

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8588

Exam Date: 8/20/2012

1. Current Owner: CASA DEL NORTE LP
11204 N BAR 21 DR
GLENN'S FERRY ID 83623
(208)366-7931

2. Accompanied by: John McCallum
Phone No: 366-7931/863-4275
Address: same as above
Relationship to Permit Holder: owner

3. SOURCE TRIBUTARY
WASTE WATER SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 2-10434 and 200 shares of Northside Canal Co.
2. Other water rights with the same point of diversion: shares a PD with the canal water

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

WASTE WATER SW1/4SW1/4 Sec. 2, Twp 06S, Rge 12E, B.M. GOODING County

Method of Determination: Field visit and aerial imagery (existing spatial point for PD)

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	
06S	12E	8			32.0	15.0				33.0	14.0	4.0							98.0
					L 2	L 1					L 4	L 3							
06S	12E	9	38.0	38.0	39.0	26.0	30.0	10.0	23.0	37.0									241.0
						L 1			L 2										
06S	12E	10					20.0	33.0											53.0
							L 2	L 3											

Total Acres: 392

STOCKWATER same as IRRIGATION

Method of Determination: field visit, aerial imagery and overlapped right 02-10434

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**

NA—no well in place, the point of diversion is a headgate at the top of the ditch on the ridge, I was not able to access the headgate during the field exam

D. FLOW MEASUREMENTS

1.

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

Polysonic

Flow meter

Tyme Flyte

March 26, 2012

2. Measurements:

I obtained a measurement on the 10" pipe that drops down the ridge. The pipe at the top of the ridge is submerged in a pond where canal water and wastewater is collected. The measurement that I took consists of 200 shares of canal water worth 2.5 cfs and any waste water. I talked to the ditch rider, Dirk (208) 308-2525, for the Northside Canal Co. and he told me on the day I conducted the measurement he was delivering 2.5 cfs and any extra wastewater. I will deduct the canal water from my measurement to get the wastewater that was available that day. When the pond is full, the water continues into a channel and drops down the ridge where the water seeps back into the ground in summer months and in spring months goes into a channel and sometimes floods out land to the north of the irrigated area.

E. FLOW CALCULATIONS

___x___ Additional Computation Sheets Attached

Measured Method:

The measurement from the polysonic was 5.37 cfs. 2.5 cfs of the total came from canal shares so the wastewater that was delivered on that day was 2.87 cfs. This right can be licensed for the full permitted diversion rate of 2.0 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 100 \text{ acres} \times 4 = 400 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 2.0 \times 246 \times 1.9835 = 976 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 400 \text{ AF}$$

2. Volume Calculations for Other Uses: Stockwater—Mr. McCallum told me that they have run 1400 cattle at the most on the POU but do not any more. I spoke with Shelley Keen and Craig Saxton and was advised to use the # of cattle on the proof of beneficial use form for licensing purposes. The form reflects 900 range cattle, as permitted, and will be allowed the 0.20 cfs and 12 gpd/cow x 365 days = 12.1 AF

G. NARRATIVE/REMARKS/COMMENTS**Notes about the system and canal shares**

The right holder owns 200 shares of Northside Canal Co. water that pertain to the permit's POU. There are 160 shares in Sec. 9 and 40 shares in Sec. 10; there are no shares on Sec. 8 according to Terry at Northside Canal (324-2319). The shares were all purchased in 1978 and have transferred ownership when Casa del Norte acquired the property (aka Iron Horse).

One share represents 5/8" or 0.0125 cfs which is enough to irrigate 125 acres at 0.02 cfs/acre. Based on the canal co. records, Sec. 9 should have 25 acres and Sec. 10 should have 100 acres of irrigated area (@ 0.02 cfs/acre) I evaluated the acres that appeared to be irrigated in 1992 and found ~270 acres total (see page #5). Note that some of the acres that I outlined in my map are questionable, but I concluded that 100 acres have been developed during the development period. A 392 acre permissible place of use was authorized through transfer 74775 for 02-10434. At this time 02-10434 is in the water supply bank but I will license this permit with the permissible place of use and limit it to 100 acres.

Overlap Analysis: I preformed an overlap analysis and found that 02-10434 and Northside Canal Co. shares are the only overlapping rights that must be addressed. Because the delivery system for the shares and the wastewater is combined, this condition can be added: Use of this right is combined with water from North Side Canal Co., Ltd.

The overlap with 02-10434 is as follows:

Right	PPU	Limited acres	Rate	Volume
02-10434	1087 acres	250 acres	5.0 cfs	1000.0 af
37-8588	392 acres	100 acres	2.0 cfs	400.0 af
Combined Total	392 acres	350 acres	7.0 cfs (additive)	1,400 af (additive)

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER	1/01 to 12/31	0.200 CFS	12.1 AF
IRRIGATION	3/15 to 11/15	2.000 CFS	400.0 AF
<u>Totals:</u>		2.000 CFS	412.1 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 ☐ Other

INCLUDE A PPU

I. AUTHENTICATION

Field Examiner's Name Cherie Palmer Date 11/30/12

Reviewer _____ Date _____

2 attachments

- #1 - place of use map --- originally part of transfer 74775
- #2 - polysonic tape

Delivery System



System Notes

During my visit all of the sprinklers on the system were running at once.

All of the wastewater and canal shares are conveyed through the same system.

The 10" mainline that runs down the ridge serves three separate 6" lines.

160 handline sprinklers x 5 gpm avg = 1.78 cfs

Small pivot @ 58 sprinklers x 5 gpm = 0.65 cfs

Medium pivot @ 76 sprinklers x 5 gpm = 0.87 cfs

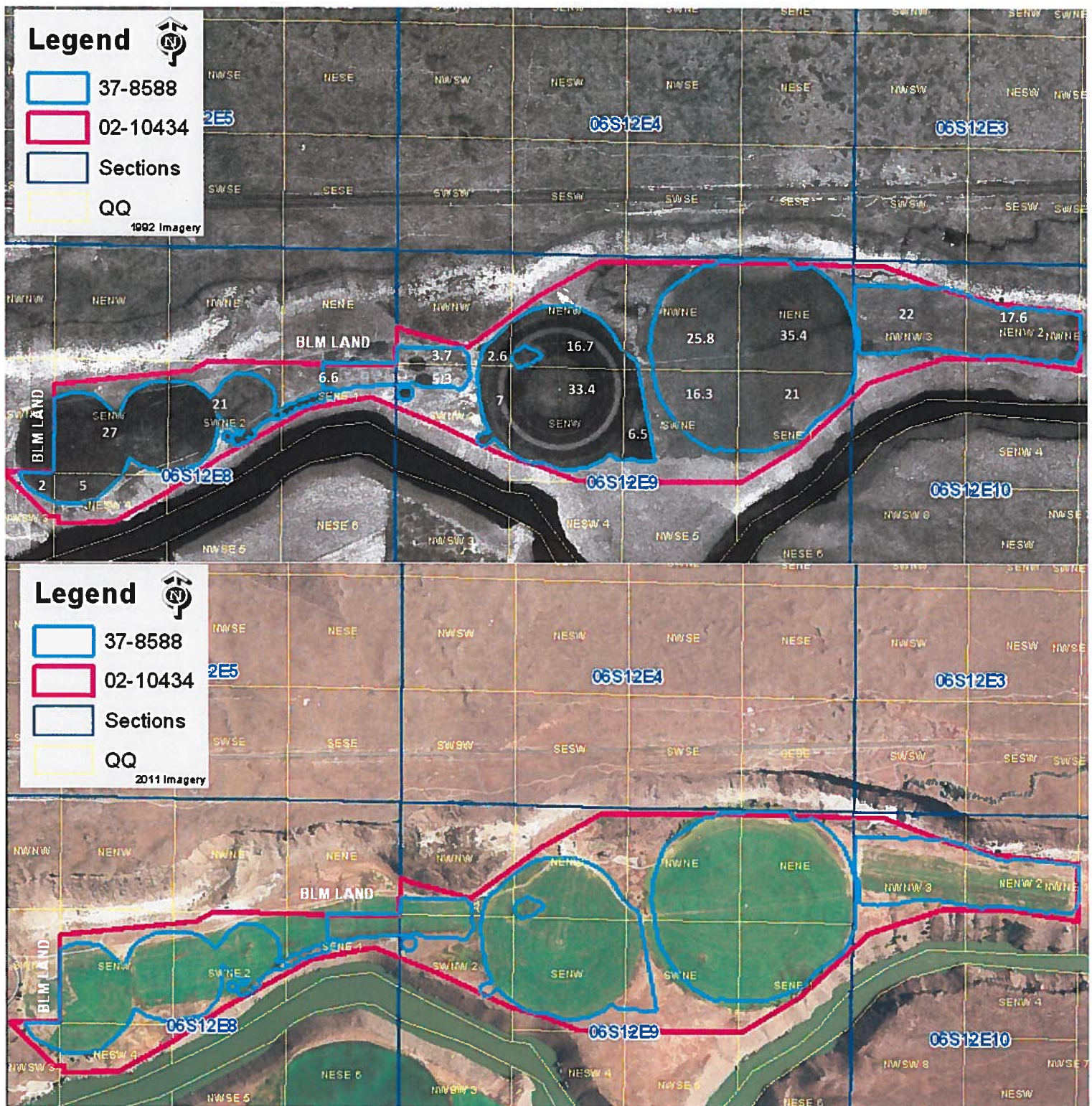
Large pivot @ 120 sprinklers x 5 gpm = 1.34 cfs

3 handguns @ 70 gpm = 0.47 cfs

~5.11 cfs

The total estimated water that they system requires is within 95% of the amount measured.

The permit holder was not positive of the location of the delivery pipes once they go underground so the delivery system diagram is my best guess based on the exposed pipes and pressure readings that I was able to collect.



Maps depict the acres that were developed during the development period compared to recent activity.

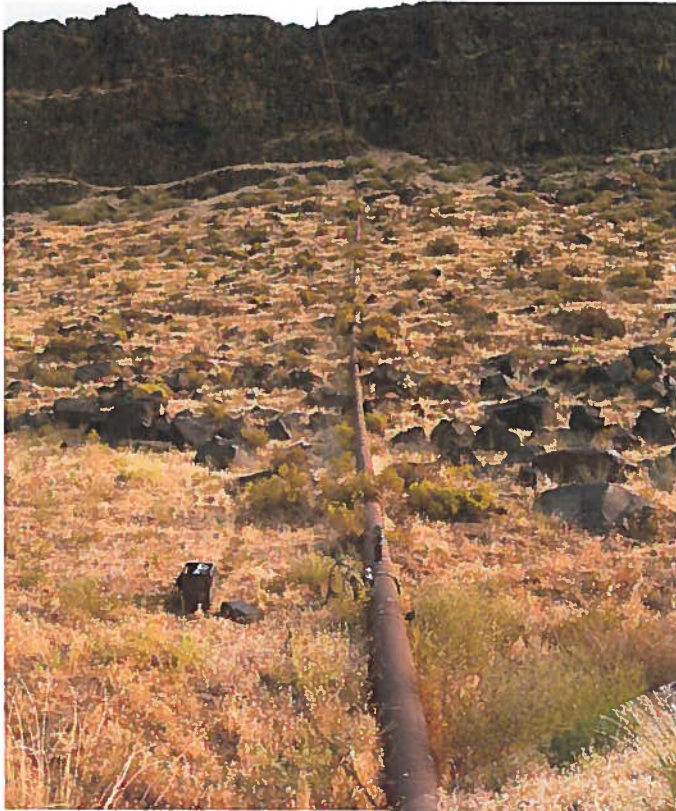


Photo taking while looking north.
This is a photo of the 10" mainline
that begins in a pond at the top
of the ridge.

Note the measurement point.



Pipe splits here

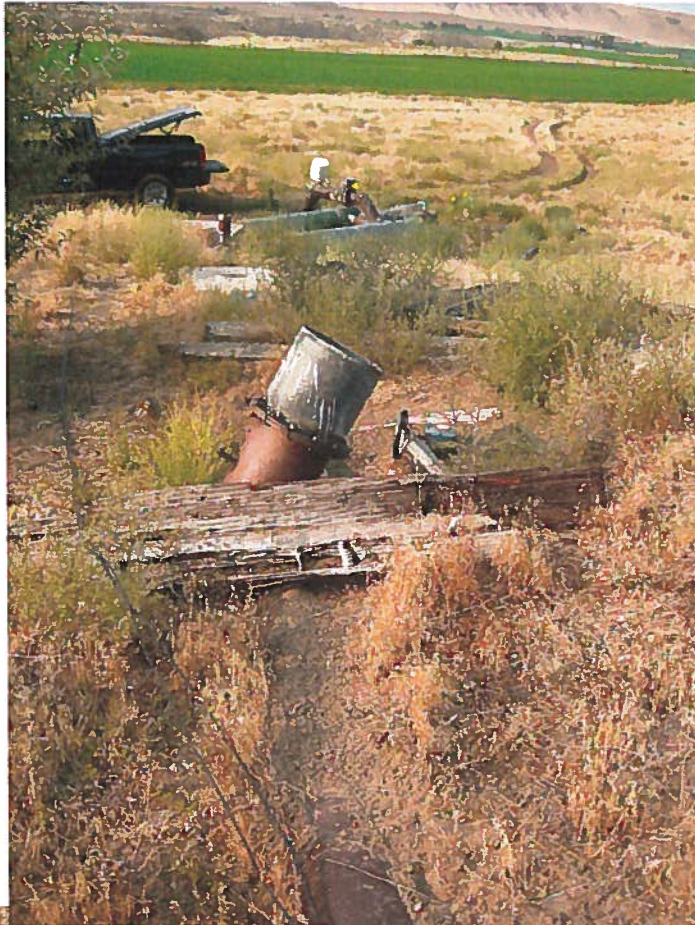


Photo taken while looking South



This is a photo of the 1st split off the mainline. I attempted to take a pressure reading here but my gauge maxed out at 100psi and the pressure was greater than that.



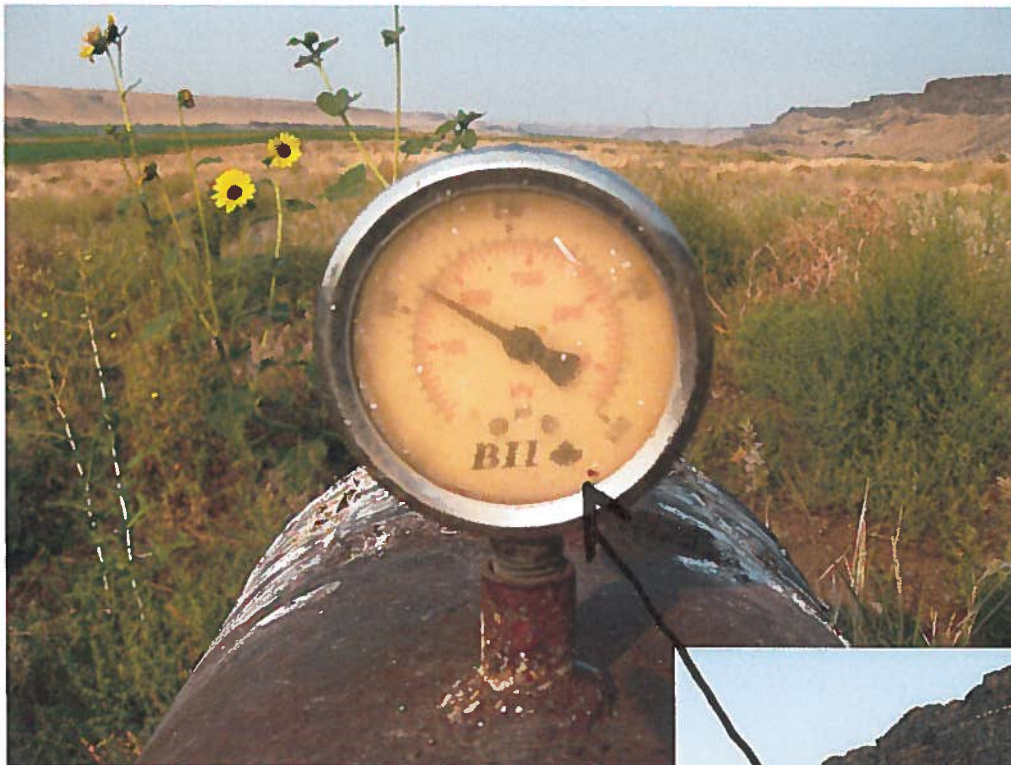
Pipe provides
water to most
eastern field
→

↓
Pipe provides water to
the medium and large
pivots

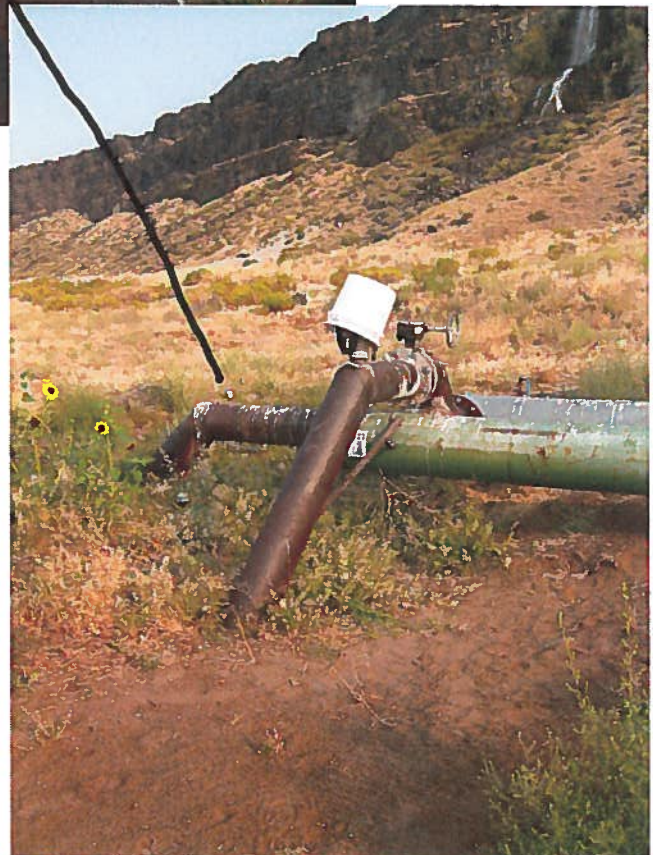


~60psi to
eastern most fields





120 psi to the
medium + large pivots





eastern most fields
Photo taken facing
northeasterly



45psi is the
pressure reading at the
large pivot



Photo looking northerly
down the large pivot



Large pivot panaramic

- end gun is visible
- photo was taken while facing northeasterly

Photo taken while looking southwesterly
This field is ^{for} the medium pivot



medium pivot's
endgun





Panoramic of fields serviced by handlines.
This photo was taken while facing the southeasterly.



more fields serviced by
handlines

← photo was taken while
facing southeasterly



← facing southwesterly

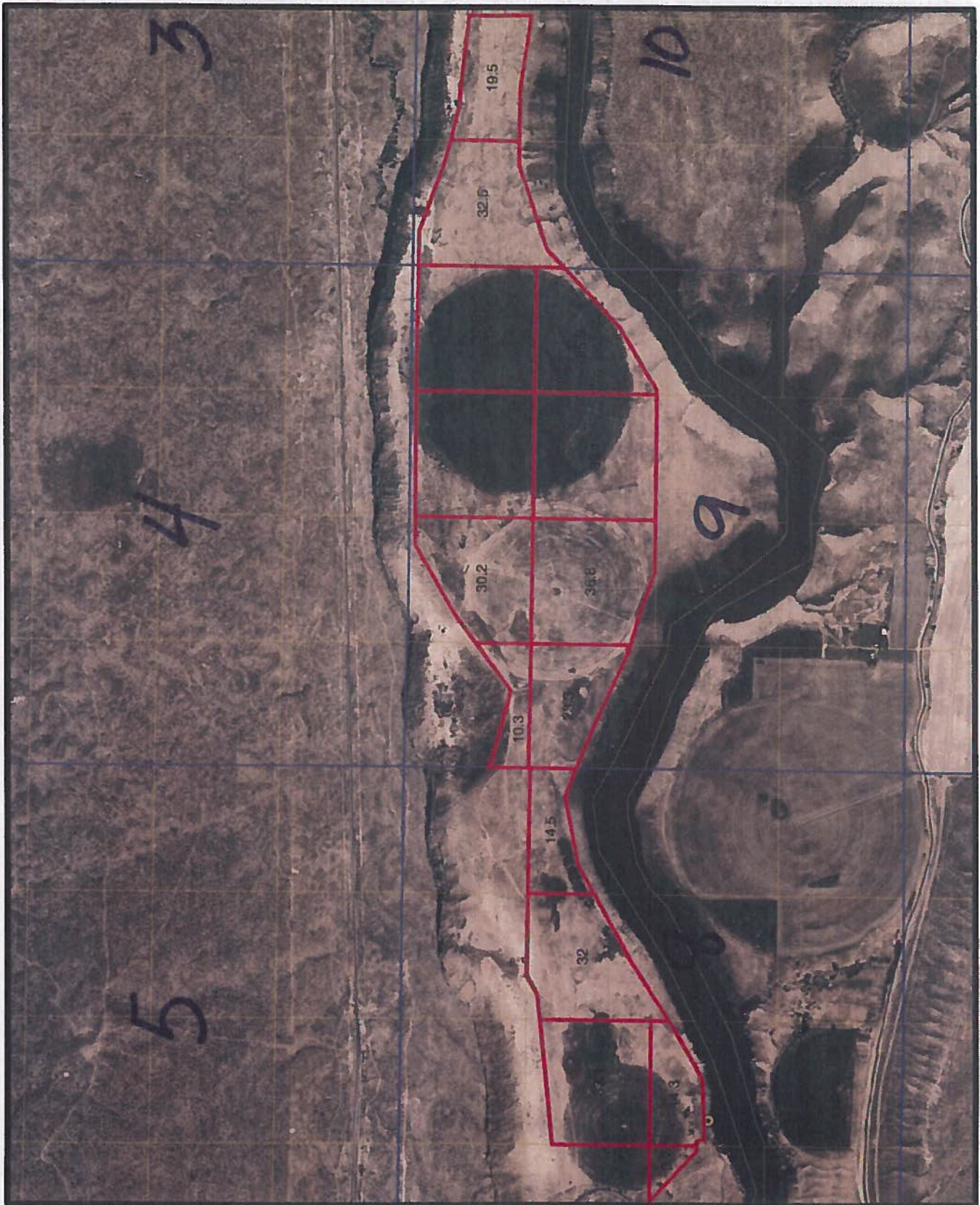




This is a photo of the small pivot. In this photo I am looking in the western direction.
The endgun is visible.



This photo taken while I was arriving for the exam.
Down the road and to the right you'll find Bliss dam.
The acres belonging to BLM have been visibly dried
up in this photo.



6S, 12E

POU pursuant to Transfer #7775
Attachment #1

Attachment 1b

RECEIVED

MAY 20 2009

WATER RESOURCES
WESTERN REGION



SPH0118B IN 11
 02-11 09:1400 *H = 0.20Z
 -000.00 % AI2
 0000.00 MMSEC
 000.00 % T0
 Pipe thickness = 0.20Z
 Diameter = 10.75

09:10+ 2.387E 36PM 00R
 +000000 *10 G 00R
 -000000 *10 G 00R
 ①
 09:21+ 2.401E 36PM 00R
 +000236 *10 G 00R
 -000000 *10 G 00R
 ②
 09:31+ 2.413E 36PM 00R
 +000477 *10 G 00R
 -000000 *10 G 00R
 ③
 09:41+ 2.403E 36PM 00R
 +000719 *10 G 00R
 -000000 *10 G 00R
 ④
 09:51+ 2.412E 36PM 00R
 +000961 *10 G 00R
 -000000 *10 G 00R
 ⑤
 09:01+ 2.430E 36PM 00R
 +001203 *10 G 00R
 -000000 *10 G 00R
 ⑥
 09:11+ 2.442E 36PM 00R
 +001444 *10 G 00R
 -000000 *10 G 00R
 ⑦
 09:21+ 2.414E 36PM 00R
 +001685 *10 G 00R
 -000000 *10 G 00R
 ⑧
 09:31+ 2.394E 36PM 00R
 +001926 *10 G 00R
 -000000 *10 G 00R
 ⑨
 09:41+ 2.424E 36PM 00R
 +002167 *10 G 00R
 -000000 *10 G 00R
 ⑩
 09:51+ 2.426E 36PM 00R
 +002408 *10 G 00R
 -000000 *10 G 00R
 ⑪
 09:01+ 2.424E 36PM 00R
 +002649 *10 G 00R
 -000000 *10 G 00R
 ⑫
 09:11+ 2.378E 36PM 00R
 +002892 *10 G 00R
 -000000 *10 G 00R
 ⑬
 09:21+ 2.396E 36PM 00R
 +003133 *10 G 00R
 -000000 *10 G 00R
 ⑭
 09:31+ 2.409E 36PM 00R
 +003374 *10 G 00R
 -000000 *10 G 00R
 ⑮

$$(3374 \times 10) / 14 = 2410 \text{ gpm or } 5.37 \text{ cfs}$$

SPH0118B IN 11
 02-11 09:1400 *H = 0.20Z
 -000.00 % AI2
 0000.00 MMSEC
 000.00 % T0
 Pipe thickness = 0.20Z
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09:10+ 2.387E 36PM 00R
 +000000 *10 G 00R
 -000000 *10 G 00R
 ①
 09:21+ 2.421E 36PM 00R
 +000236 *10 G 00R
 -000000 *10 G 00R
 ②
 09:31+ 2.413E 36PM 00R
 +000477 *10 G 00R
 -000000 *10 G 00R
 ③
 09:41+ 2.403E 36PM 00R
 +000719 *10 G 00R
 -000000 *10 G 00R
 ④
 09:51+ 2.412E 36PM 00R
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 -000000 *10 G 00R
 ⑤
 09:01+ 2.430E 36PM 00R
 +001203 *10 G 00R
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 09:11+ 2.442E 36PM 00R
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 09:21+ 2.414E 36PM 00R
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 +001926 *10 G 00R
 -000000 *10 G 00R
 ⑨
 09:41+ 2.424E 36PM 00R
 +002167 *10 G 00R
 -000000 *10 G 00R
 ⑩
 09:51+ 2.426E 36PM 00R
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 09:21+ 2.396E 36PM 00R
 +003133 *10 G 00R
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 ⑭
 09:31+ 2.409E 36PM 00R
 +003374 *10 G 00R
 -000000 *10 G 00R
 ⑮

$$(3374 \times 10) / 14 = 2410 \text{ gpm or } 5.37 \text{ cfs}$$

Attachment #2