5741

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

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } Sheet No. 14

State CALIFORNIA

LOCALITY

Southern California Coast

Point Pedernales to Santa Inez River

1933-'34

CHIEF OF PARTY

O. W. Swainson

U.S. GOVERNMENT PRINTING OFFICE: 1934

5741

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 14

REGISTER NO. 5741

State California

General locality Southern California Coast

Locality Point Pedernales ~~Point~~ to Santa Inez River

Scale 1:10,000 Date of survey Dec. 21, 1933 to Jan 30, 1934., 19

Vessel PIONEER (Stbd and Port Motorsailers)

Chief of Party O. W. Swainson

Surveyed by C. J. Wagner, J.C. Ellerbe.

Protracted by H. J. Pulskamp

Soundings penciled by H. J. Pulskamp

Soundings in fathoms ~~feet~~

Plane of reference M L L W

Subdivision of wire dragged areas by None

Inked by L.E. Boyce

Verified by S.R. Ludlow

Instructions dated November 18, 1932, Project No. 120, 19
Apr. 24 1933 Amdt

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

For Landmarks, see Chart Letters:
#520 (1934)
#693 (1934)

DESCRIPTIVE REPORT

TO ACCOMPANY SHEET FIELD NO. 14.

AUTHORITY

The survey shown on this sheet was made in accordance with instruction dated November 18, 1932, Project No. 120.

LOCALITY

The area covered by this survey is the inshore area extending from Pedernales Point, (Latitude 34° 26') northward to Latitude 34° 42' and offshore 1 to 1-5/8 miles to depths of 12 to 15 fathoms.

It joins sheet Field No. 13 on the south, sheet Field No. 15 on the north, and sheet Field No. 45 on the west.

CONTROL

The following control was used for this sheet:

Recovered triangulation stations of 1933.

Signals located on topographic sheet Field No. B (Office No. 4865) and sheet Field No. C (Office No. 4851), both executed in 1933.

Hydrographic Signal "Maru", located by the hydrographic party. This signal was originally located on topographic sheet Field No. B, but was relocated by the hydrographic party on account of a slight shifting of the wreck.

A list of the control signals used on this sheet is attached inside the front cover of Volume 1 of the sounding records.

SURVEY METHODS

The survey was made on a scale of 1:10,000, in order that the inshore area comprising the sheet might be well developed.

The hydrography was executed entirely by the motorsailers of the PIONEER, the starboard motorsailer doing the southern half of the sheet and the port motorsailer the northern half.

All sounding were made by hand lead, with visual fixes.

Shoreline detail was transferred from topographic sheet Field No. B, (Office No. 4865) and C (Office No. 4851).

CURRENTS

No current observations were made.

CHIEF OF PARTY'S REPORT ON INSPECTION OF RECORDS AND SHEET.

Sheet Field No. 14.

The positions were protracted and the soundings were plotted by H. J. Pulskamp, a draftsman, with a limited amount of experience in hydrographic plotting. Shoreline detail was transferred from the topographic sheets by Lieutenant H. J. Healy.

The records and sheets were carefully inspected by Lieutenant W. M. Scaife on the following points:

Records were inspected for discrepancies and doubtful points.

All features mentioned in records checked with smooth plotting.

Boat sheets compared with smooth sheet.

Comparison made with old work and with adjoining sheets, except sheet 13, which was compared previously.

Smooth sheet inspected for discrepancies. Plotting of smooth sheet inspected by placing over the smooth sheet a tracing showing boat sheet positions.

Considerable discrepancy was found in some of the plotting, particularly on the northern part of the sheet, possibly due to a poorly adjusted protractor. A large number of positions were replotted, and those found in error were corrected. While some of the positions on the smooth sheet may still be slightly in error, it is believed that no appreciable errors in plotting were left uncorrected.

Points of doubt were called to my attention for decision.

O. W. Swainson

O. W. Swainson,
H. & G. Engineer,
Chief of Party,
Commanding PIONEER.

MAGNETICS

No magnetic observations were made.

COMPARISON WITH PREVIOUS SURVEYS

A tracing of the original survey, enlarged to the scale of this sheet, was used to compare the new survey with the old. In general the new survey shows slightly shoaler depths than the old, although in places the reverse is true, or the depths agree. The shoaler depths on the new work are particularly noticeable on the inshore part of the sheet in depths of about 6 fathoms or less, where the new work in many cases is shoaler than the old by 1 fathom or more.

COMPARISON WITH ADJOINING SHEETS

The comparison of the junction with sheet Field No. 13 was made before that sheet was forwarded to the office. I t was stated in the descriptive report for sheet Field No. 13, that this junction is good.

The junction with sheet Field No. 15 shows some small differences, probably accountable for by the swell existing at the time of the work.

The soundings on sheet Field No. 45 along the junction with sheet Field No. 14 were made by the PIONEER, using the fathometer. They tend to be slightly shoaler than the soundings on sheet Field No. 14, which were made with handlead. Where differences exist, preference should be given to the handlead soundings.

DANGERS

A rock which bares 1 foot at mean lower low water is located about 475 meters westward of Pedernales Point in Latitude 34° 36.3', Longitude 120° 38.83'. One sunken rock and several shoal soundings are located within thirty meters of this rock.

A sunken rock with least depth of 2-1/6 fathoms is located 140 meters southward of the above rock and 500 meters westward of Pedernales Point (position 48d, starboard motorsailer).

Detached sunken rocks, rocks awash at various stages of the tide, and rocks bare at all stages of the tide extend 400 meters westward from Pedernales Point. The S. S. Nippon Maru was wrecked in 1933 on the outer end of this group of rocks. Pedernales Point was the scene of the disaster involving a squadron of destroyers some years ago.

A sunken rock with least depth of 2 fathoms is located on the inshore line of soundings about 400 meters offshore in L atitude 34° 36.87' (position 134-135 a, stbd motorsailer).

Between this rock and Latitude 34° 37' about the same distance offshore and just east of the inshore line of soundings are located two other sunken rocks. Breakers occur in the area around these rocks in a moderate swell. (position 134-135a, stbd motorsailer).

Between the inshore line of soundings and the beach, a distance varying in general from 400 to 600 meters, breakers were noted by the hydrographic party, as shown on the sheet.

With the exception of the dangers mentioned above, no dangers were found with the exception of the general shoal depths on the inshore lines and the dangers close to shore located on the topographic sheets.

DISCREPANCIES AND ABRUPT CHANGES IN DEPTH

Port Motorsailer

Latitude 34°39.85', Long 120° 37;65- cross line from 211b to 213b shows several sounding about 1/2 fathom deeper than corresponding soundings on other lines. Recommend that shoalest soundings be accepted.

Latitude 34° 41.23', Longitude 120° 37.0'- sounding of 6-5/6 fathoms on 137c about 1/2 fathom shoaler than surrounding soundings. Recommend that this sounding be accepted.

Starboard Motorsailer

Beginning Latitude 34° 37.95', Longitude 120° 38.6'- cross line from 16d to 25d shows some soundings slightly deeper than corresponding soundings on other lines. Recommend that the shoaler soundings be accepted.

Other minor discrepancies in depths are not considered of sufficient importance to be mentioned specifically. The swell existing at the time part of the work was done was probably the cause of the discrepancies.

O. W. Swainson

O. W. Swainson,
H. & G. Engineer,
Chief of Party,
Commanding PIONEER.

STATISTICS FOR SHEET,

FIELD NO. 14.

	No. Positions	No. Sndgs.	Statute Miles Sounding Lines.
Port Motorsailer	620	1797	75.6
Starboard Mostorsailer	547	1896	78.0
TOTALS	1167	3693	153.6

LIST OF SIGNALS

SHEET FIELD NO. 14.

TRIANGULATION	TOPOGRAPHIC	HYDROGRAPHIC
Surf, 1933	Rod	Maru
Surf, High Water Tank, 1933	Ban	
Bear Valley-2, 1933	Switch	
Edgir, 1933	Three	
Promontory, 1874-1933	Fence	
Destroyer Rock (Ly), 1933.	Tank	
Arguello Lighthouse, 1933	Pole	
	Dog	
	Can	
	Do	
	Ray	
	Mut	
	Strip	
	Red	
	Tub	
	Bath	
	Toe	
	Kick	
	New	
	White	
	Low	
	Ro	
	Tool	
	Mix	
	Sub	
	Gro	
	Rum	
	Sok	
	Sta	
	Sad	
	Nub	
	Pat	
	Hi	

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ..5741

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

Number of positions on sheet	1167.
Number of positions checked	78.
Number of positions revised	4.
Number of soundings recorded	3693
Number of soundings revised	11.
Number of signals erroneously plotted or transferred	.....

Date: June 27, 1935

Verification by	S. R. Ludlow	Time: 50 hrs
Inking by	L. E. Boyce	20 hrs
Review by	H. W. Murray	Time: 4½"
	R. J. Christman	1½"

HYDROGRAPHIC SURVEY NO. 5741

Smooth Sheet 1

Boat Sheet 2

Sounding Records 4 Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals yes in D.R.

Landmarks for Charts (Form 567)

Statistics Yes

Approved by Chief of Party O. W. Swainson

Recoverable Station Cards (Form 524)

Special Chart for Lighthouse Service
(Circular Nov. 30,1933)

Remarks

GEOGRAPHIC NAMES

Survey No. H-5741

Date. _____

Chart No. 5302

Diagram No. 5302 - 2

Approved by the Division of Geographic Names, Department of Interior. ✕

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Santa Ynez River				140
	Point Pedernales				140
		APPROVED NAMES UNDERLINED IN RED. H-L Flemer.			

(4-136)

LAC

Form 719
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 10, 1935

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5741

Locality Point Pedernales to Santa Inez River, Coast of Southern California

Chief of Party: O. W. Sawinson in 1933-1934
Plane of reference is Mean lower low water reading
3.6 ft. on tide staff at Santa Barbara
16.5 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:

Paul T. Whitney

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Report on Sheet H 5741.

The records are complete and conform to the requirements of the general instructions.

The 5 + 10 fathom curves are the only ones which could be completely drawn. The shoaler curves could not be completely drawn because of insufficient soundings in close to shore.

The field plotting was very satisfactory with few corrections as noted in the records.

The junction with sheet H. 5509 is very satisfactory. Sheets H. 5742 - H 5746* have not yet been verified so that other junctions could not be made.

*Junction with H-5746 has now been made on this sheet. KWM. 7/15/35

L. R. Ludlow.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5741 (1933-34) - FIELD NO. 14

Point Pedernales to Santa Inez River, Southern California Coast, Cal.
Surveyed in 1933-34
Instructions dated Nov. 18, 1932 (PIONEER); Apr. 4, 1932 (GUIDE)

Hand Lead Soundings. 3 Point Fixes on Shore Signals.

Chief of Party - O. W. Swainson.
Surveyed by - C. J. Wagner and J. C. Ellerbe.
Protracted by - H. J. Pulskamp.
Soundings penciled by - H. J. Pulskamp.
Verified and Inked by - S. R. Ludlow and L. E. Boyce.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

The "Descriptive Report" is clear and exceptionally comprehensive, and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

The lack of hydrography in the inshore area extending approximately 400 to 600 m. outside the low water line, as explained in the Descriptive Report (page 3), is due to the presence of breakers.

3. Sounding Line Crossings.

Agreement of cross lines is within 1/4 to 1 fm. or less. The more important of such differences are discussed in detail in the Descriptive Report (page 3).

4. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn, including portions of the 2 and 3 fm. curves.

5. Junctions with Contemporary Surveys.

a. The junction on the south with H-5509 (1933-34) is satisfactory. Neither survey completely developes the immediate area around Destroyer Rock, owing to its exposed location. However, the offshore limits of dangers are considered adequately defined.

b. The junction on the north with H-5742 (1934) will be considered in the review of that survey.

c. The junction on the west with the 1 to 40,000 scale survey, H-5746 (1933-34) is satisfactory with the exception that a number of fathometer soundings of that survey vary 1 fm. shoaler than the hand lead soundings of the present survey. (See D. R., page 2).

6. Comparison with Prior Surveys.

a. H-290 (1851).

This is a reconnaissance survey on a scale of 1 to 375,000 and contains no information which conflicts with the present survey.

b. H-1470 (1880).

Soundings of this survey (scale 1-20,000) are 1/4 to 1 fm. shoaler than those of the present survey in some areas and deeper by the same amount in others. Several areas, however, are in very close agreement.

7. Comparison with Chart No. 5302.

a. Hydrography.

Soundings shown on this small scale chart originate with surveys discussed in the foregoing paragraphs and need no further consideration in this review.

b. Aids to Navigation.

The charted whistle buoy (Fl R) "8A" in lat. 34°36.8', long. 120°39.3' originating with IHN to M No. 29 (dated July 16, 1934) was established subsequent to this survey.

8. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete and no additional field work is required.

10. Note to Compiler.

Blueprint No. 27425 (1933) overlapping the offshore limits of the present survey is an advance tracing of H-5746 (1933-34) submitted to this office and has been considered in the review of that survey and in paragraph 5c of this review.

11. Superseding Previous Surveys.

Within the area covered, H-5741 (1933-34) supersedes the following surveys for charting purposes:

H- 290 (1851) in part.
H-1470 (1880) " "

12. Reviewed by - Harold W. Murray, July 11, 1935, and R. J. Christman, July 27, 1935.

Inspected by - R. L. Johnston.

Examined and approved:

C. K. Green, C. K. Green
Chief, Section of Field Records.

L. O. Colbert
Chief, Division of Charts.

J. S. Borden
Chief, Section of Field Work.

G. Rude
Chief, Division of H. & T.

Applied to drawing of Chart 5302 - MAR. 30 1936 - J.F.W.
" " " " " " 5202 Mar 1936 L.M.Z.

Appld to drwg of new Chart 5281 10-19-63 RKD
" " " " " " 5066 thru Chart 5281 RKD 1-10-64

25 Jan 3, 1936

E.A.D.