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U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1923

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: CALIFORNIA

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. M

LOCALITY

~~Central~~ California Coast
Shell Beach to San Luis Obispo Creek
~~San Luis Obispo Bay (Avila)~~

1934

CHIEF OF PARTY

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

6285

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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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 M

REGISTER NO. 4785

State California

General locality ~~Central~~ California Coast

Locality Shell Beach to San Luis Obispo ^{Creek 34} ~~Bay (Avila)~~

Scale 1:10,000 Date of survey September 1934, 19

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

Chief of Party O. W. Swinson

Surveyed by Harold Clarke

Inked by Harold Clarke

Heights in feet above LHW to ground ~~text tops of trees~~

~~Contours~~ Approximate contours Form line interval 100 feet

Instructions dated November 18, 1932, 19

Remarks: _____

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET NO. M.

San Luis Obispo Bay, California Coast,
Latitude 35° 09' to 35° 11'.

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, Work was done during the month of September, 1934.

CONTROL

The control was furnished by the triangulation points located previously by Chas. Pierce in 1933, at an approximate maximum distance of two miles along the coast line. Traverses were run between these stations with the following errors of closure:

△ Smith Point-2, 1933, to △ Valley View-2, 1933 Flat

△ Valley View-2, 1933, to △ Union, 1933 Flat

Offlying rocks and backlying land features were located by cuts. Elevations of prominent peaks and knolls were determined and contours were checked from a form line standpoint.

All features in this area were located with particular care and therefore this survey with the exception of the contours is complete in every detail and supersedes other surveys.

GENERAL DESCRIPTION

This section consists in general of a low rock cliff with gentle sloping land under cultivation immediately back thereof and then steep slopes up to the higher peaks.

At △ South Point-2, 1933, and northward the cliff varying from 20 to 35 feet high is composed of approximately half rock and the remainder sandy black or brown soil. Offlying rocks, kelp patches and close-in reefs characterize this to △ Valley View-2, 1933. The highway, U. S. No. 101, lies a few hundred meters back of the cliff and represents the start of the steep slopes up to the peaks. The hills are covered with low brush, with oaks at the peaks and in the draws.

△ Valley View 2, 1933, elevation 728 feet, is located on a hill with sparse growth of chaparral on top and some oaks. The cliff opposite increases to over a hundred feet maximum with a sand beach in the bight. The point at the west end of this bight has the remains of the Mallagh Landing, now abandoned.

From this landing to the sand beach is a section of ragged cliffs varying 50 to 200 feet in elevation and a profusion of inlying islands and rock patches.

The large group of oil tanks just east of Avila from 100 to 270 feet in elevation is very prominent. From this point on the cliff rapidly diminishes until it disappears at Avila. At Avila is a flat sand beach ending in San Luis Obispo Creek. The pier, indicated by △ Avila Dock, Elevation 16 feet, 1933, extends out from the main highway. The west side of San Luis Obispo Creek is a cliff, about half rock and half dark sandy soil, continuing to the shore end of the Union Oil Co. pier. Close in ~~islets~~ and rocks feature this section. The Union Oil Co. Pier, designated by △ Oil Pier, 1933, is very extensive with the Pacific Coast Railroad (narrow gage) extending clear out. An oil pipe line runs along the west side of the pier.

CHANGES IN COAST LINE

The cliff line and offlying rocks follow very closely the old survey.

The major change is in the shift of the mouth of San Luis Obispo Creek; This was caused in part by the railroad fill across the marshy ground.

A cave-in southwest of △ Valley View 2, 1933, caused a change in the cliff line.

U. S. Route No. 101 added.

Pacific Coast Railroad to Union Oil Co. pier and pier itself added.

Avila Dock added.

STATISTICS

Shore Line	9.4 statute miles.
Highways and Roads	6.4 statute miles.
Lineal Miles Creeks	1.1 statute miles.
Railroad	1.6 statute miles.
Piers	0.9 statute miles.

Forwarded:

O. W. Swainson

O. W. Swainson,
Chief of Party,
Commanding PIONEER.

Harold Clarke
Harold Clarke,
Topographer.

Note: This constitutes a complete resurvey of the area and will supersede previous surveys excepting contours.

OWS

RECOVERABLE PLANE TABLE POSITIONS

Barn Gable	35° 09	1104 m.	Age	35 10 1409
	120 40	891		120 43 894
Ello	35 09	1501	Tank (oil)	35 10 1167
	120 41	49		120 43 918
Barn Gable	35 10	244	Cus	35 10 1342
	120 41	778		120 43 1390
Windmill	35 10	470	Gable	35 10 875
	120 41	955		120 44 32
Gable Refinery	35 10	554	Ven	35 10 1713
	120 41	1279		120 44 420
Water Tank	35 10	1061	Flag	35 10 1283
	120 41	1155		120 44 705

LANDMARKS

✓ Double Water Tank, N. Pismo Beach, 1933.

The double tank, elevation 86 feet, ground 53 feet, composed of two galvanized iron tanks, the lower about 12 feet in diameter and the upper about 8 feet, mounted on steel framework, is visible from all directions and should be charted.

✓ Brick Refinery

This is a large red brick building visible from all directions and prominent because of its size and color and should be charted as a refinery.

✓ Office Building, S. Avila Beach, 1933.

This large office building of stucco and brick pilasters stands out because of its height and size, is visible from all directions and should be charted as a house.

South Tank, Avila Beach, 1933 (Elevation 271 feet).

West Tank, Avila Beach, 1933 (Elevation 239 feet).

North Tank, Avila Beach, (AGE) (Elevation 255 feet) Topo. Sig. AGE

The above form the outer limits of the large group of tanks and buildings, refinery, etc. at the Union Oil Co. of California, are visible from all directions and should be charted. Note that South Tank is actually the West Tank, and West Tank is actually the South Tank.

Bird Rock, 1933.

White Rock, 1933.

Avila Rock, 1933.

These rocks are visible from all directions and should be charted.

✓ Avila Dock, 1933

This dock, elevation 16 feet, is about 500 meters long and should be charted.

✓ Oil Pier, 1933.

This pier, elevation 12 feet, is about 900 meters long with large platform at the offshore end, a narrow gage railroad leading to it, is visible from all directions and should be charted.

✓ Chimney on House near Avila, 1933.

This house about 40 meters by 50 meters, elevation 419 feet, assuming the proportions of a castle, constructed of white stucco with red mission tile roof, looks up from every direction and should be charted.

GEOGRAPHIC NAMES
Sheet M.

The following should be removed from the charts:

S. E. Stack.

Oilport (and buildings except as indicated on topo sheet).

Shore Line Road - Avila to Oilport (see topo sheet).

Fossil Point (now Union Oil Pier location).

The following should be added to the charts:

Shell Beach (settlement)

- ✓ Avila
- ✓ San Luis Obispo County Dock
- ✓ E. Stack should be retained on the chart.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

U.S.C. & G.S.S. PIONEER, Long Beach, Calif.

February 28, 1935. 19

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

O. W. Swainson,

Chief of Party.

Topo Sheet M. DESCRIPTION	POSITION						METHOD OF DETER- MINATION	CHARTS AFFECTED	
	Latitude		Longitude			Datum			
	°	'	D. M. meters	°	'				D. P. Meters
BIRD ROCK (7') (Δ Bird Rock, 1933)	35	08	1678	120	40	1512	1927	Triang.	Island 5302 & 5386
WHITE ROCK (16') (Δ White Rock, 1933)	35	09	1478	120	42	794	"	"	Island " "
AVILA ROCK (7') (Δ Avila Rock, 1933)	35	10	410	120	43	619	"	"	Island " "
AVILA DOCK (Δ Avila Dock, 1933).	35	10	845	120	44	41	"	"	Dock " "
OIL PIER (Δ Oil Pier, 1933)	35	10	393	120	44	587	"	"	Pier " "
CHIMNEY (Δ Chimney on House near Avila, 1933)	35	10	1730	120	44	808	"	"	✓ " "
DOUBLE TANK (Elevated (Δ Double Water Tank, N. Pismo Beach, 1933)	35	09	1019	120	40	1344	"	"	✓ " "
REFINERY (Brick)	35	10	554	120	41	1279	"	Topo.	✓ " "
BUILDING (Office) (Δ Office Bldg. S. Avila Beach)	35	10	803	120	41	1138	"	Triang.	✓ " "
OIL TANK (East) (Δ S. Tank Avila Beach, 1933)	35	10	1210	120	43	436	"	"	✓ " "
OIL TANK (South) (Δ W. Tank, Avila Beach, 1933)	35	10	996	120	43	693	"	"	✓ " "
OIL TANK (Northeast) Lighthouse Signal "Age"	35	10	1409	120	43	894	"	Topo.	✓ " "

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

REVIEW OF TOPOGRAPHIC SURVEY No. 6285

Title (Par. 56) *Shell Beach to San Luis Obispo Creek, California*Chief of Party *O.W. Swainson* Surveyed by *H. Clarke* Inked by *H. Clarke*Ship *Pioneer* Instructions dated *Nov. 18, 1932* Surveyed in *Sept. 1934*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)
Contours from previous survey T1321 (1871-2) used. Several check elevations taken.
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)
See Par. 4
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None submitted*
7. High water line on ~~marshy and mangrove coast~~ is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, ~~coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
See reverse side
10. ~~The span, draw and clearance of bridges are shown.~~ (Par. 16c.)
11. Locations and elevations of summits are given. (Par. 19, 51.)
Check elevations taken
12. The tree line was shown on mountains. (Par. 16g.)
Not shown

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 9

T1321 (1871-2)

~~The present survey is in good agreement with T1321 except for one rock awash at Lat. 35° 30' 45", Long. 129° 45' 55" which was brought forward to T6285. The remainder of the shoreline and rocks check very closely. Survey T1321 used the bare rock symbol where the rock awash symbol should have been used. There is much more detail back of the H.W. line on T6285 than on T1321. Other changes in changeable areas are noted in the Descriptive Report. Survey T6285 supersedes T1321 in part.~~

Chart 5386

The chart was evidently taken from T1321. Changes are noted under T1321 above.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *11 cards submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *No evidence of having checked declination. Declination at Union 3° East of that at A South. Evidently local attraction at Union*
18. The geographic datum of the sheet is *N. A. 1927 (Adjusted)* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate. ✓
Joins T 6286 on the North and T 6274 on the South
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by
24. Remarks:

Reviewed in office by

Chas. R. Bush Jr. May 28, 1936.

Examined and approved:

C. K. Green
Chief, Section of Field Records

L. O. Colburn
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

Stude
Chief, Division of Hyd. and Top.