

4864

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: California

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. A 4864

LOCALITY

Pacific Coast

North of Pt. Conception

19 33-34

CHIEF OF PARTY

O. W. Swainson, H. & G. Engr.

U. S. GOVERNMENT PRINTING OFFICE: 1928

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REG. NO.

TOPOGRAPHIC TITLE SHEET

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

Field Letter A

REGISTER NO.

State CaliforniaGeneral locality Pacific CoastLocality North of Pta. ConcepcionScale 1:10,000 Date of survey Sept. 1933 - Jan. 1934Vessel U.S.C. & G.S.S. PIONEERChief of Party O. W. Swainson,Surveyed by P. L. Bernstein,Inked by P. L. Bernstein,Heights in feet above HW to ground ~~to tops of trees~~~~Contours~~ Approximate contour ~~spacing~~ interval 100 feetInstructions dated November 18, 1932., 19

Remarks: _____

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET A.

North of Ft. Conception - California Coast.

U.S.C. & G.S.S. PIONEER

O. W. SWAINSON, CMDG.

AUTHORITY

This work was done in accordance with instructions dated November 18, 1932, to the Commanding Officer of the PIONEER for Project No. 120, and also those dated April 4, 1932, to the Commanding Officer of the GUIDE, Project No. 101. The dates of the survey was from Sept. 25 to Sept. 30, 1933, and from Jan. 22, to Jan 31, 1934.

AREA

The area covered in the survey includes the coast line from Latitude $34^{\circ} 29' N.$ to Latitude $34^{\circ} 33' N.$

CONTROL

The control was triangulation stations located previously by F. G. Johnson in 1933. The usual method of traverse and resection cuts was used thruout the survey. The following traverses were run with the resulting closing errors.

- △ Black Point to △ Jalama - 1 meter long in distance; orientation correct.
- △ Jalama to △ Bluff - 3 meters long in distance; orientation correct.
- △ Bluff to △ Sudden - Correct in distance and orientation.
- △ Sudden Red Barn to △ Flint - Correct in distance and orientation.

The closing error was adjusted proportionally.

Offlying rocks and land features were located by cuts. Numerous elevations were determined and contour lines verified from a form line view point.

GENERAL DESCRIPTION

In general the shore line consists of rocky cliffs of varying height with numerous gullies and ravines cutting into the cliff line. Immediately

back of the cliff line extends the Southern Pacific Railroad along which extends a poor dirt road. Back of this, there are grassy slopes extending to the higher peaks and ridges.

△Black Point is located on a grassy knoll, the height of which is 404 feet. The cliff line directly opposite this station is the highest along the area, being almost 200 feet high, and gradually diminishing in height until they no longer exist. The shore line opposite △Black Point is fringed with a rocky ledge, extending north to signal "ALL"

North of signal "ALL" the shore line consists of a broad sandy beach which is broken by a rocky ledge directly opposite topographic signal PUT.

Three hundred meters south of △Jalama there is a small creek about 30 meters wide which will empty into the ocean when swollen by rains. The cliff line begins again here, and is fairly uniform in height until △Bluff is reached. Four hundred meters north of signal MAY the sandy beach ends, and from the point northward the shore line is fringed with numerous rocky ledges, rocks awash, and small scattered stretches of sandy beach.

Opposite △Bluff there are two distinct bluff lines with the railroad between. The cliff east of the tracks is very steep, 370 feet in height, and consists of a yellowish sedimentary soil. Two hundred meters west of △Bluff exists a railroad tunnel.

North of △Bluff the cliff line is of fairly uniform height of approximately 60 feet. A narrow stretch of sand beach extends along the base of the cliff and this is fringed with numerous rocks and foul area which is clearly shown on the sheet.

LANDMARKS

Topographic signal SIS is the middle one of three water tanks just north of the bridge of the Southern Pacific Railroad. These tanks are visible offshore.

△ Station Bluff is on the top of a steep yellowish cliff, 370 feet high, which is clearly visible offshore.

~~△ Sudden~~, Red Barn, West Apex, is a large red barn, and clearly visible offshore.

(△ Sudden,) Black Tank, is clearly visible offshore.

Topographic signal Barn is the west gable of a large barn visible offshore.

No new names listed.

Espada Bluff is called 'The Espada on U.S.G.S. Guadalupe Quad' (Inquiry made)

H.B. Oct 16, 1934,

A number of names of canyons are found on U.S.G.S. Quad

Topographic signal PUT is the west gable of a large barn visible offshore.
Topographic signal BAN is the west gable of a large barn visible offshore.

CHANGES IN COAST LINE

Rocks In general the rocks shown on the old survey of 1877 were located correctly, but were not shown by the correct symbols. All rocks shown outside the high water line on the old topographic sheet should be removed and indicated in accordance with the new survey. No evidence could be found of the few shown on the old and not shown on the new sheet.

HIGH WATER AND CLIFF LINES

With few exceptions the high water line and the cliff line follow closely with that shown on the old survey. The few discrepancies were probably due to erosion. In vicinity of Bluff the cliff line and high water line is offshore about 30 meters, due probably to the railroad construction.

On the point immediately south of signal TOP, the high water line and cliff line was found to be about 60 meters offshore of that shown on the old topographic sheet.

CONTOURS

The contours as shown on the survey of 1877 were transferred to the topographic sheet, and in this way were verified in the field from a form line standpoint. Numerous elevations were taken and are shown in red. The verified contours were left in pencil, and all changes are shown in red. The following changes are to be noted:

- 200 foot contour north of signal BAN.
- 100 and 200 foot contours in vicinity of signal TAN.
- 300 foot contour in vicinity of BLUFF.

MISCELLANEOUS

Southern Pacific Railroad added. Unimproved highway added.

In a number of places along the high water line, the Southern Pacific Railroad is constructing sections of a sea wall to prevent undermining of the cliff, which would endanger their tracks.

STATISTICS

Miles of shoreline	6 statute miles.
Miles of Railroad	6 statute miles.
Miles of Roads	7 statute miles.
Area	3 square statute miles.

P. L. Bernstein
P. L. Bernstein,
Jr. H. & G. Engineer

Approved and forwarded:

O. W. Swainson
O. W. Swainson,
H. & G. Engineer,
Commanding PIONEER.

LIST OF RECOVERABLE STATIONS

Station	Latitude	Longitude	Remarks
Block Signal #3228	34° 29' + 100 m.	120° 28' + 1350 m.	
Ban	34 29 310	120 28 1505	West Cable of Barn
Block Signal #3219	34 29 810	120 29 421	
Block Signal #3214	34 29 1523	120 29 877	
Block Signal #3213	34 29 1531	120 29 892	
Pat	34 29 1574	120 29 677	W. Cable of barn
Barn	34 30 169	120 29 1021	do
Block Signal #3205	34 30 1041	120 29 1358	
Block Signal #3206	34 30 1041	120 29 1349	
Tan	34 30 1069	120 29 1370	S. Cable Jalama RR Station
Ho	34 30 1279	120 29 1380	S. Cable Two Story Yellow Section House.
Sis	34 30 1510	120 29 1422	Middle one of 3 water tanks.
Block Signal #3202	34 30 1441	120 30 85	
Block Signal #3193	34 31 958	120 30 997	
W. Cable Barn	34 31 991	120 30 979	
Block Signal #3188	34 31 1250	120 30 1511	
Ner	34 31 1545	120 31 408	W. Cable of Shed
Rail	34 32 159	120 31 1067	Block Signal #3181
NW Corner of Shed	34 32 345	120 31 1418	

List of Recoverable Stations
Continued

Station	Latitude	Longitude	Remarks
✓ Block Signal #3176	34° 32' + 479 m.	120° 32' + 72 m.	
Block Signal #3177	34 32 492	120 32 65	
✓ Gab	34 32 603	120 32 892	W. Gable of Barn
Block Signal #3171	34 32 856	120 32 909	
✓ Block Signal #3172	34 32 863	120 32 905	
✓ W. Gable Barn	34 32 1132	120 32 850	
✓ Block Signal #3166	34 32 1207	120 33 241	
✓ W. House, Center of Platform Apex	34 32 436	120 31 1217	

LIST OF UNRECOVERABLE STATIONS

Station	Latitude	Longitude
Cep	34° 29'	120° 28'
All	34 29	120 29
Top	34 30	120 29
Old	34 30	120 29
Bad	34 31	120 30
May	34 31	120 30
Run	34 31	120 30
It	34 31	120 31
Til	34 31	120 31
Cat	34 31	120 31
Pos	34 32	120 31
Me	34 32	120 32
Do	31 32	120 32
La	34 32	120 33

*no longer
required
ows*

Survey No. T 4864

Date. Oct. 16, 1934

Chart No. 5202 & 5302

CALIFORNIA

Diagram No. 5202-2 & 5302-2

Names underlined in red approved Oct 16, 1934
 Approved by the Division of Geographic Names, Department of Interior

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

✗, Not Approved by the Division of Geographic Names, Department of Interior.

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

[illegible]

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 4864 (1933-4)

North of Point Conception, Pacific Coast, California
Surveyed in September, 1933, and January, 1934
Instructions dated November 18, 1932 (PIONEER)

Plane Table Survey

Chief of Party - O. W. Swainson.
Surveyed and Inked by - P. L. Bernstein.

1. Condition of Records.

The records conform to the requirements of the Topographic Manual except as follows:

- a. The reference station was shown in red instead of black (the color of the Projection) and the datum note (N. A. 1927) was omitted.
- b. Differences and discrepancies in offshore rocks between the 1933 survey and previous surveys were not listed in the Descriptive Report in detail but only a general recommendation relative to their disposition was included.
- c. Landmarks are described in the Descriptive Report but no duplicate of Form 567 was attached to the Report.

2. Compliance with Instructions for the Project.

The survey in general complies with the instructions for the project.

3. Junction with Contemporary Surveys.

Junction with T-4865 (1933) to the north is satisfactory. Revised contours were carried to a satisfactory junction with the survey of 1877 (contours shown in pencil on the sheet). The topographic survey to the south by the party of C. K. Green has not yet been received.

4. Comparison with Prior Surveys.

a. T-1520a (1877).

Small differences in shoreline are noted. They are probably due to the breaking down of the cliffs and erosion. At Δ Bluff (lat. $30^{\circ}32'$, long. $120^{\circ}31'$) the high water shoreline has been extended seaward slightly by the construction of the Southern Pacific Railway.

The Descriptive Report recommends that "all rocks shown outside the high water line on the old topographic sheet should be removed and indicated in accordance with the new survey." A close comparison reveals some minor differences in location and detail but all fall within the areas shown as foul on the new survey. Two rocks awash have been transferred to the new survey in red.

The contours from this survey were transferred in pencil to the present survey by the field party.

b. T-1122a (1869).

The older survey shows a somewhat wider fringing reef along a part of the coast but the details are practically the same on both surveys. The S. P. Ry., constructed since the 1869 survey, closely parallels the bluff line on the 1933 survey.

5. Field Drafting.

The quality of the drafting is good. The reference station, however, should have been inked in black (the color of the projection lines). The lettering of "Pacific Ocean" is excessively large.

6. Additional Work Recommended.

No additional work is necessary.

7. Note to Compiler.

Contours in pencil were transferred from a bromide print of T-1520a (1877). The sheet itself should be given preference, as the bromide print may have been somewhat distorted.

8. Superseding Previous Surveys.

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

T-1520a (1877) in part.

T-1122a (1869) " "

9. Reviewed by - R. J. Christman, October, 1934.

Examined and approved:

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

L. O. Pollock
Chief, Division of Charts.

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

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

applied to drawing of Chart 5302 - M.M. 30, 1934 - J.W.
" " 5202 Mar 1936 L.M.3
App'd to new chrt. 5280 - 12-7-63 GRT