

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 61-7679
Exam Date: 7/12/2012

1. Current Owner: CITY OF GLENNS FERRY
PO BOX 910
GLENNS FERRY ID 83623-0910
(208)366-7418
2. Accompanied by: Jeff Cook
Phone No: (208)599-3741
Address: PO Box 910, Glenns Ferry, ID 83623
Relationship to Permit Holder: Certified PWS Operator for the City of Glenns Ferry
Email: Jeffcook@rtci.net

3. **SOURCE**

GROUND WATER

TRIBUTARY

SNAKE RIVER*

**On 12/4/1992, Steve Lester wrote a memo to the file explaining the reasoning behind this source being "Ground water," instead of being "springs" like 61-4141. The field examination confirmed that the original water right 61-4141 is a "spring" source, but with the extension of the collection gallery being added which required water right 61-7679, a 600 – 650 ft long trench was dug (10ft X 10ft), to obtain "shallow ground water" and then the trench was back-filled with 4 inch gravel surrounding a 10 inch perforated pipe running the full length, used to collect the "shallow groundwater." For this reason, the source is "Ground Water" Tributary to "Snake River."*

B. OVERLAP REVIEW

1. **Other water rights with the same place of use:** All of the following are within the service area of the City of Glenns Ferry: 2-7470 (City of Glenns Ferry municipal, Snake River source), 61-7679 (City of Glenns Ferry municipal, expansion of the original infiltration system), 2-2209E (City of Glenns Ferry municipal irrigation system), 61-4141 (City of Glenns Ferry municipal, original infiltration system), and 61-7228 (City of Glenns Ferry municipal groundwater source).

2. **Other water rights with the same point of diversion:** Only 61-4141 actually overlaps, since it is the original infiltration gallery supplied by the springs source. What makes 61-7679 "source classified different" from 61-4141 is that the collection area was dug down into the shallow groundwater and extended out, expanding the infiltration gallery collection area. The other PODs in the same QQ do not overlap: 2-7470 (City of Glenns Ferry municipal, Snake River source), 2-2209E (City of Glenns Ferry municipal irrigation system), and 61-7228 (City of Glenns Ferry municipal groundwater source)

C. DIVERSION AND DELIVERY SYSTEM

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

GROUND WATER L4 SE1/4SW1/4NW1/4 Sec. 32, Twp 05S, Rge 10E, B.M. ELMORE County

Method of Determination: Garmin GPS Map 76S, ArcMap esri and 2004 – 2013 Imagery

2. **LOCATION OF PLACE OF USE:**

CITY OF GLENNS FERRY SERVICE AREA BOUNDARY (see attached map)

Method of Determination: Garmin GPS Map 76S, ArcMap esri and 2004 – 2013 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 *(Photo's were lost when my computer crashed and IT was unable to retrieve them when they rebuilt my computer. For this reason, additional ArcMap imagery and drawings are being used for this field examination).*

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
----------------------------------	-------------------	-----------	-------------------------	------------------	--

US Motor 3-phase, 20 Hp turbine model #20030722-100 with an 8 inch discharge

US Motor 3-phase model # (unknown) ID# H0403032246-100E 20 Hp turbine, with an 8 inch discharge.

Both pumps discharge to the same 10 inch ductile iron pipe that flows through a Water Specialties 10 inch flow meter #2004131

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Water Specialties 10 inch flow meter #2004131, measuring at the time of the field examination 444 gpm (420 gpm), 20-24 psi, with a lift of 65 ft. Next to the flow meter was ID Tag #A0018538						Unknown when calibrated last.

2. Measurements:

None.

E. FLOW CALCULATIONS

Measured Method:

From the Water Specialties flow meter (at the time of the field examination): 420 gpm X 0.00223 = 0.9366 = 0.94 cfs

INSERT HERE (waiting on flow measurements from Jeff Cook. If he cannot submit historical flow records showing that more diversion rate is required during peak demand, then I would recommend 0.94 cfs, with 61-4141 and 61-7679 combined limit not to exceed 2.54 cfs).

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

2. Volume Calculations for Other Uses:

N/A. Not required on licensing due to permit being approved prior to Administrative Memo #1 Licensing.

G. NARRATIVE/REMARKS/COMMENTS

The same system is used for both water rights 61-4141 and 61-7679. The pump house and buried 10 ft wide X 12 ft deep brick infiltration collection area with 4 access ports are located in the SESWNW, and then the expansion for 61-7679 is an additional 600 - 650 ft long trench dug 10 ft X 10 ft with 4 inch gravel surrounding 10 inch perforated pipe extending from the brick infiltration collection area and running northeast, and running to the end of the concrete barrier just north of the restrooms. From the Pump house, a buried 10 inch C900 pipe runs north up the hill, then turns

northeast, then makes a 90 degree turn and discharges into the water treatment plant (the surface water intake, for water right 2-7470, into the treatment building is located to the south). There is a 10 inch line that runs north to (2) storage tanks (located on the north side of Hwy 184), with a total storage capacity of 500,000 gallons (ID#T4200022TS1; installed in 2000; level measured with a transducer; SCADA system; has a 13 inch overflow/flapper valve). Inside the pump house is a US Motor 3-phase, 20 Hp turbine model #20030722-100 with an 8 inch discharge, and a US Motor 3-phase model # (unknown) ID# H0403032246-100E 20 Hp turbine, with an 8 inch discharge. Both pumps discharge to the same 10 inch ductile iron pipe that flows through a Water Specialties 10 inch flow meter #2004131, measuring at the time of the field examination 444 gpm (420 gpm), 20-24 psi, with a lift of 65 ft. Next to the flow meter was ID Tag #A0018538. Discharge thru the flow meter, discharges to buried 10 inch C900 pipe that runs to the treatment plant. The main distribution throughout the City of Glenns Ferry range from 4 - 12 inch (PVC, steel, C900, and Ductile Iron). There are 85 fire hydrants on the system. Beneficial use is for 736 connections (at the time proof of beneficial use was submitted), with only a couple businesses on the system, which use minimal water (Magic West Potato Processing, ICT Plating/circuit boards, and a winery). The schools and State Park are irrigated by King Hill Irrigation. The average lot size for residents is 1/2 acre, and anything greater than this is irrigated with King Hill Irrigation water. Water right 61-7728 Harrison Well (ID Tag# A0018537), is a back-up well that is run manually only if there is a high demand in the summer. Pictures are not available from this field examination, due to my computer crashing and IT not being able to retrieve them when my computer was rebuilt. Pictures of the pump house, pumps, flow meter, infiltration gallery and access ports were obtained from water right 61-4141.

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>
MUNICIPAL	1/01 to 12/31	0.00 CFS	N/A (prior to Memo #1 licensing)
<u>Totals:</u>		0.00 CFS	

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

I. AUTHENTICATION

Field Examiner's Name _____ Date _____



SENW 3

SENW 4

61-7679 POD (Infiltration Gallery Pump House)

SENW

2-7470 POD (4 pipes/intake in the Snake River;
Where the bubbler is located)

SWNW

SENW 7

NESW

NWSW 5

32

05S105

NWSW

NESW 7

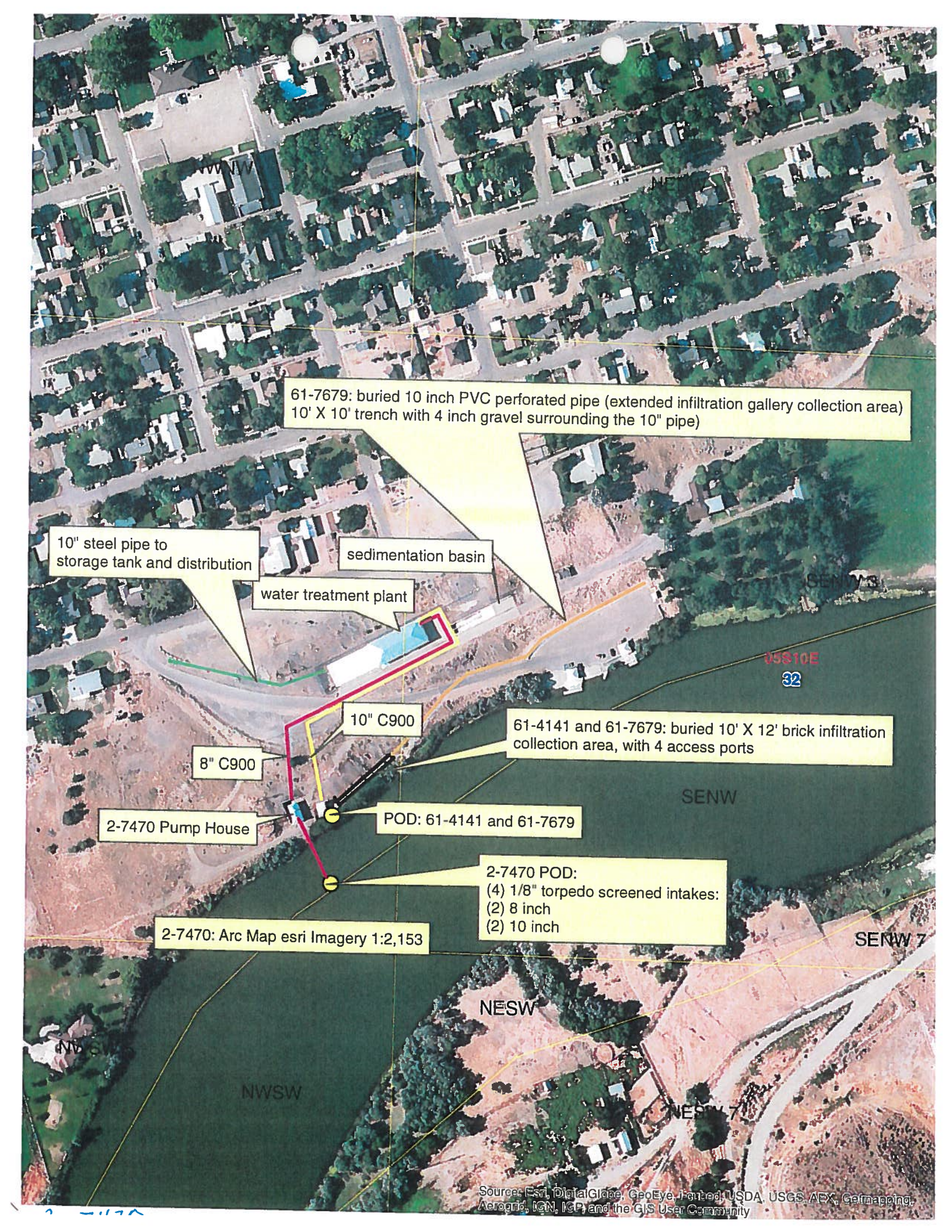
ArcMap 2013 Imagery 1:3,000

NWSW 7

SWSW

SWSW 6

SESW



61-7679: buried 10 inch PVC perforated pipe (extended infiltration gallery collection area)
10' X 10' trench with 4 inch gravel surrounding the 10" pipe

10" steel pipe to
storage tank and distribution

sedimentation basin

water treatment plant

10" C900

61-4141 and 61-7679: buried 10' X 12' brick infiltration
collection area, with 4 access ports

8" C900

2-7470 Pump House

POD: 61-4141 and 61-7679

2-7470 POD:
(4) 1/8" torpedo screened intakes:
(2) 8 inch
(2) 10 inch

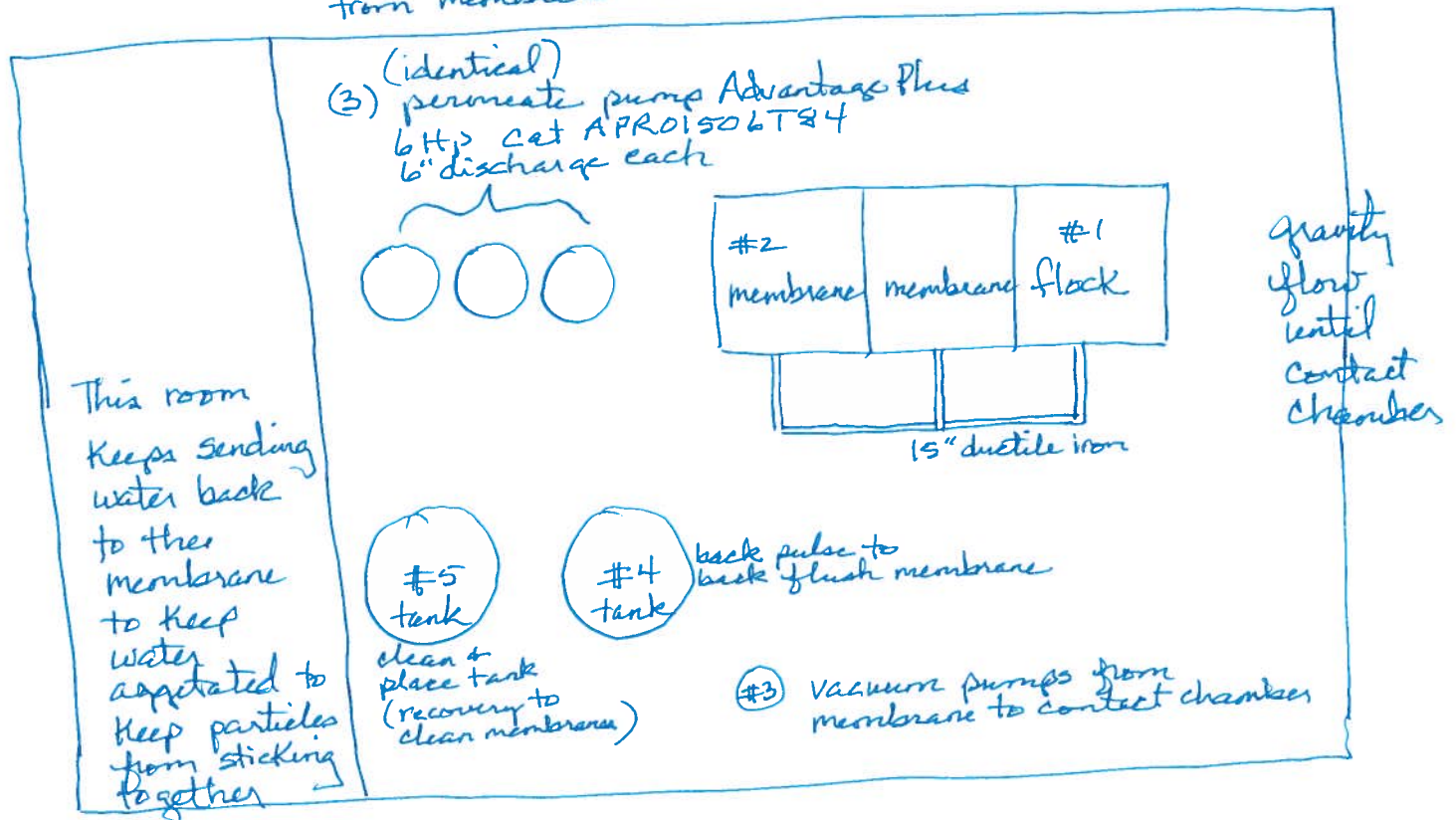
2-7470: Arc Map esri Imagery 1:2,153

NESW

NWSW

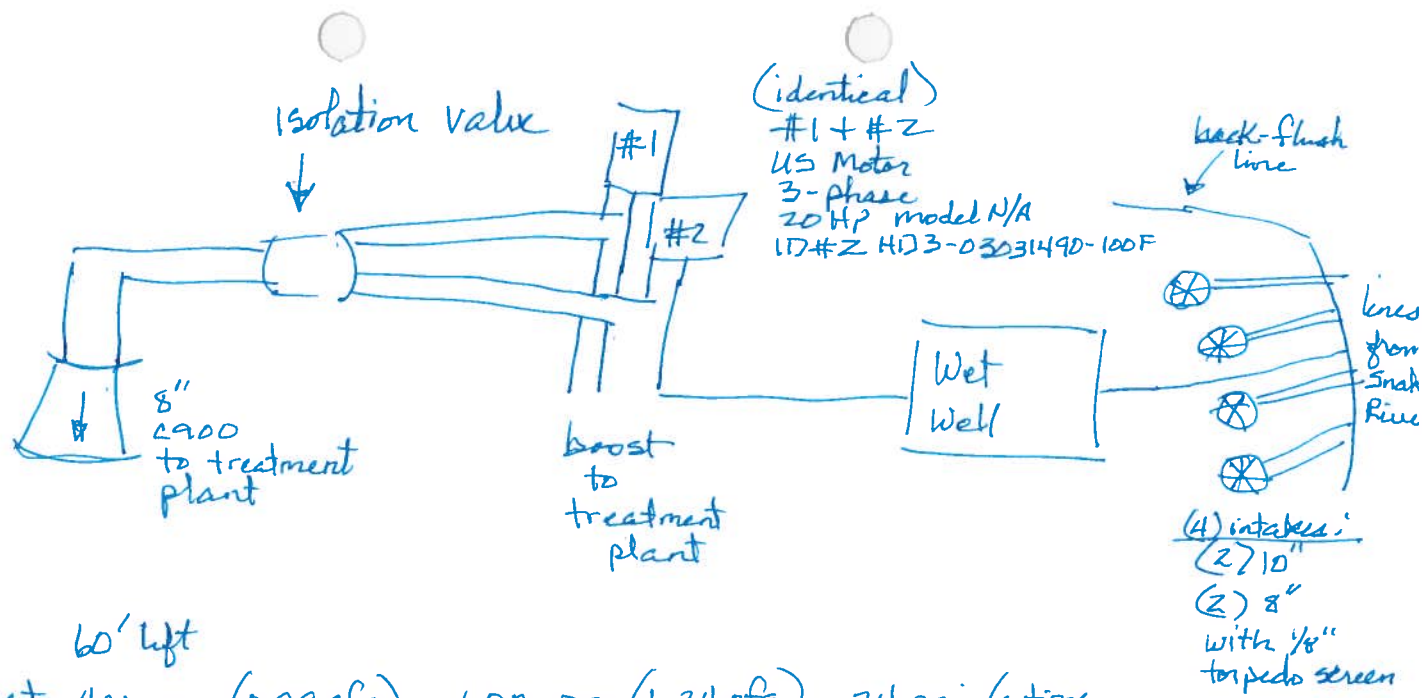
NESW 7

from membrane #2 + #4 + #5:



Treatment Plant (lower level)

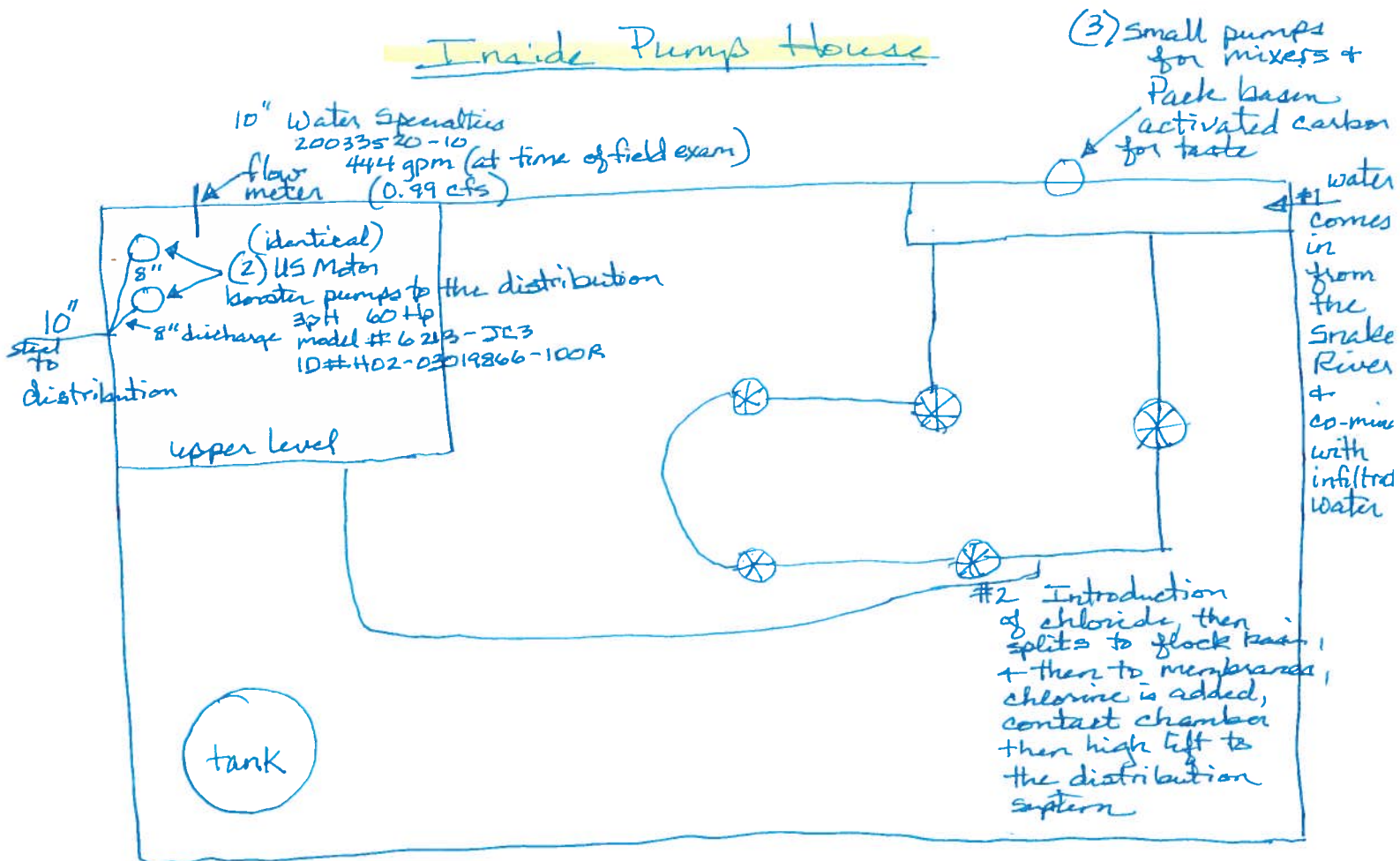
- 10" steel to distribution, to 12" Δ 900 under I84 to 10" high density to 500,000 gallon storage tank
- with 13" overflow (flapper valve)
- level controlled by demand / SCADA system



60' lift

- runs at 400 gpm (0.89 cfs) - 600 gpm (1.34 cfs), 24 psi (at time of F.E)
in order to be able to pump flow to treatment plant

Inside Pump House



Treatment Plant (70 Joseph Ferry Dr.)
SCADA controlled



NWNW

NENW

2 Storage Tanks: 500,000 gallon total storage

29

05610E

SWNW

61-7679: Arc Map esri Imagery 1:1,250

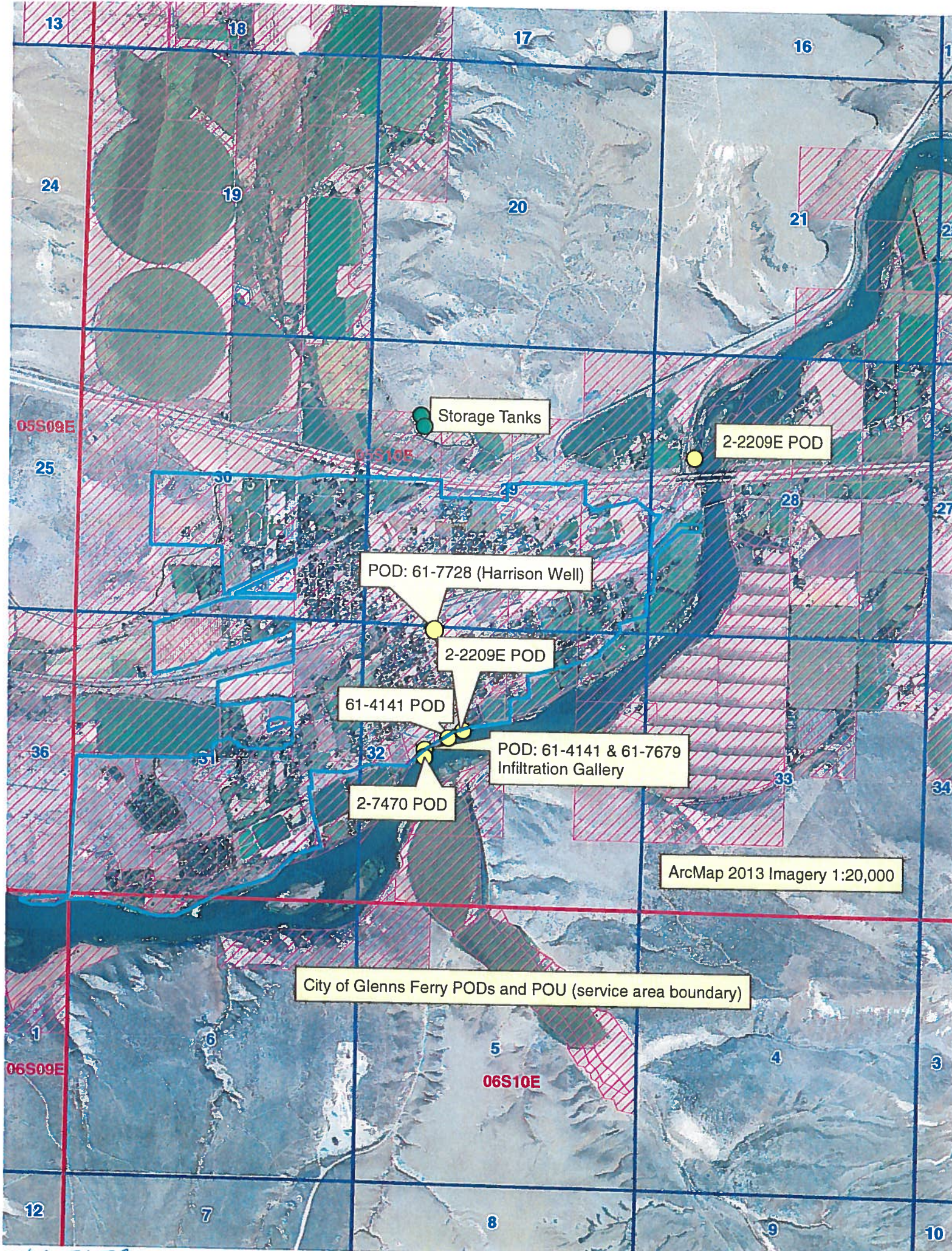
SENE

POD: 61-7728 (Harrison Well)
12" casing, extending 12" above ground
6" discharge, runs manually if high demand
in the summer (A0018537, tag on casing)

2 Storage Tanks: 500,000 gallon total storage
13" overflow (flapper valve)
10" high density, changing to 12" C900 under the
interstate to the tank; ID# T4200022TS1
SCADA system; level measured with transducer
tank installed in 2000

POD: 61-4141 & 61-7679
Infiltration Gallery

POU (City of Glenns Ferry, service area boundary):
ArcMap 2013 1:20,000



Storage Tanks

2-2209E POD

POD: 61-7728 (Harrison Well)

2-2209E POD

61-4141 POD

POD: 61-4141 & 61-7679
Infiltration Gallery

2-7470 POD

ArcMap 2013 Imagery 1:20,000

City of Glens Ferry PODs and POU (service area boundary)

Basin	Sequence	Suffl	Process	Basis	Status	Draft	Priority Date	Diversion Rate	Source List	Water Use List	Current Owner	Volume	System	Decreed	POU/POD Overlap
2	2209	E	Water Right	Decreed	Active	N	2/25/1963	2.400	SNAKE RIVER	MUNICIPAL	CITY OF GLENNS FERRY	401.7	surface H2O for irrigation	Decreed 9/28/2009	POD Sec 28, Sec 32L3SENW
2	7470		Water Right	License	Active	Y	3/30/1996	1.000	SNAKE RIVER	MUNICIPAL	CITY OF GLENNS FERRY		surface water treatment plant		
61	4141		Water Right	Decreed	Active	N	1/1/1917	2.540	SPRINGS	MUNICIPAL	CITY OF GLENNS FERRY		Infiltration Gallery	Decreed 10/26/2000	
61	7228		Water Right	Decreed	Active	N	5/21/1975	0.450	GROUND WATER	MUNICIPAL	CITY OF GLENNS FERRY		E006756/supp. High demand	Decreed 10/26/2000	
61	7679		Water Right	License	Active	Y	12/10/1992	2.680	GROUND WATER	MUNICIPAL	CITY OF GLENNS FERRY		Infiltration Gallery*		
2	7471		Water Permit		Active	N	12/9/1996	3.000	SNAKE RIVER	MUNICIPAL	CITY OF GLENNS FERRY		for City's irrigation water		
37	8851		Water Application		Active		10/12/1995	5.500	BANCROFT SPRINGS	MUNICIPAL	CITY OF GLENNS FERRY				

*This water right is an expansion of 61-4141 (nothing was deepened, only the 10' X 10' trench with 4" gravel around 10" perforated pipe, extended 600 - 650 ft from the existing collection area, to the northeast.

POU Overlap

Basin	Sequence	Suffl Process	Basis	Status	Draft	Priority Date	Diversion Rate	Source List	Water Use List	Current Owner	Volume	System	Decreed	POU/POD Overlap
2	2209	E	Water Right	Decreed	Active	N	2/25/1963	2.400 SNAKE RIVER	MUNICIPAL	CITY OF GLENNS FERRY	401.7	surface H2O for irrigation	Decreed 9/28/2009	POD Sec 28, Sec 32L3SENW
2	7470		Water Right	License	Active	Y	3/30/1996	1.000 SNAKE RIVER	MUNICIPAL	CITY OF GLENNS FERRY		surface water treatment plant		
61	4141		Water Right	Decreed	Active	N	1/1/1917	2.540 SPRINGS	MUNICIPAL	CITY OF GLENNS FERRY		Infiltration Gallery	Decreed 10/26/2000	
61	7228		Water Right	Decreed	Active	N	5/21/1975	0.450 GROUND WATER	MUNICIPAL	CITY OF GLENNS FERRY		E006756/supp. High demand	Decreed 10/26/2000	
61	7679		Water Right	License	Active	Y	12/10/1992	2.680 GROUND WATER	MUNICIPAL	CITY OF GLENNS FERRY		Infiltration Gallery*		
2	7471		Water Permit		Active	N	12/9/1996	3.000 SNAKE RIVER	MUNICIPAL	CITY OF GLENNS FERRY		for City's irrigation water		
37	8851		Water Application		Active		10/12/1995	5.500 BANCROFT SPRINGS	MUNICIPAL	CITY OF GLENNS FERRY				

*This water right is an expansion of 61-4141 (nothing was deepened, only the 10' X 10' trench with 4" gravel around 10" perforated pipe. extended 600 - 650 ft from the existing collection area, to the northeast.

POU Overlaps

AGI-04141



7-21-94 LRU

Spring(s) diversion system 2 Pumps, pipeline

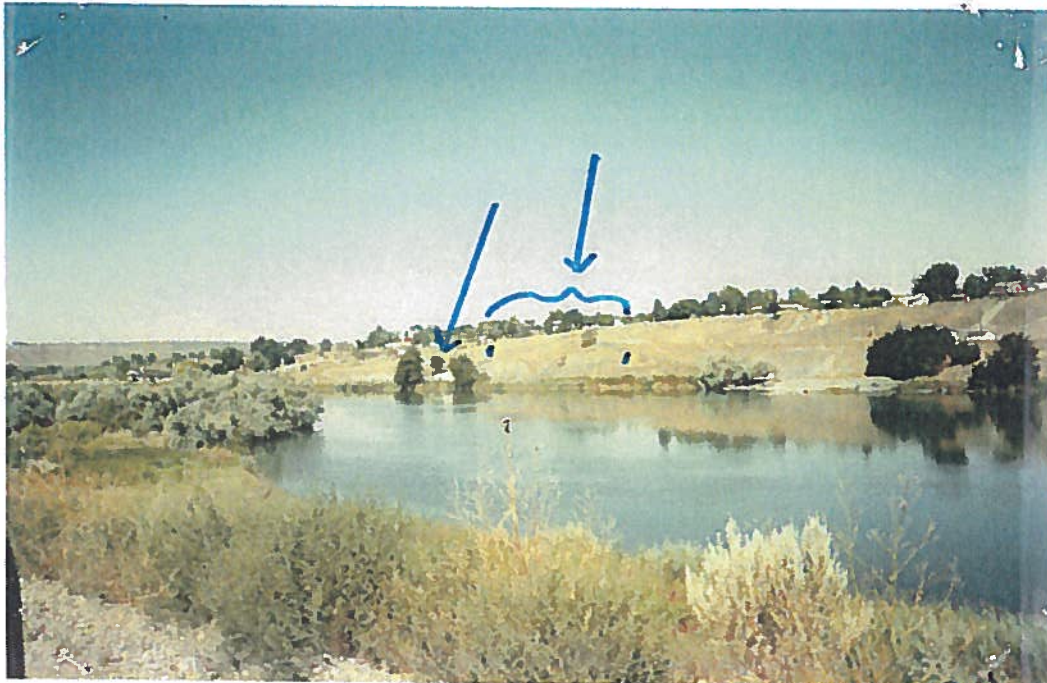


7-21-94 LRU

Pipeline from above pumps, Flowmeter

61-4141 + 61-7679

AGI-04141



7-21-94 LKW

View of pumphouse & infiltration gallery
from south side of the river.

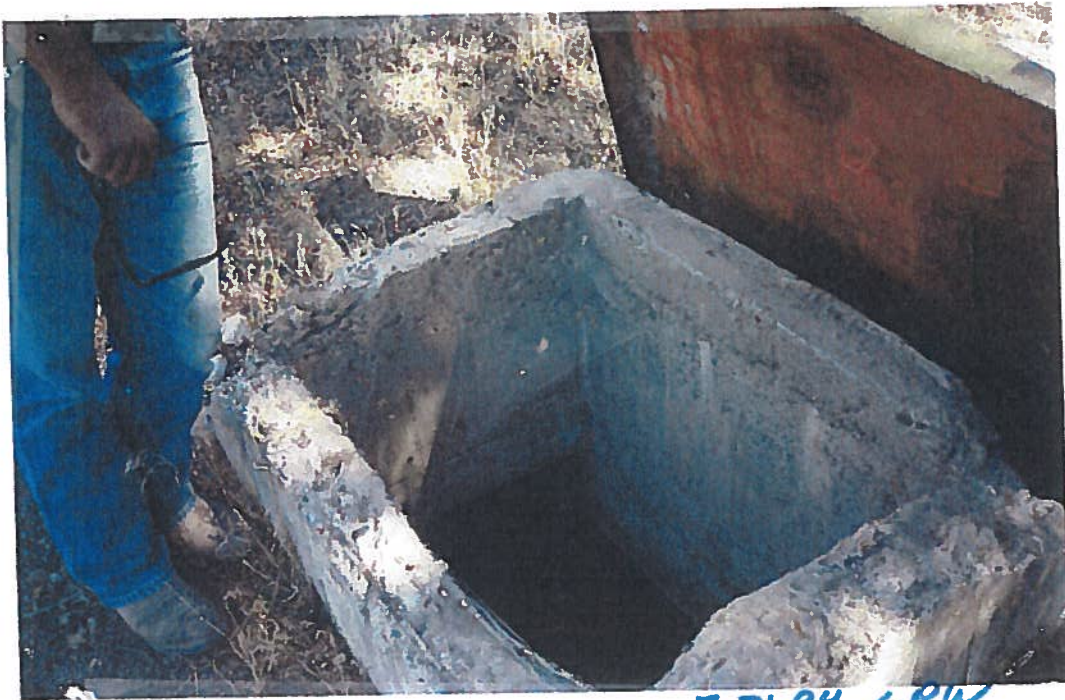


7-21-94

Access ports to infiltration gallery.

61-4141 + 61-7679

AGI-04141



7-21-94 LRW

Close-up of access port.

61-4141 + 61-7679