

A. GENERAL INFORMATION

Exam Date: 5/1st/2009
19

- Relationship to Permit Holder:

- ## ROCK CREEK

1. Other water rights with the same place of use:
2. Other water rights with the same point of diversion:

PLACE OF USE: FISH PROPAGATION

[illegible]

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.

<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>

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

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>
Flow Meter	Polysonic	Panametrics				April 2009
Flow Meter	Polysonic	Fuji				April 2009

2. Measurements:

Measured 1148.7 gpm average over 10 minutes on Fuji meter, 1142 gpm average over a minute or so on other meter.

= 2.56 cfs

E. FLOW CALCULATIONS

Measured Method:

☒ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

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

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

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

2. Volume Calculations for Other Uses:

$$2.56 \text{ cfs} \times 1.9835 \text{ af/cfs/day} \times 365 \text{ days/year} = 1853.4 \text{ afa}$$

G. NARRATIVE/REMARKS/COMMENTS See attached

Have conditions of permit approval been met? No; no measuring device has been installed in the system. Owner needs to request waiver of this requirement; I recommend this be approved, as the diversion pipeline served as an acceptable "measurement port" for our equipment.

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
FISH PROPAGATION	01/01 to 12/31	2.560 CFS	1,853.40 AF
<u>Totals:</u>		2.560 CFS	1,853.40 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

I. AUTHENTICATION

Field Examiner's Name J. F. Stanton Date 5-21-07

Reviewer _____ Date _____

Comment Report

47-7659

1. jstanton 5/21/2009 Field Report Narrative

Comment: Yesterday I visited this property in hopes of conducting a licensing exam, as I had not been able to contact the permittee. Upon entering the property, I was met by Claude Holland; he is the brother of Larry Holland, and lives on the property. Larry Holland has lived in Las Vegas for many years, and his business address/preferred mailing address there is 5085 Cecile Ave, Las Vegas, NV, 89115. Claude showed me the diversion works on Slaughterhouse Gulch, then had to leave for a while. I walked around on my own, mapping the system and taking many photos. There was no measuring device, and it would take a lot of work to install one. It is possible to use a polysonic meter on the pipeline above the upper raceways. The owner told me by telecon that he thinks the spring flow has held up over the years, and that it is pretty constant on an annual basis; an accurate measurement could be made at any time. The owner never measured the diversion rate himself, so finding outside records on this will probably not be possible. The permit does require inlet and outlet measuring devices, so this condition has not been met.

There are two water sources on this property. This permit covers a seep tunnel located east of Slaughterhouse Gulch, which is diverted to this facility just as it emerges from the rimrock that surrounds this property. I did not see a tunnel, just a concrete wall at the base of a large rock that feeds a 12" pvc pipeline. The pod was gpsd; based on both this data and my review of several ArcMap photos, the permitted pod appears to be incorrect; a licensing amendment will be required. The pipeline feeds some small raceways inside a building and then 2 larger raceways just west of the building. It also feeds several wooden troughs inside a fry house (typical of commercial fish-rearing facilities). Water leaving the fry house enters the original channel of Slaughterhouse Gulch below the pod on that source before ending up in Rock Creek. The spring source is crystal clear, so is easy to identify from the murky stream that is covered under Permit 47-7731. Water exiting the upper raceways is piped over the diversion works on the Gulch for use in other parts of the facility. A local representative/employee of the permittee told me that the fish-out facility was operated until about 1996, and was used to raise trout for the commercial fish market for several years after that. The economic slump that hit the commercial fish market several years ago put an end to commercial production at this facility in 2003.

Some of this water is piped to a home and mobile home located near the NW corner of the property; this use is not covered by this permit or any other filings that I could find. The owner told me that the use began in the 1940s, so no SRBA claim is required. The use is for non-drinking purposes and a little outside watering; a small artesian well provides drinking water. I think that the owner will claim this use in the SRBA, so I do not plan to include it in my recommendation.

Water still flows through various raceways and ponds, but the only fish currently on the property are a few sturgeon that Claude Holland put into 2 ponds a few years ago as

property are a few sturgeon that Claude Holland put into 2 ponds a few years ago as pets (he feeds them and looks at them). The spring water feeds a single concrete raceway NW of the fry house, and also feeds one of the sturgeon ponds (I estimated 1-2 cfs entering this tiny pond). Water leaving the tiny pond then comingles with Slaughterhouse Gulch water in the long pond/channel complex on the east side of the property. This channel then feeds 3 concrete raceways and then into another dirt pond before entering Rock Creek at the north end of the property; this pond also has a few sturgeon, but they are not visible in the murky water. Trout were raised in the raceways, then placed in the clear-water pond for fishing; the other ponds were settling ponds built to handle the large silt load from Slaughterhouse Gulch. I am not including the settling ponds in my shape file, as they were not built for the permitted use.

This place was called the Daydream Ranch for a while, and allowed people to come in and catch trout for a fee. So there was recreational usage in the fish-out pond until 1996, which is not covered by the permit. Holland did not "give up" anything to add this usage, so it cannot be recommended under a licensing amendment. Once this use ended, the use went back to just fish propagation for about 7 years. Fish production here was mainly done by local professionals in this field, which Mr. Holland is not. There are no plans at this time to put the facility back into production, but that has no effect on issuance of the license. I am including the fish-out pond in the place of use shape, as they are raising a few sturgeon there now.

An SRBA claim still has not been filed on this permit as required, but the owner said he was willing to file a claim. I will send him the necessary paperwork.

On 5-/19/09, Jana Reeder and I went back to this property to measure the flow in the diversion pipeline before water dumps out into the raceways. Measurements were taken with both Fuji & Panametrics flow meters, and both measurements were within a few gpm of each other. Over a 10-minute span, flows averaged 2.56 cfs on the Fuji meter. Meter specs were in line with good measuring conditions, and the pipeline was full of water, so it seems unlikely that it could have carried the 7 cfs permitted or the 5 cfs that were proved up on. I am recommending the measured flow for licensing; the owner can object if he wants to. Assuming this rate is diverted 24/7/365, the total diversion volume is 1853.4 af.

We also measured the production facilities with a steel tape to determine exact facility volume, even though this is no longer an element of the water right. The total facility volume is 18019 cu ft, not counting the volume of the fish-out pond (a circular pond about 55 feet in diameter but of unknown depth; owner claimed 15-20 feet, but I observed about a 4-6 foot depth).

LOG NAME:JIM

START :05-19 11:00

END :05-19 11:10

INTERVAL:00:01:00

5/19/2009 11:00

+3.271E+0 ft/s

+1.141E+3 gal/m

+TOTAL 0000000 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:01

+3.290E+0 ft/s

+1.148E+3 gal/m

+TOTAL 0001126 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:02

+3.314E+0 ft/s

+1.156E+3 gal/m

+TOTAL 0002275 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:03

+3.279E+0 ft/s

+1.144E+3 gal/m

+TOTAL 0003425 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:04

+3.261E+0 ft/s

+1.137E+3 gal/m

+TOTAL 0004578 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:05

+3.269E+0 ft/s

+1.140E+3 gal/m

+TOTAL 0005728 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:06

+3.303E+0 ft/s

+1.152E+3 gal/m

+TOTAL 0006877 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:07

+3.302E+0 ft/s

+1.152E+3 gal/m

+TOTAL 0008028 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:08

+3.247E+0 ft/s

+1.132E+3 gal/m

+TOTAL 0009184 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:09

+3.301E+0 ft/s

+1.151E+3 gal/m

+TOTAL 0010334 gal

-TOTAL 0000000 gal

NORMAL

5/19/2009 11:10

+3.294E+0 ft/s

+1.149E+3 gal/m

+TOTAL 0011487 gal

-TOTAL 0000000 gal

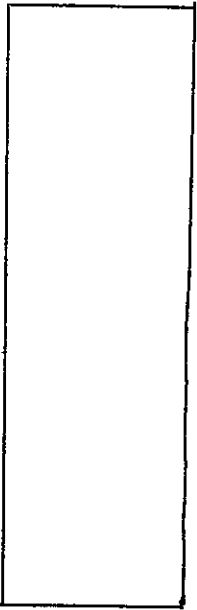
NORMAL

FUJI = 1148.7 GPM
PanaMetrics = 1142 GPM

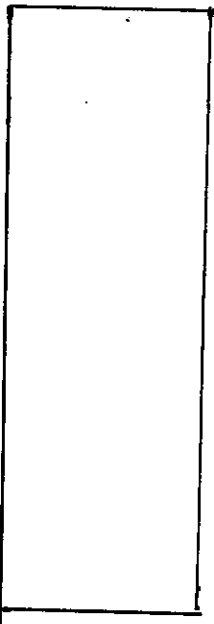
2.56 *df*

All 3'-4' deep

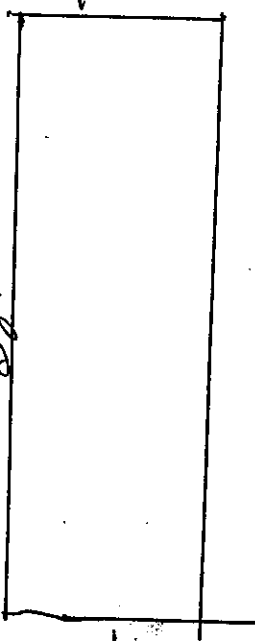
20'



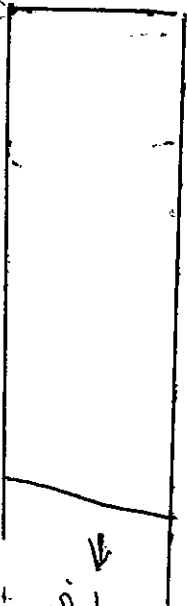
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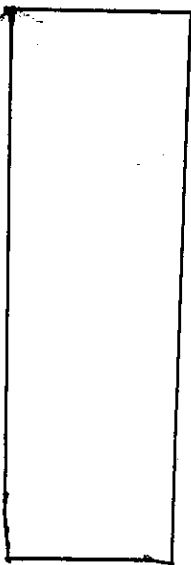
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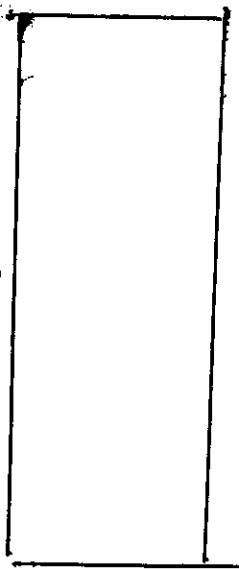
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20



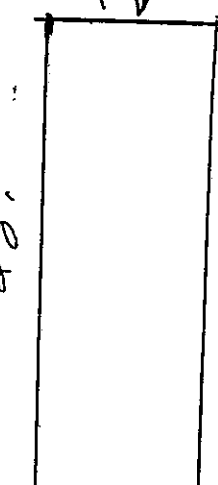
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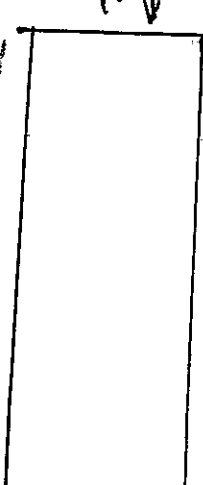
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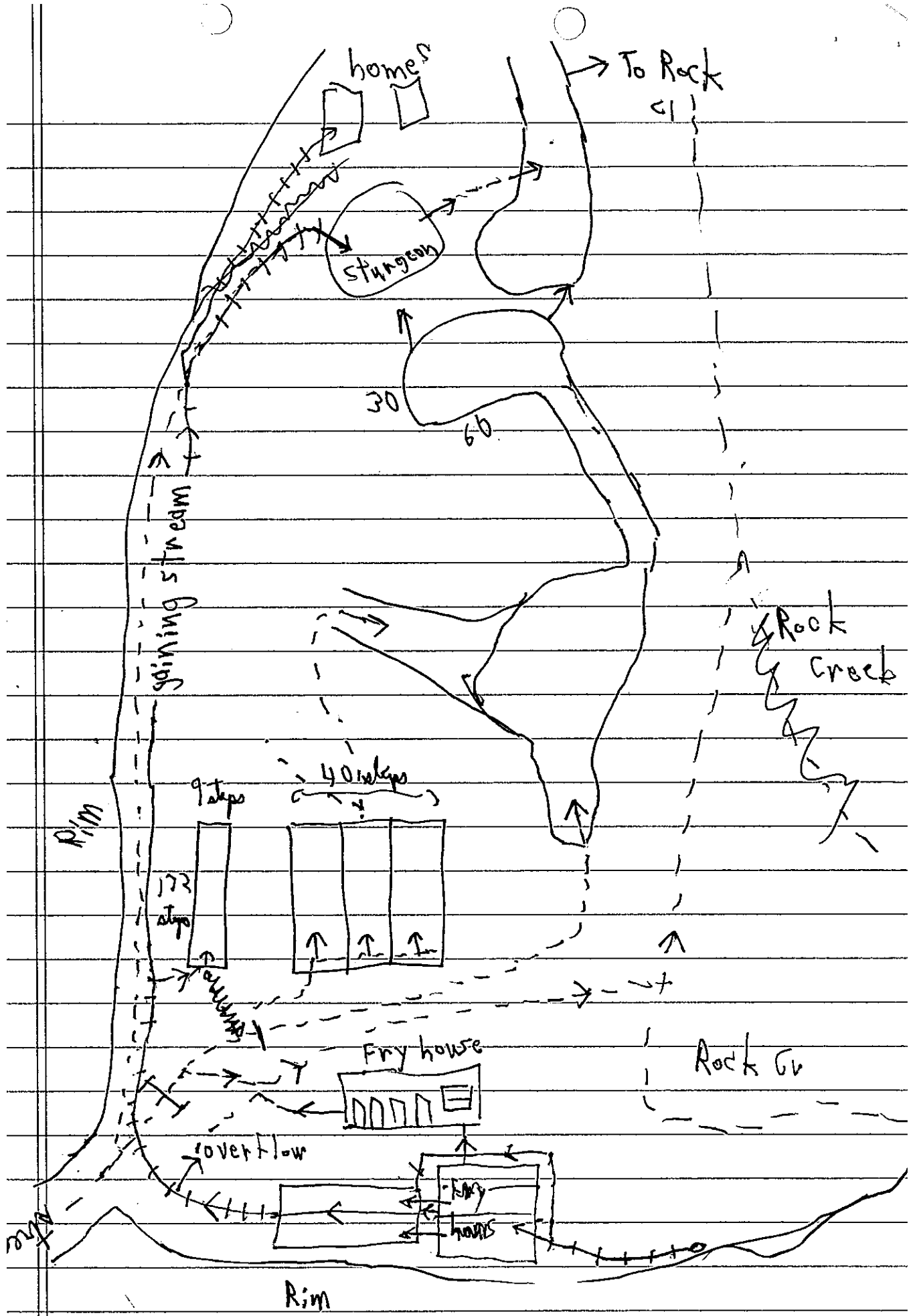
10'



10'



MICROFILMED



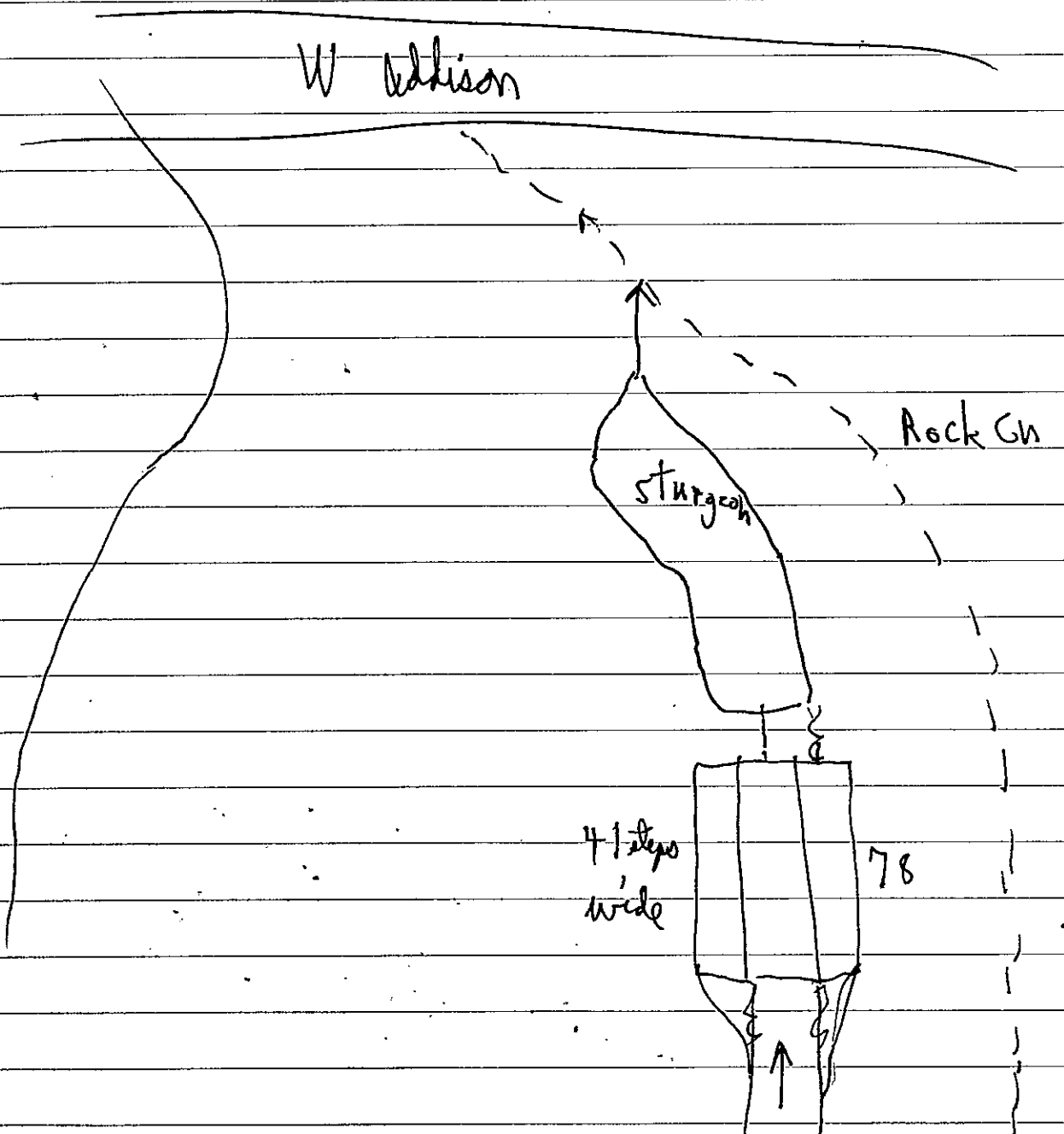
W Addison

Rock Cn

Sturgeon

41 steps
wide

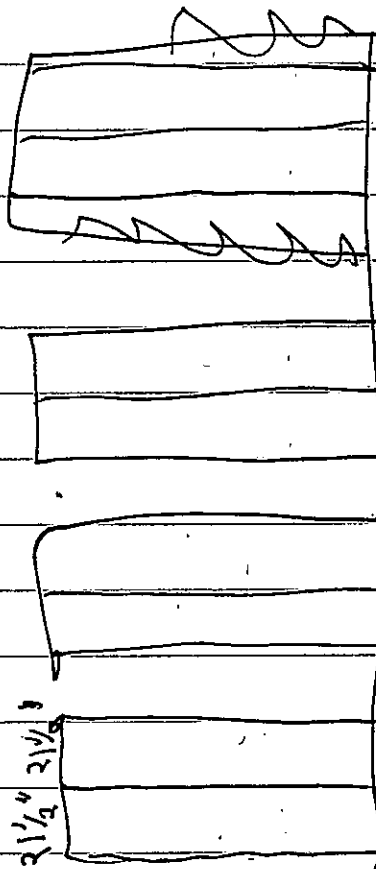
78



fry house



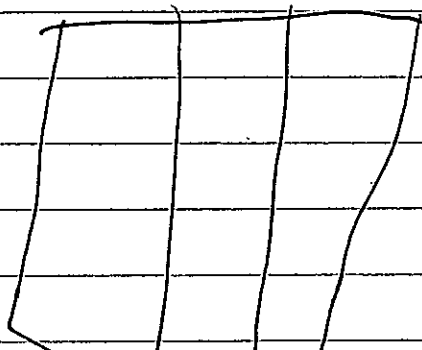
104.6 cu ft
in fry house



9" under depth

93" L

12'4"

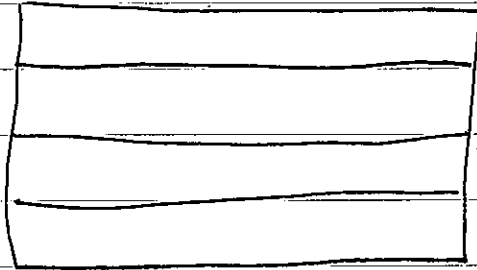


lowest raceways

65'

9617.4 cu ft

upper inside raceways

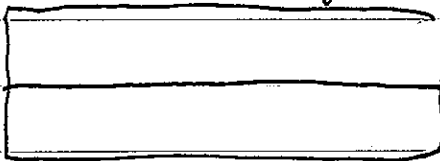


18" water depth
} 3' 8"

331.8 cu ft

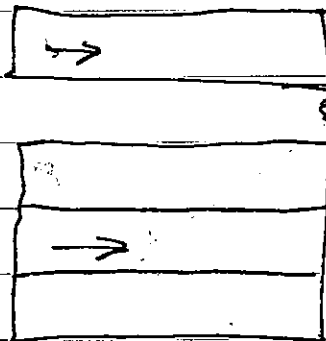
22 1/2'

outside raceways



8' w 4' water depth, 3072 cu ft

48'



8 1/2' w

4998 cu ft

147'

4' water depth

weir board/plates 74 1/2" & 177" wide at downstream end of lead works

Jim Shirley runs Pawn Shop 734-7900
partner of Holland

706 7170

Claude Holland 763 W Addison caretaker

Larry Holland 555 Annie Oakley Dr Las Vegas 89130

no commercial use for a long time, but still has sturgeon in 2 ponds as a hobby.

1 sturgeon pond fed by spring water, no M.D. estimate. 1-2 cfs in pond SE of house

creek POD EPE 23' 2459308 x 1262284

due to misalignment of head walls, no MP could be installed on stream POD. essentially entire flow goes thru system today

spring-headbox & 12" PVC pipe 2459400 x 1262248⁷ 20' EPE

spring provides domestic water for home/lawn/garden

12.25" diameter PVC pipe ^{.156} ~~1/4~~" wall thickness
spacing = 11.07"

Parametrics 4798.6 fpm sound
1135-1140 gpm rel 3.25 fpm speed

Fuji Meter

1140-1160 gpm 3.32 fpm
1153 gpm average over 10 minutes
= 2.57 cfs



NW/NW
Sec. 17
47-7659 Holland

The background is an aerial photograph of a rural area with fields and some buildings. A dashed line with arrows indicates a path or route. Along this path, there are several blue rectangular markers and blue circular markers. A horizontal line crosses the map, and a vertical line is on the right side.

POU

POD



47-7659 Diversion Works Looking SE

5-19-09 By J Stanton



47-7659 Measuring Point Looking SE

5-19-09 By J Stanton



47-7659 Upper Raceways Looking SE

5-19-09 By J Stanton



47-7659 Upper Raceways Looking NW 5-19-01 By J Stanton

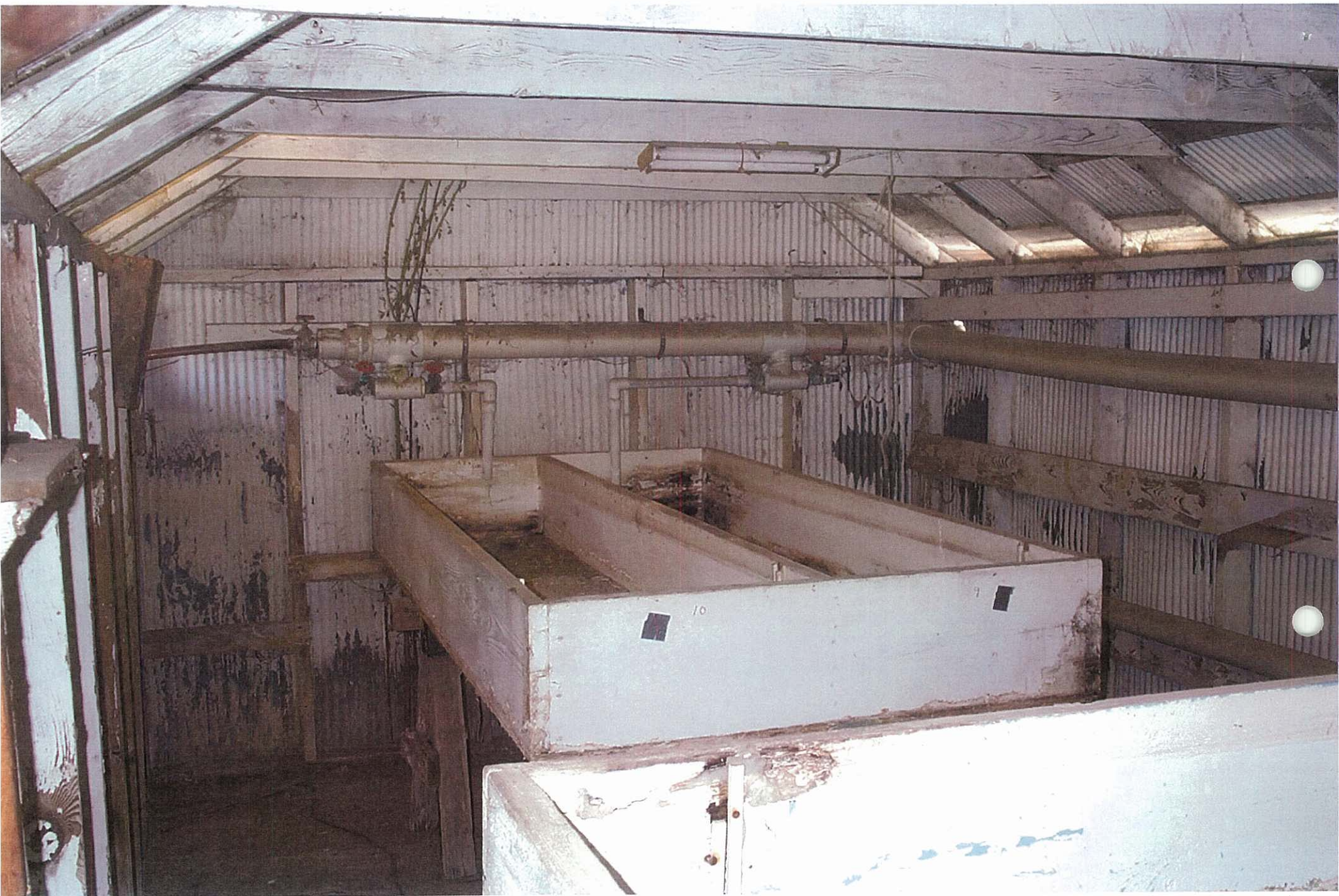


47-7659 Upper Raceways Looking ESE

5-19-09 By J Stanton



47-7659 Spring Water Below Upper Raceways Looking SE 5-19-09 By J Stanton



47-7659 Upper End of Fry House Looking ESE 5-19-09 J Stanton



47-7659 Fry House Looking SSE

5-19-09 By J Stanton



47-7659 Pipeline From Upper Raceways Across Slaughterhouse Creek Looking SSW 5-19-09.
Ru T Stanton



47-7659 Pipeline From Upper Raceways To Inlet For Middle Raceway 5-19-08 By J Stanton
Looking N



47-7659 Middle Raceway SE 8-25-09 By J Stanton



47-7659 Spring-fed Pond Looking NE

5-19-09 By J Stanton