

Length of Headpipe _____ Length of Tailpipe 5'
Packer ☐ Y ☒ N Type _____

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
#10-20 Sand	324	380	9,720	Dry pour
#10-20 Sand	400	505	24,000	Dry pour

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____
Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:
Depth first water encountered (ft) _____ Static water level (ft) 23'3"
Water temp. (°F) 72.69° Bottom hole temp. (°F) 72.69°
Describe access port 2" pipe on side

Well test:			Test method:			
Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
145	830	540	☒	☐	☐	☐
307	1,800	60	☒	☐	☐	☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:					
Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
24	0	9	Top soil		X
24	9	33	Burnt brown clay		X
24	33	35	Medium gravel	x	
24	35	72	Tan clay, sm gravel streak	x	X
24	72	95	Blue clay		X
24	95	135	Grey clay		X
24	135	204	Blue clay		X
24	204	215	Coarse sand	x	
24	215	269	Blue clay		X
24	269	277	Fine sand	x	
24	277	343	Blue clay		X
24	343	354	Fine sand	x	
24	354	430	Grey clay		X
24	430	435	Fine sand clay mix	x	
24	435	439	Hard clay		X
24	439	479	Fine sand	x	
24	479	487	Grey clay		X
24	487	493	Fine sand	x	
24	493	520	Grey clay		X
24	520	595	Blue clay		X
			Note: Filled in bottom of hole from		
			505'-595' with bentonite, pea gravel		
			mix.		

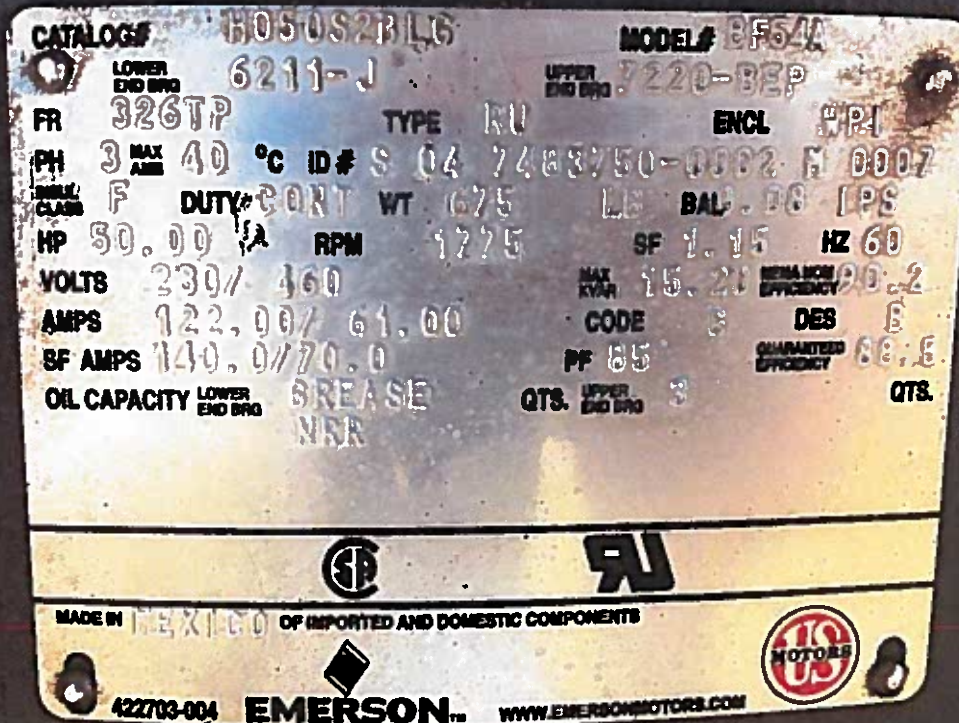
14. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Company Name Riverside Inc Co No. 333
*Principal Driller [Signature] Date 11/21/11
*Driller [Signature] Date 11-21-11
*Operator I [Signature] Date _____
Operator [Signature] Date 11/21/11
* Signature of Principal Driller and rig operator are required.

TR5	BasinSequence	Owner	Source
03N04W16	63-33335	SYMMMS FRUIT RANCH INC	GROUND WATER
03N04W16	63-10558	YOST, C ROBERT	GROUND WATER
03N04W16	63-136	BARKER ROSHOLT & SIMPSON LLP; BOISE	BOISE RIVER
03N04W16	63-1378	BARKER ROSHOLT & SIMPSON LLP; BOISE	BOISE RIVER
03N04W16	63-200A	BARKER ROSHOLT & SIMPSON LLP; BOISE	BOISE RIVER
03N04W16	63-2106	UNITED STATES OF AMERICA ACTING THI	FIVEMILE CREEK
03N04W16	63-233K	AMERICAN DITCH CO; BARKER ROSHOLT	BOISE RIVER
03N04W16	63-2388A	UNITED STATES OF AMERICA ACTING THI	BOISE RIVER
03N04W16	63-2392F	BOISE PROJECT BOARD OF CONTROL	WASTE WATER
03N04W16	63-251A	UNITED STATES OF AMERICA ACTING THI	BOISE RIVER
03N04W16	63-301A	UNITED STATES OF AMERICA ACTING THI	BOISE RIVER
03N04W16	63-302A	UNITED STATES OF AMERICA ACTING THI	BOISE RIVER
03N04W16	63-33251	BOISE PROJECT BOARD OF CONTROL	INDIAN CREEK
03N04W16	63-33253	BOISE PROJECT BOARD OF CONTROL	TENMILE CREEK
03N04W16	63-373A	UNITED STATES OF AMERICA ACTING THI	BOISE RIVER
03N04W16	63-5358	ALEXANDERSON DAVIS RAINEY & WHITN	UNNAMED DRAIN
03N04W16	63-8197	LANDA, SABINO; LANDA, SIMON	SPRINGS

NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	TotalAcres
		40	40													80
5																5
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
										0.7	0.3					1
													33			33



Well tag#
D0060057



US Motors plate

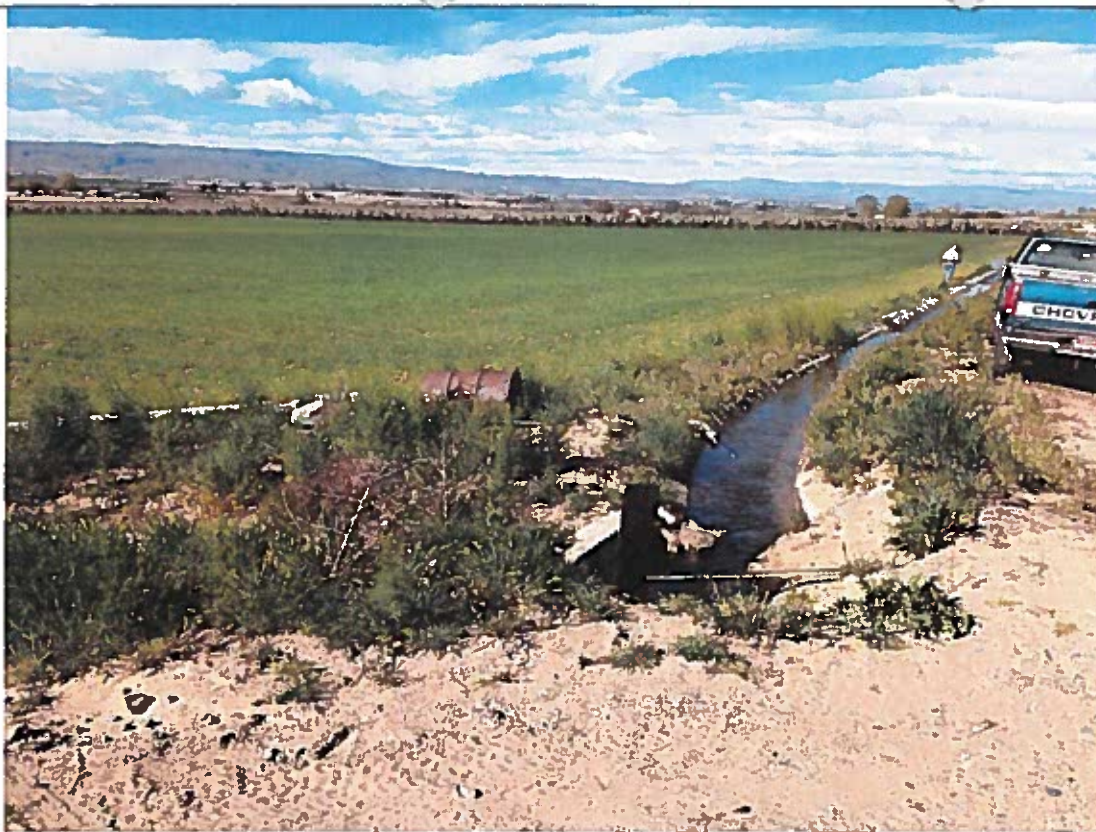


Open discharge pipe. Pressure gauge reading 15 psi.



Wilder Irrigation District headgate located at north end of property.

White pipe shows ground water being delivered to headgate.



Ditch immediately west of Wilder headgate. User can deliver as is shown in the photo, or open a slide gate to deliver water to fields on south end of property.

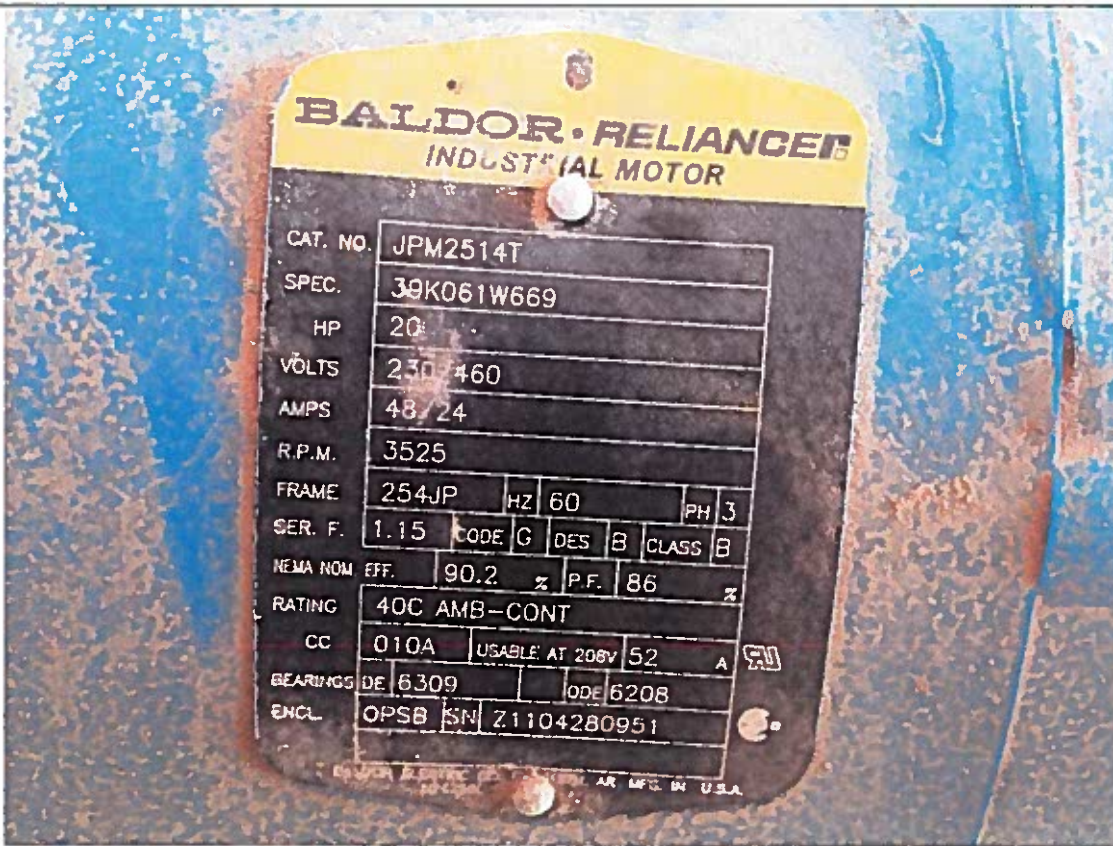


Wilder Irrigation water being delivered on left end of photo to a main delivery ditch.

Sprinkler control pump house shown on right. White pipe can delivery groundwater to bubbler.



Two booster pumps stationed inside sprinkler pump house.



Booster pump #1



Booster pump #2



SW corner of property shows waste water passes under Pear Ln. and to wastewater ditch shown across street.