

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED
JAN 11 1993

Department of Water Resources

A. GENERAL INFORMATION

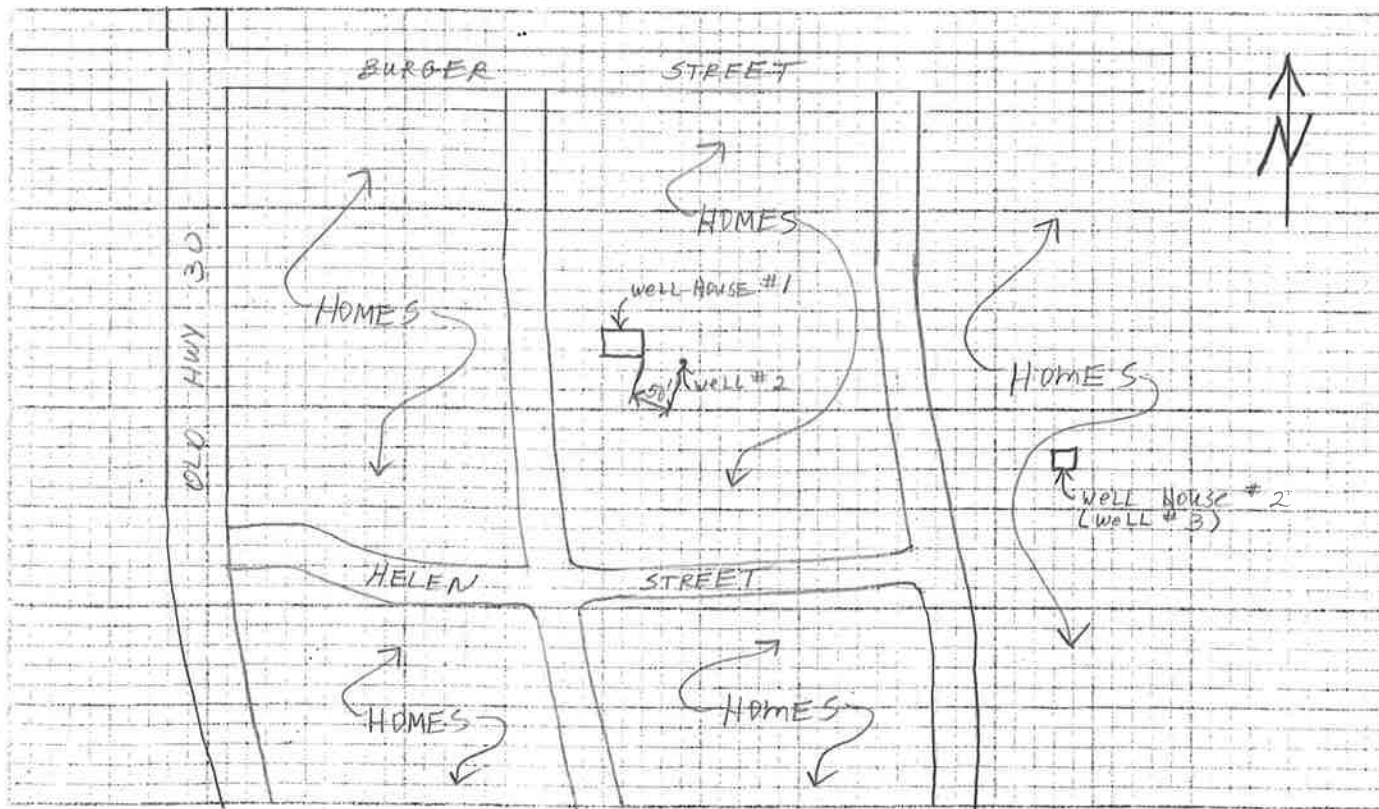
1. Owner: Rio Vista Water Co., Inc., No. 3
c/o Gerald Fitz, President Permit No. 63-10850
Phone No. 454-9929
Current Address: 22109 Rio Vista Drive, Caldwell, ID 83605
2. Accompanied by: David Wickard & Jack Durham EXAM. DATE: 7/29/92
Address: Rio Vista Sub. Phone No. (Same)
Relationship to Permit Holder: Board members
3. Source: Groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with same place of use: 63-2283, 63-9064, 63-8234, 63-8154
☒ Copies Attached
2. Other water rights with same point of diversion: 63-9064, 63-8234, 63-8154
☒ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. Diversion System Diagram: Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



Scale: 1" = N.T.S.

2. ☒ Copy of U.S.G.S. Quadrangle Attached
Showing location(s) of point(s) of diversion and
place(s) of use (required). ☐ Aerial Photo Attached
(required for irrigation of 10 acres or more).
☒ Photo of Diversion and System Attached
(required for all but single household domestic groundwater, and stockwater).

System Description (continued)**3. Narrative: Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)**

Three separate wells supply water to TOTAL OF 53 residences. Three Licenses all ready exist for 24 homes, so this permit will cover 29 extra homes. Well #1 is a 10" Located inside well house with Two Large Pressure Tanks. Well #2 is a 10" also, located outside of well house. Water is piped into main system. Well #3 is 6" well in small well house. This well services only 7 homes on east rim as per Jack Durham.

☐ See Remarks on page 4 for continuation

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	(NO TAG)	3	(NO TAG)		4"
	(NO TAG)	5	(NO TAG)		4"
	(NO TAG)	3	(NO TAG)		2"

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

5. Point(s) of Diversion:

Ident. No.	Gov't. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
	4	NE	SW	SW	10	4N	3W	Canyon	Aerial Map
	4	SE	SW	SW	10	4N	3W	Canyon	Aerial Map

6. Place(s) of Use:

Indicate Method of Determination Same as P/O

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
4N	3W	10											6						6
													LOT 4						

Do not use this space

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

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

2. Measurements:

NONE due to size of system. Polysonic could not be used
due to too many elbows and joints.

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method: NONE

2. Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: 60 psi x 2.31 = 138.6 ft (1); Dynamic pumping level: 80' ft (2) 0.8
Total Head: (1) + (2) = 218.6 (3) $Q = \frac{(8.8)(2814)(.7)}{218.6} = 0.23 \text{ CFS}$; Flow rate: 0.23 cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)

Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)

Meter Input HP: (6) x 1.34 = _____ (7)

Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Amps x .001732 = _____ (6)

Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = (6)(4.5) = 27.0 \text{ AFA}$

$V_{D.R.} = [\text{Diversión Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = (0.30)(246)(1.9835) = 146.4 \text{ AFA}$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 27.0 \text{ AFA}$

2. Volume Calculations for Other Uses:

$V_R = 29 \text{ homes} \times 0.6 = 17.4 \text{ AF}$

$V_D = (0.3)(365)(1.9835) = 217.2 \text{ AFA}$

$V_R < V_D$, use 17.4 AF

H. REMARKS AND OVERLAP REVIEW ANALYSIS

OVERLAPS - (P/D & U) - Previous water Right Licenses on early stages of subdivision.

P/U - Same area but different P/D and use.

Theoretical pumping efficiency calculated to be 0.8 CFS. Since the request is for only 0.36 CFS, and prior licenses ~~total~~ recommend licensing for 0.12 CFS IRRIGATION and 0.24 CFS FOR DOMESTIC as requested on permit.

NOTE: Need to check system capacity in regards to (3) prior licenses. Seems to me this request may be beyond system capacity.

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
IRRIGATION	3/15	11/15	0.12	27.0
Domestic	1/1	12/31	0.24	17.4
Totals:			0.36	44.4

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 |

J. AUTHENTICATION

Field Examiner's Name Rick Collingwood
 Signature Rick Collingwood
 Certification Date _____
 Field Report Preparation Date 8/13/92

CONSULTANT SEAL

K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

Rio Vista Water Co

Well Name 12' x 28'

80 ~~psi~~ gpm (discharge)

Well #1

~~12"~~
10" casing

264' well depth
80' static

(2) Steel Pressure Tanks - (peaLL) Gray Tank 1971
Working Press. 60 psi. (70 psi at this time)

Gray Tank - 4' ϕ x 14'

Red Tank - 4' ϕ x 12'

(2) Pumps

3 hp + 5 h.p.

Float meter gauge for water usage.

4" Iron Pipe into Pressure Tanks

4" " " from Well #2 to Pump House.

(2) 4" Discharge Lines to Sub + (1) 3" Line to sub.

Well #2

210'
- 280' sup

80' static water level

50' SE of Pump House

12" casing

Pump - 20 h.p.

Air Compressor on Red Tank - Air Volume Control
Model 610 HP

Whitewater - Air Rite.

53 homes

Well # 3 - Original when sub. was developed.

Well - 6" Casing

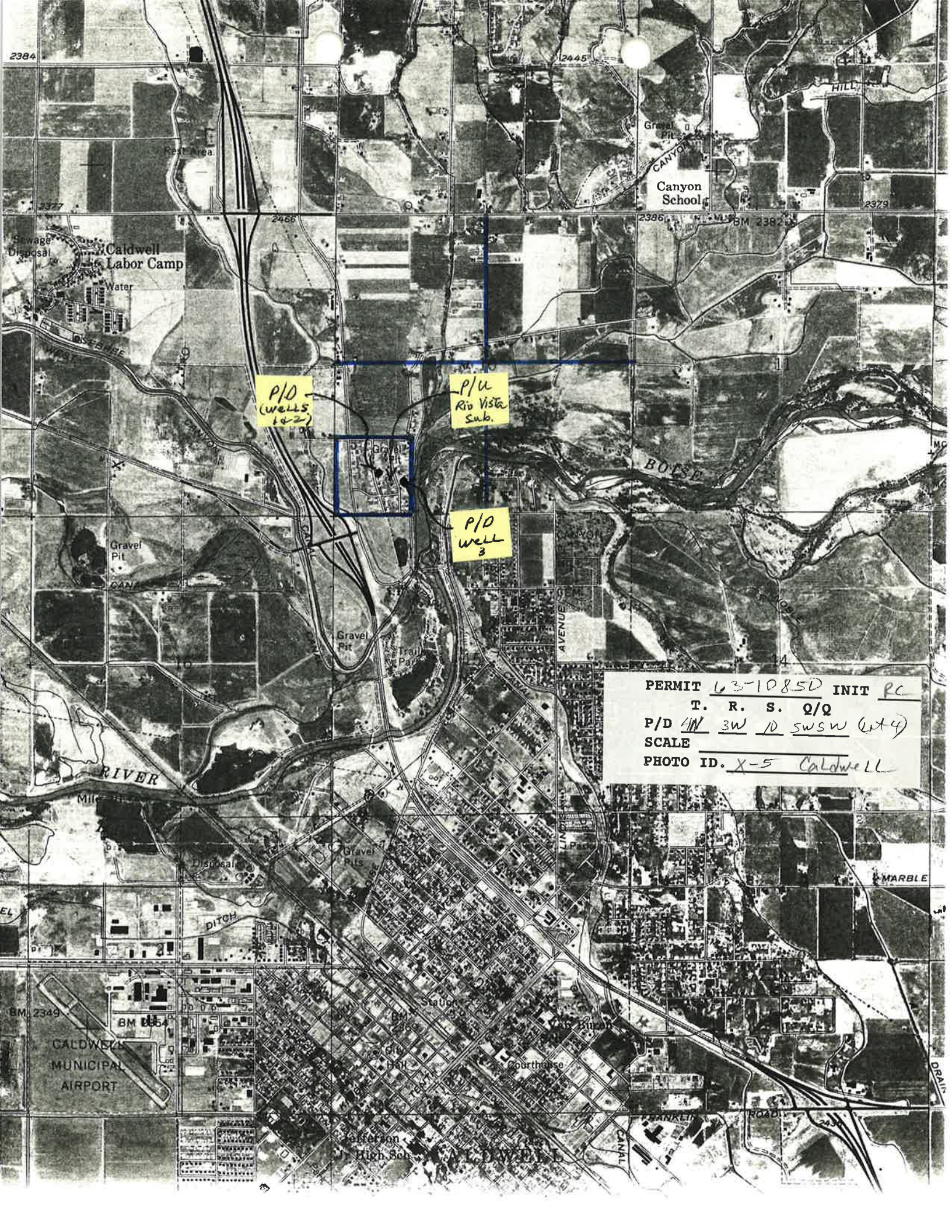
(2) Pressure Tanks - Well Mate - Model WM25WB
Precharged to 25 psi.

(Adams Pump Co.)
466-6439

[3 h.p. originally]

Well House 6' x 8'

Gene
Heibel
Paddy Flit
Lot 25
East of
Dorothy



PERMIT 63-10850 INIT RC

T. R. S. Q/Q

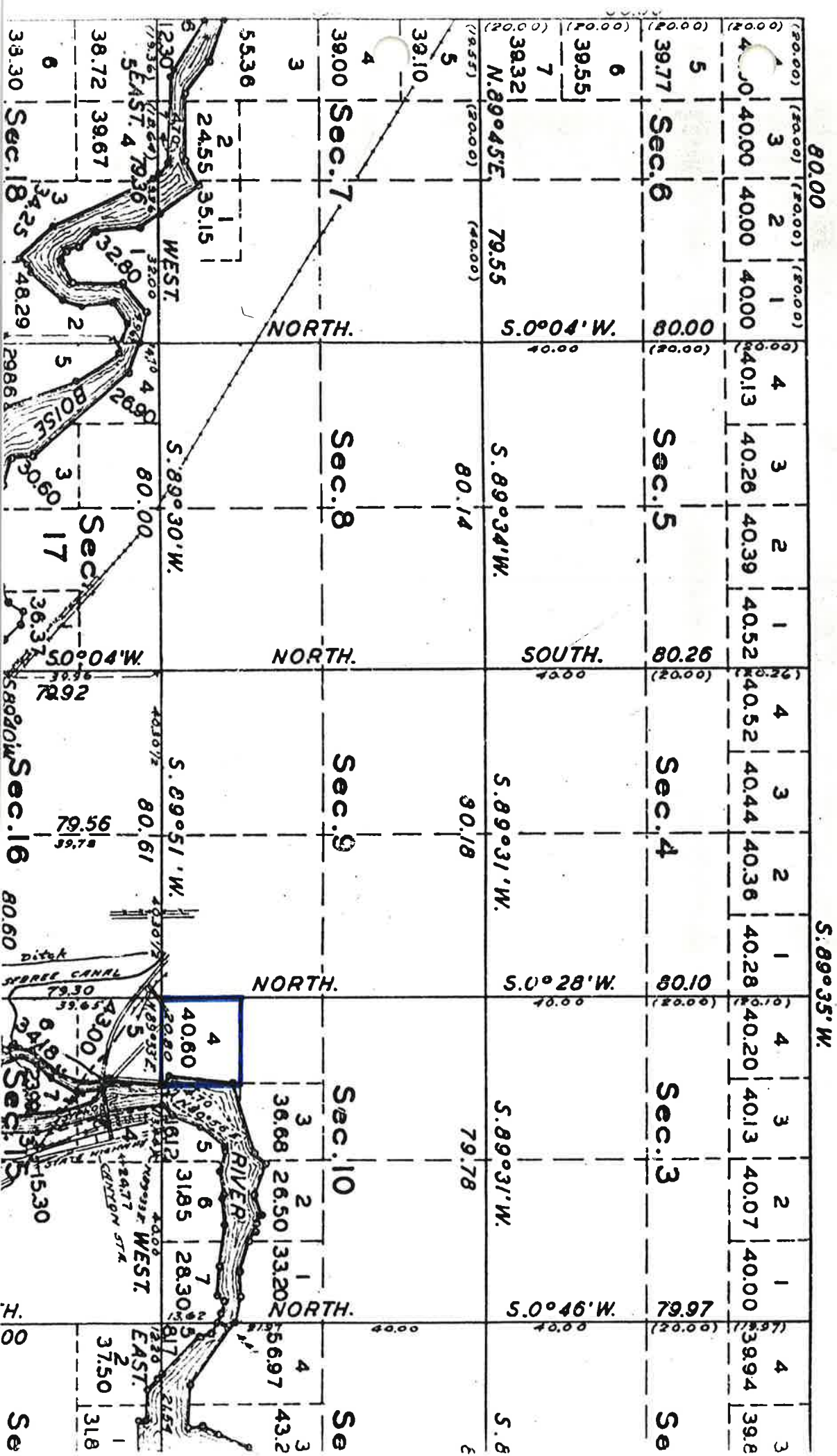
P/D 1W 3W 1D SWSW (4x4)

SCALE

PHOTO ID. X-5 Caldwell

COMPOSITE PLAT OF

NO 4 NORTH, RANGE NO 3 WEST OF THE



Department of Water Resources

WELL INSPECTION FORM

If well is associated with water right, provide WR# 63-10850

Otherwise provide legal description and a sketch map and/or address so that the well can be located easily.

1. Legal Description: TWP 4N, Rge 3W, Sec. 10, SW 1/4 SW 1/4 or Lot 4.

2. Owner: (Same AS PERMIT)

Address _____, City _____, St _____

3. Casing $\geq$ 12 inches above ground: Yes _____ No ☒

4. Access Port: Yes _____ No ☒
Pressure Gauge: Yes ☒ No _____
Flowing: Yes ☒ No _____

Static Water Level: 80'
Casing Diameter: 10"
Temperature: N/A

5. Are there any obvious construction problems that may be a source for contamination or waste of water: Yes _____ No ☒

If answer to Item 5 is Yes, describe in remarks and attach photo.

Remarks: _____

Form 238-I
05/90

Department of Water Resources

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If well is associated with water right, provide WR# 63-10850

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2. Owner: (Same AS permit)

Address _____, City _____, St _____

3. Casing $\geq$ 12 inches above ground: Yes _____ No ☒

4. Access Port:	Yes _____ No ☒	Static Water Level:	<u>80'</u>
Pressure Gauge:	Yes _____ No ☒	Casing Diameter:	<u>10"</u>
Flowing:	Yes ☒ No _____	Temperature:	<u>N/A</u>

5. Are there any obvious construction problems that may be a source for contamination or waste of water: Yes _____ No ☒

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2. Owner: (Same as permit)

Address _____, City _____, St _____

3. Casing $\geq$ 12 inches above ground: Yes _____ No ☒

4. Access Port:	Yes _____ No ☒	Static Water Level:	_____
Pressure Gauge:	Yes ☒ No _____	Casing Diameter:	<u>6"</u>
Flowing:	Yes ☒ No _____	Temperature:	<u>N/A</u>

5. Are there any obvious construction problems that may be a source for contamination or waste of water: Yes _____ No ☒

If answer to Item 5 is Yes, describe in remarks and attach photo.

Remarks: _____



PHOTO ONE-

View northwest of well No. 1 well house and well No. 2 in foreground.



PHOTO TWO-

View inside well house of well No. 1. The 4" line to the right is from well No. 2.



PHOTO THREE-

Two 4" Lines and valves connected to Two pressure Tanks.

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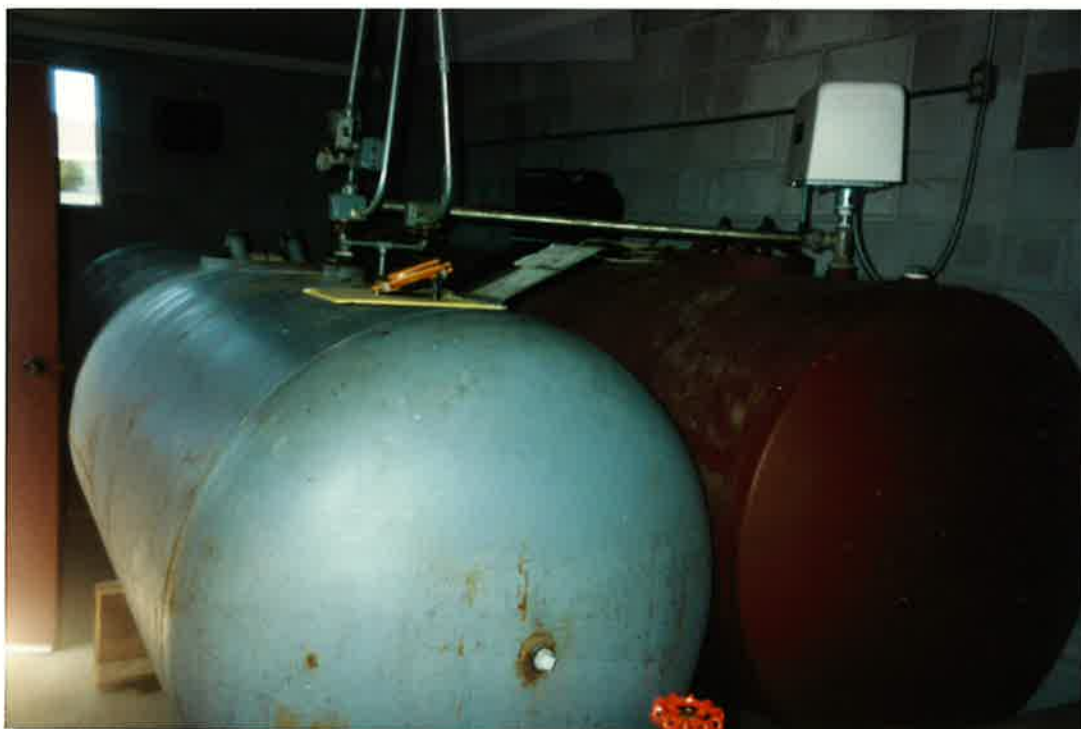


PHOTO FOUR-

The two pressure tanks in well house and pressure gauges. The white device on red tank is an Air Volume Control device. The black object is the backup.



PHOTO FIVE-

The 4" discharge Lines at west end of Tanks.

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PHOTO SIX-

West end of well House showing three 4" discharge Lines to subdivision.



SEVEN
PHOTO ONE-

View inside well house No. 2 on east side of Rio Vista Subdivision. The 6" well services 7 homes at eastern portion of subdivision.

>



EIGHT
PHOTO TWO-

Two pressure Tanks in well house No. 2.



PHOTO THREE-

View south from Well House No. 1 of homes serviced by water system.

>



PHOTO FOUR-

View southeast of Well House No. 2.