4080-1-2-3

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: California and Nevada

11—5613

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 4080-1-2-3

LOCALITY:

Lake Tahoe

1919

CHIEF OF PARTY:

Arthur Joachims

4080-1-2-3

ADDRESS THE SUPERINTENDENT
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO.
.41-EMK

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

November 29, 1919.

Division of Hydrography and Topography:

Division of Charts:

Tidal reductions are approved in 3 volumes of wire drag records and 2 volumes of sounding records for

HYDROGRAPHIC SHEETS 4080, 4081, 4082, 4083.

Lake Tahoe, California and Nevada.
Arthur Joachims in 1919.

Plane of reference is

4.0 ft. above the sill of the gates in the concrete dam, or approximately 6223 feet above mean sea level.

L. P. Shidy

Acting Chief, Section of
Tides and Currents.

Forwarded to Charts
JPC

ADDRESS THE DIRECTOR
U.S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 4-DRM

DEPARTMENT OF COMMERCE

U.S. COAST AND GEODETIC SURVEY

WASHINGTON June 19, 1923.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheets Nos. 4080, 4081, 4082, 4083.

Lake Tahoe.

Surveyed in 1919. Instructions dated Feb.28,1919.

Chief of Party, A. Joachims.

Surveyed by A. Joachims and G. L. Bean.

Protracted and Inked by G. L. Bean.

Verified (hyd. only) by F. M. Albert.

1. As this survey was made at the instance of the Reclamation Service and in consultation with their project manager, it is assumed that the Chief of Party complied with their needs as to extent and depth of dragging.

2. The records lacked completeness and notes in critical places were meager. The following are a few of the defects:

a. The stamp for length of drag, length of towline, etc. was entirely omitted.

b. The sounding records were poor and often difficult to follow just what was being done.

c. The names of signals were entered in the column for boats head by compass and no position numbers in the angle column were noted. Very frequently an obscure note similar to this would appear at the beginning of a day's sounding: "Tar"="Casino"; "Shop"="Barn", etc. This is extremely poor practice and should be discouraged as it leaves the office in a state of confusion and discredits the accuracy of the work. If one signal was recorded when another was observed upon, then the record should be changed throughout and not merely depend upon an obscure note many pages back. On "A" day sounding record, the note in the remarks column is "Tar"= "Casino"; "Shop"="Barn". "Tar" and "Casino" are two distinct signals on the smooth sheet. "Tar" is then recorded for several pages and then changed to "Tarcon". Is "Tar" the same as "Tarcon" or does "Tarcon" correspond to what is marked "Tar" on the smooth sheet?

d. The computed distances were not recorded for A and B days.

e. Records do not show who was in charge of end launch and what the organization was.

f. Signaled angles not recorded in proper column.

g. About two bottom characteristics for all the sounding work.

3. There were no shoals within the limits of the drag that the drag grounded on except at 36Q (Sheet 4080). The drag was reversed apparently to clear the 7' boulder; however no mention of grounding is made in the record. This was the least water obtained here and the drag was not passed over it again. If the drag actually grounded here then it is possible that less than 7' exists as the drag was set to 7.6' effective depth, so that it would hardly have hung up on a boulder only .6' less than the depth of the drag.

A 3' sounding between 17 and 18 B (Sheet 4080) is shown well within the limits of the drag and no record of the drag having grounded here. It is somewhat vague as to how this sounding was obtained. Was it taken by a tender following up the drag or was it taken by the guide launch? If by the latter then it should plot outside the drag and perhaps one of the angles are recorded wrong. It is not shown on the boat sheet. If, however, the location is correct then it can possibly be explained by the fact that the boulder may be a smooth one thus enabling the drag to slide over it without actually hanging up. Whatever the reason may be, it proves at least the inability of the office to properly interpret the records on account of their incompleteness.

There is an unswept area between 5 and 7E at Tahoe Vista (Sheet 4081). The records are not clear on this. It seems that the drag grounded at 5E, although the records note merely "stopped at 5" and "went ahead at 6". 10' was the least water found, but as this plots within the 8.1' drag it is possible that less water exists here. If this is so then the area should have been further developed. However, this is further proof of the insufficiency of the drag records.

There are several shoal soundings that are shown as cleared by a deeper drag. This may be due to the trace of a buoy not being properly plotted.

4. The overlaps between sheets are sufficient.

5. As a very detailed and systematic survey has been made of this Lake subsequent to this survey, it is hardly likely that any further drag work will be done here to clear up some of the doubtful places

mentioned in the above paragraphs. Besides, owing to the poor condition of the records as well as the unsystematic method of running some of the sounding lines, it is recommended that the soundings on these sheets should be used only to supplement the later 1923 hydrographic survey.

6. The field plotting was completed to the extent prescribed in the General Instructions. There are a number of soundings shown on the boat sheet and on the smooth sheet that are marked by sunken rock symbols and a sounding close by. This is old practice and should not be used. The sounding is apparently the depth on the sunken rock. No record could be found for the soundings shown thus, and are probably soundings taken by the guide launch along the line of the drag and plotted approximately on the boat sheet.

7. No Area and Depth sheets were made for these sheets because the smooth sheets themselves clearly show the depth and extent to which the area was dragged.

8. Rating of work (a. Character and scope of the surveying: fair.
(b. Field drafting: good.

9. Reviewed by A. L. Shalowitz, June, 1923.