

MEMORANDUM

State of Alaska

Trocadero River
Fog 12

TO: Tina Cunning
Habitat
Ketchikan
Dept. of Fish and Game

DATE: April 18, 1975

FILE NO:

TELEPHONE NO:

FROM: Donald L. Siedelman
Sport Fish *WLS*
Ketchikan
Dept. of Fish and Game

SUBJECT: Right Fork Trocadero System
Prince of Wales Island

Yesterday, April 16, 1975, I made a stream survey of the Trocadero System, Prince of Wales Island, to determine fish activity and check on stream in relationship to the proposed Harris/Hydaburg road. A foot survey was conducted on both forks of this system (called right and left forks).

The right fork of the Trocadero at the end of tidal influence (approximately $\frac{1}{2}$ mile) on the right bank has been recently logged up to this streams next fork and then up this fork (see attached map). Throughout the new logged area on the stream bank there were limbs and small branches. Most of the branches were out of the creek but many were still within the flood plain area and next to the water's edge. Due to the number of windfalls in the stream, there were some buildups of small limbs on these blocking creating small dams. In the small side fork that parallels the logging unit, there were many small branches that looked like sea algae due to the silt that was collecting on the branches and needles. This was especially noticable due to the newness of the logging and the felling of trees next to and paralleling the stream. Branches were laying next to the water on the left bank of this fork. The logs on the left bank area had not been yarded to date.

Water temperatures in the main left fork were in the 36-37° F. area at 11:00 A.M. Water temperature in the right fork at 2:00 P.M. was 43° below logging area. At the forks upstream, the water temperature at 4:00 P.M. in the right fork was 44° F. and in the left fork, 49° F.

The main right fork of the Trocadero is a slower moving stream draining pot holes and lower elevations. The left fork of the Trocadero is a faster moving stream draining higher elevations. The water in this left fork is clear while the water in the right fork is more muskeg colored. There are more windfalls in the right fork than the left fork, creating more pools/riffle combinations and thus probably higher temperatures. It appears that the right fork would naturally have a higher temperature without timber harvesting. Now that harvesting has taken place, these temperatures will probably increase to the critical point and cause fish die offs.

It is interesting to note the 5° F. temperature difference between the upper two forks of the right fork and the 6-7° F. difference between the main two forks of this system.

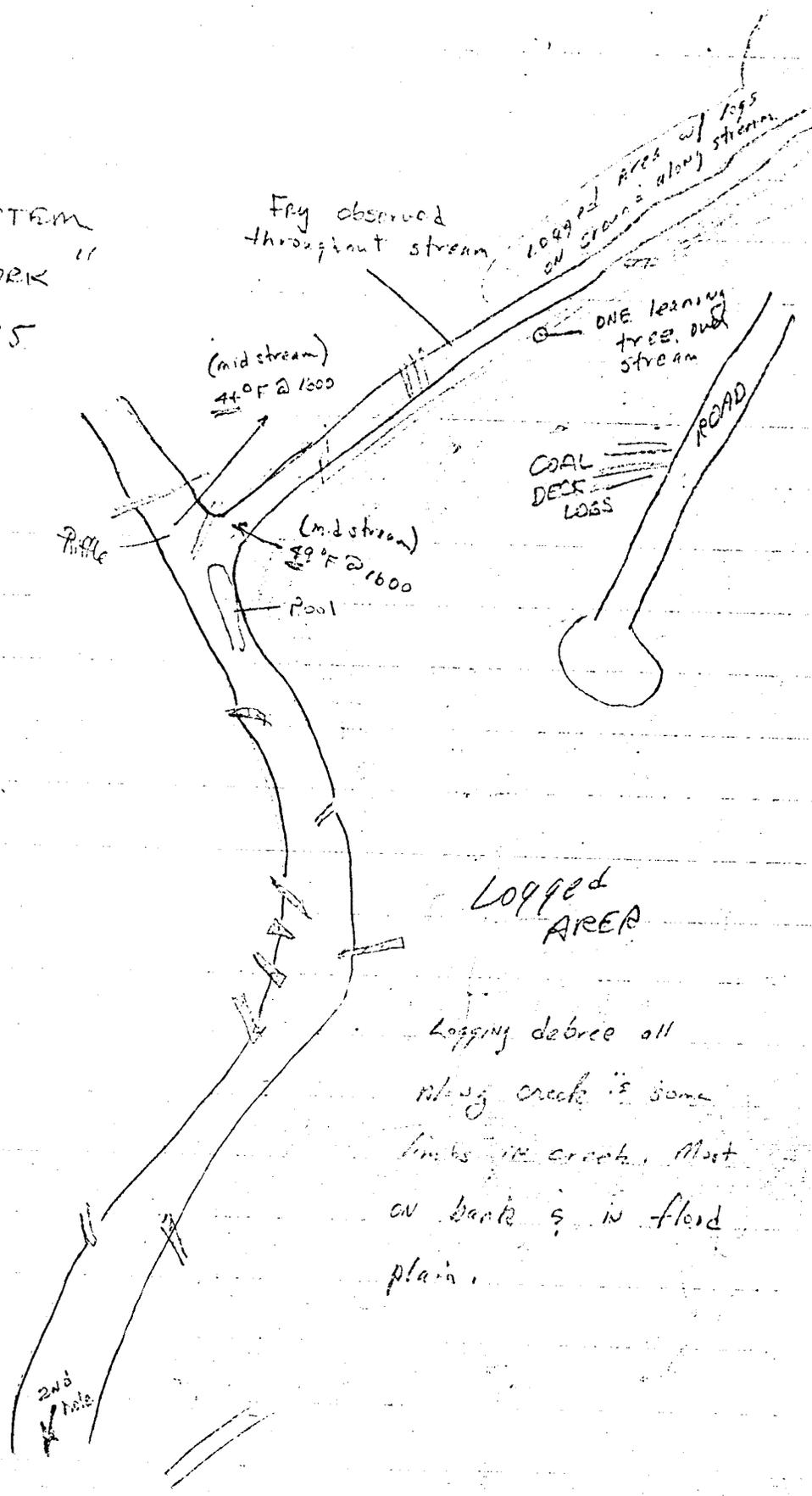
Perhaps a constant recording temperature unit should be set up in these streams to provide further information on this system. I would think that the USFS should be contacted as to contract stipulations for stream clearance vs high water mark clearance and informing them of the possible water temperature situation in relationship to the fish rearing in the right fork.

Many fingerling and fry (mostly coho) were noted in the right fork system, but none were observed in the left fork.

CC:R. Armstrong
P. Novak
J. Valentine
A. Schmidt

TROCADERO System
" RIGHT FORK "
4-16-75

Foot Survey



Logged AREA

Logging debris all along creek in some limbs of creek. Most on banks & in flood plain.

2nd hole

MEMORANDUM

State of Alaska

TO: Robert H. Armstrong
Sport Fish Division
Juneau
Dept. of Fish and Game

DATE: May 16, 1975

FILE NO:

TELEPHONE NO:

FROM: Donald L. Siedelman
Sport Fish Division
Ketchikan
Dept. of Fish and Game

SUBJECT: Trocadero System Foot Survey

Traveled to Trocadero Bay by Cessna 185 to survey the lower reaches of this stream and to familiarize myself with this area. Area is presently being logged and has a proposed road crossing stream to connect Harris River to Hydaburg. The Bay is fairly shallow with much duck and geese life.

There is an old cement building 6'x10' at the point where the left and right forks of the Trocadero River join which is in the tidal influence area. (Lower middle of Map on Page 1). This block house is not suitable for staying in even if it is raining. The floor has standing water and algae. On a 1:63:360 map, the block house is shown up the right fork in another township but it is about 3/4 mile down stream where I have indicated. The small stream at tidal area is not a salmon stream.

Walked up the left fork first. This fork is the larger of the two and is clearer and faster flowing. After the first hole, it starts into a good pool riffle ratio. There were no fish observed - adults, fry or fingerlings except one steelhead noted in the hole where the side stream enters the main left fork. Fry were observed in the tidal influence area.

This fork has some excellent gravel, but there may be a lot of gravel shifting in this stream from ice and high water. There were 1-2 foot gravel bars periodically along the stream indicating some scouring action either at high H₂O or during ice periods.

The stream water temperature was 37° F. There were still areas on the bank where ice was stacked up from the jams. Ice was still about 6" thick in some of these chunks. Most of the ice was melted or in piles by wind thrown trees laying in the stream. There were three or four bad wind thrown areas or where trees had toppled due to bank erosion.

Most of my comments about the right fork were expressed in an earlier memo concerned with stream temperatures and logging (Memo of 4/18/75).

CC: Paul Novak
Art Schmidt ✓

See Page 2

See Page.

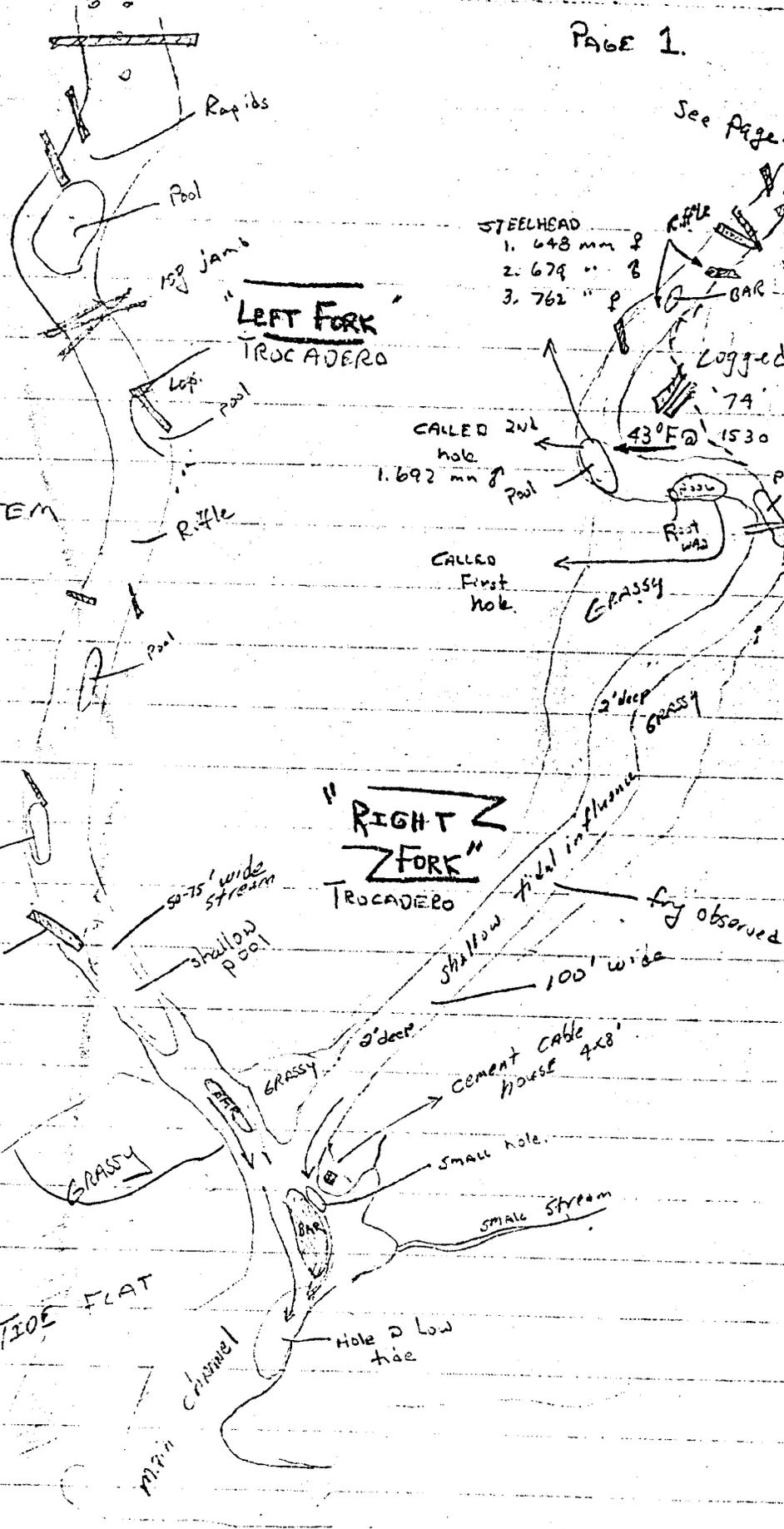
Foot Survey

TROCADERO SYSTEM

4/16/75

UP-STREAM

TROCADERO BAY



- STEELHEAD
1. 648 mm ♀
 2. 679 mm ♂
 3. 762 mm ♀

CALLED 2nd hole
1.692 mm ♂
Pool

CALLED First hole

"RIGHT FORK"
TROCADERO

TIDE FLAT

Hole @ Low tide

Cement cable house 4x8'

Small hole.

Small stream

main channel

GRASSY

GRASSY

3' deep

100' wide

shallow tidal influence

fry observed

GRASSY

3' deep GRASSY

Logged '74

43' F @ 1530

Rift wall

BAR

See Page.

Foot Survey

TROCADERO

System
"LEFT FORK"

4-16-75

STREAM WAS
very clear

could be a
Coho fry
Producer if
Not a spawning
stream.

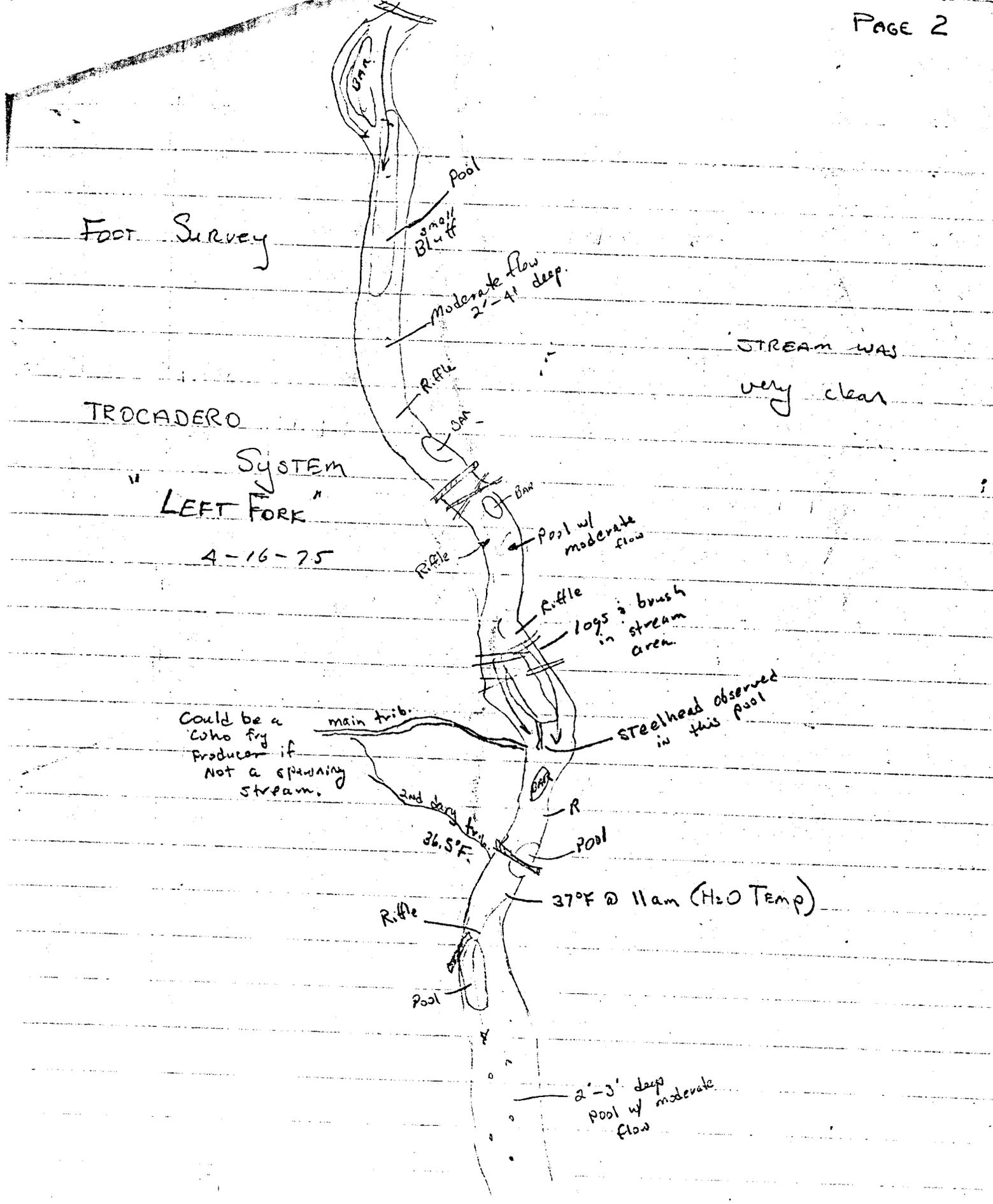
main trib.

2nd dery
trib.
36.5°F

Steelhead observed
in this pool

37°F @ 11am (H₂O Temp)

2'-3' deep
Pool w/ moderate
flow



TROCADERO SYSTEM
" RIGHT FORK "

4-16-75

Foot Survey

Fry observed
throughout stream

Logged Area w/ logs
on ground along stream

ONE leaning
tree, end
stream

(mid stream)
44°F @ 1600

(mid stream)
49°F @ 1600

Pool

COAL
DECK
LOGS

ROAD

Logged
AREA

Logging debris all
along creek & some
limbs in creek. Most
on bank & in flood
plain.

2nd
hole

