

5503

U. S. COAST AND GEODETIC SURVEY
LIBRARY AND ARCHIVES
SEP 10 1934
File No. _____

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~XXXXXXXXXX~~ } Sheet No. 108 5503
Hydrographic }

State California

LOCALITY

Santa Barbara Channel

Goleta Pt. to Naples

193 ~~4~~ 3

CHIEF OF PARTY

C.K. Green

3
0
5
4

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET FIELD NO. 106
CALIFORNIA COAST, SANTA BARBARA COUNTY

INSTRUCTIONS

October 31, 1932.

LIMITS AND SCALE

The sheet embraces the inshore hydrography from Goleta Point to Naples to a distance of two miles offshore. It joins sheets 107 on the east, 109 on the west, and the PIONEER'S 1:40,000 sheet (1934) on the south. The scale is 1:10,000.

GENERAL DESCRIPTION

The coast consists of a 30 to 70 foot bluff along the shore, generally with a sand beach and a mesa from the bluffs to the foot hills - from 1 to 3 miles inland.

Coal Oil Point is marked with a wharf and oil derrick, and all along the water front at Elwood many long and short wharves with numerous derricks are prominent.

The 10-fathom curve lies from 1/4 to 7/8 mile offshore, and kelp, which is a characteristic of the coast, lies along that curve. The bottom is sand to the 20-fathom curve and mud outside that curve.

Oil is loaded at the mooring buoys 1/2 mile westward of Coal Oil Point and at the buoys off Elwood. Generally from 1 to 3 tankers call at Elwood weekly.

There is only a scattering of small buildings that are seen from seaward, except at Elwood, where the oil plants and tanks may be seen on the bluff.

SURVEY METHODS

The inshore line in places was accomplished with a pulling boat, the remainder of the sheet with hand lead (12 pound) soundings except for the offshore lines which were wire soundings. In general, control was ample.

DISCREPANCIES

Cross lines check well, and there are no discrepancies of note.

DANGERS

The 2 fathom 4 foot shoal at Longitude 119° 57' and 3/4 mile offshore is the only danger. It is marked by heavy kelp.

ANCHORAGES

There are no protected anchorages. Small boats can get some protection from westerly winds behind the kelp just westward of Elwood.

COMPARISON WITH PREVIOUS SURVEYS

A least depth of 16 feet was found on the shoal 3/4 mile offshore near longitude 119° 57'. The old survey, Register No. 1043, 1869, shows 15 feet. This party spent a considerable time "feeling" around for a shoaler depth, but 16 feet was the least found. The shoal is marked by extremely heavy kelp, and sounding is difficult. It is recommended that the 15 feet of the old survey be retained. This shoal breaks only in extreme seas.

The 13-3/4 fathom sounding of the old sheet 520 meters south by west from the above shoal is 175 meters too far seaward.

The depth curves are not materially different than the curves of the old survey.

The 6-1/2 fathom sounding shown on old work 220 meters west of intersection longitude 119° 51' and latitude 34° 24' is some 100 meters too far seaward, and is located in 8-1/4 fathom water.

GEOGRAPHIC NAMES

H.B. Sept 17, 1934

The vicinity of the many oil derricks and wharfs shown between longitudes 119-54 and 119-56 is known as the Elwood oil fields. Otherwise no new names were assigned.

SPECIAL NOTE

In the vicinity of Coal Oil Point, oil coming from the ocean floor frequently covers the surface of the water with a thin film of oil, the odor from which is very noticeable.

Approved by

Submitted by

Chas. K. Green

Chas. K. Green,
Chief of Party #10.

Chas. K. Green

Chas. K. Green

STATISTICS SHEET NO.108

DATE 1933	LETTER	VOLUME	POSITIONS	SOUNDINGS	MILES STATUTE	VESSEL	
July	25	A	1	1 2 1	2 0 8	2 8.1	VIRGINIA I
	26	B	1	1.4 9	2 7 1	2 7.0	"
	27	C	1	1 1 5	3 1 6	1 5.2	"
August	28	D	1&2	1 3 6	3 9 2	2 2.8	"
	1	E	2	1 0 8	3 4 5	1 9.7	"
	2	F	2	9 8	3 8 4	1 6.0	"
	4	G	2	9 6	3 0 8	1 5.2	"
	7	H	2&3	9 5	2 4 4	1 2.6	"
	8	J	3	6 1	2 1 1	8.0	"
	9	K	3	8 2	2 6 1	1 3.9	"
	10	L	3	3 9	1 1 6	4.7	"
	11	M	3	7 1	1 3 3	1 4.1	"
	18	N	3	6 2	9 3	1 0.0	"
Sept.	6	P	3&4	9 0	1 9 2	1 5.0	"
Nov.	20	Q	4	9	1 8	0.4	"
TOTALS				1,3 3 2	3,4 9 2	2 2 2.7	

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

SEP 10 1934

Acc. No. _____

PARTY #10

Santa Barbara, Calif.
August 29, 1934.

Hydrographic sheet No. 108, submitted herewith, has been inspected and approved by me, together with the data listed below.

List of data forwarded with Hydrographic Sheet No. 108

Title sheet
Descriptive Report
Statistic sheet
Tidal data



Chas. K. Green
Chief of Party

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
SEP 10 1984
REG. NO. 5503
Acc. No. _____

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 108

REGISTER NO. 5503

State California

General locality Santa Barbara Channel

Locality Goleta Pt. ^{to} Naples *Large ✓*

Scale 1:10,000 Date of survey July - Nov., 1933

Vessel Chartered Launch VIRGINIA I

Chief of Party Chas. K. Green

Surveyed by Chas. K. Green - Harry T. Kelsh - N. R. Gindrat

Protracted by John W. Parsons

Soundings penciled by John W. Parsons

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by } *Irvin Michaelson*

Verified by }

Instructions dated October 31, 1932

Remarks:

September 19, 1934.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
4 volumes of sounding records for

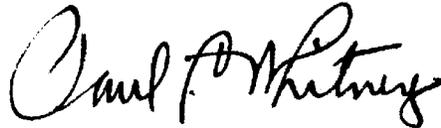
HYDROGRAPHIC SHEET 5503

Locality Goleta Point to Naples, Santa Barbara Channel, Calif.

Chief of Party: Chas. K. Green in 1933
Plane of reference is mean lower low water, reading
3.6 ft. on tide staff at Santa Barbara
16.6 ft. below B. M. 1

Height of mean higher high water above plane of
reference is 5.4 ft.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents

November 12, 1934.

Report on H-5503 Surveyed - July - Nov, 1933.
Chief of Party - Charles K. Green Surveyed by - C.K. Green, H.T. Kelsh, N.R. Gindrot
Protracted by John W. Parsons Soundings plotted by J.W. Parsons
Verified and Inked by Irvin Michaelson

1. The records conform to the requirements of the Hydrographic Manual. However, depths between 10 fathoms and 11 fathoms were plotted in whole fathoms. The verifier plotted them in the proper manner.
2. The usual depth curves can be completely drawn.
3. The field drafting was good; the lettering of position and day letters was good. The low water line and the few rocks in the area covered by this sheet were not well transferred from T-4859. The low water line, etc. was made to conform with T-4859.
4. Soundings were correctly plotted; the protracting was good; crossings were good.
5. To the east, the junction with H-5502 was good. There are no contemporary surveys to the west and south. To the south a few soundings were transferred from H-5030 (1930). The junction is fair

Respectfully Submitted,
Irvin Michaelson

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. **5503.**

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet	1332..
Number of positions checked	..45..
Number of positions revised	...2..
Number of soundings recorded	3492.
Number of soundings revised	..157..
Number of signals erroneously plotted or transferred

Date:..... *Nov. 12, 1934*

Cartographer:..... *Irvin Michaelson*

Verification of plotting

Verification & inking of rocks and shoals

IRVIN MICHAELSON

Verification of inking by

IRVIN MICHAELSON

Review by

R. J. Christman

Time: }
Time: } 2 5/8 hrs.
Time: } 6 3/4

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5503 (1934)

Goleta Pt. to Naples, Santa Barbara Channel, California.
Instructions dated October 31, 1932 (C. K. Green)
Date of Survey ~~May~~-July 1933. K

Handlead and Machine Soundings - 3-Point fixes on shore objects.

Chief of Party - C. K. Green
Surveyed by - C. K. Green - H. T. Kelsh
Pretracted and soundings penciled by - J. W. Parsons
Verified and inked by - I. Michaelson.

1. Condition of Records.

The records conform to the requirements of the Hydrographic Manual.

2. Compliance with Instructions for the Project.

The plan and extent of development are in accordance with the instructions for the project. This is a complete and very satisfactory survey of the area covered and adequately supersedes previous surveys in this area.

3. Sounding Line Crossings

The depths on cross lines are in very good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn, including portions of the 2 fathom and 1 fathom curves.

5. Junctions with Contemporary Surveys.

(a) H- 5502 (1933)

This survey joins to the eastward Goleta Point. The junction is satisfactory.

(b) H-5030 (1930)

This survey joins to the southeast. The junction is satisfactory and the agreement in depth is good. There is a considerable overlap but only the outer fringe of overlapping soundings is shown on H-5503 (1934). The 1930 survey is on a scale of 1:80,000 and is mostly tube soundings. As the area common to the two surveys is completely developed on H-5503 (1934) it should supersede for charting purposes the corresponding portion of H-5030 (1930).

The surveys to the south and west are not yet available.

6. Comparison with Prior Surveys.

(a) H-1043 (1869)

1. This survey practically embraces the same area as H-5503 (1934).

The agreement in depth is good. There are some differences in inshore details especially eastward of Coal Oil Point but this is mostly due to the uncertain location of the soundings, due to the recording of the time at only 2 to 5 minute intervals and the spacing of the soundings equally between positions or between these long intervals.

2. The $2\frac{1}{2}$ fathom in lat. $34^{\circ}-25'.35$, long. $119^{\circ}-57'.05$, has been carried forward as the least depth on this rock in accordance with the recommendation of the Chief of Party. Adjacent details must be taken from H-5503(1934); the representation on H-1043 (1869) is subject to the same limitations mentioned in the preceding paragraph.

(b). H-1045 (1869)

This survey covers the area under consideration in depths greater than 25 fathoms. The agreement in depths is good.

(c) H-2819(1906) and H-2252 (1896)

These are surveys in connection with speed trial courses and show no hydrographic information of charting value.

(d) H-289 (1851)

This is a reconnaissance survey on very small scale. All the information has been covered in later surveys.

7. Comparison with Chart No. 5202.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting.

Protracting and penciling of soundings were excellent. A few differences in low water line and rocks with those shown on T-4859 (1934) were noted. The verifier made them conform to the topographic survey.

9. Additional Field Work Recommended.

The survey is satisfactory and complete and no additional surveys are deemed necessary.

10. Superseding Old Surveys.

Within the area covered, The present survey with the indicated addition from previous survey, supersedes the following for charting purposes.

H-1043 (1869) In part
H-1045 (1869) " "
H-2819 (1906) " " Speed course
H- 2252(1896) " " " "
H-289 (1851) " "

11. Reviewed by R. J. Christman November 1934.

Inspected by A.L.Shalowitz

Examined and approved:

K.T. Adams
K. T. Adams,
Assistant Chief, Division of Charts.

H. B. Jordan
Chief, Section of Field Work

L. O. Lubat.
Chief, Division of Charts

G. H. Huse
Chief, Division H. and T.

25 Jan 13, 1936
LAD

Applied to drawing of Chart 5202 - Mar 1936 LAD-30

APP'D TO CHT 5066 EXT NOV 1971 R. J. Durso