DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: CALIFORNIA

DESCRIPTIVE REPORT

Locality: Central California Coast
Point San Luis & Vicinity to Pecho Rock

1934

Chief of Party
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 ...N.........

REGISTER NO. 8-05

State........................................California

General locality......................................Central California Coast

Locality........................................Point San Luis & Vicinity to Pecho Rock

Scale........................................1:10,000 Date of survey...October, 1934

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

Chief of Party....................O. W. Swainson

Surveyed by..........................Harold Clarke

Inked by..................................Harold Clarke

Heights in feet above M.N.W. to ground........................................

Contour Approximate Contour Form line interval 100 feet
Instructions dated..............November 18, 1934.............19

Remarks:.................................................................
DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET NO. N.

Point San Luis, California Coast,
Latitude 35° 11', Longitude 120° 44' to
120° 49'.

AUTHORITY

This work was done in accordance with instructions dated November 16, 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 October, 1934.

CONTROL

The sheet was controlled by triangulation points located previously by Charles Pierce in 1933 at an approximate maximum spacing of two miles along the coast line. Traverses were run between these stations with the following errors of closure:

△ Union, 1933 to △ Whaler's Island, 1933 - Flat.
△ Whaler's Island, 1933, to △ San Luis Obispo Lighthouse, 1933, - Flat.
△ San Luis Obispo Lighthouse, 1933, to △ McRay, 1933, - Flat.
△ McRay, 1933, to △ Olson, 1933. - Flat.

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

GENERAL DESCRIPTION

This section is characterized by high ranges the toe of which is Point San Luis. The slopes on either side of the range are abrupt and covered with either grass or low brush and the tops of the ranges are generally flat and grassy. The backing canyons are full of low spreading oak trees. The cliffs are generally rocky, sometimes low with the higher portion dirt, and the cliff line is broken by frequent small canyons. Many inshore reefs and offlying rock patches, especially at the northernmost end of the sheet, characterize the section.

Opposite △ Union, 1933, and west thereof is a long stretch of sand beach backed by a low cliff next a shelf on which is constructed the Southern Pacific Railroad and then short lengths of high whitish clay cliffs interspersed with deep canyons.
Union Oil Tank, West, 1933, marks the location of a series of oil tanks, a refinery, and several small buildings. West thereof, the high rock cliff starts culminating at the point.

Pacific Coast

The inshore end of the Point San Luis Valley Railroad Dock is indicated by a Chimney of Old Hotel, 1833, the hotel being burned to the ground prior to this survey, leaving a portion of the chimney standing, and the water end by a Railroad Dock, 1933, marking also the end of the narrow gage railroad.

Access by land to Point San Luis and the lighthouse is had by a high, narrow, side hill trail above the steep, gray green rock cliff. Very close inshore is a continuous line of small rocks and just north of the point is Smith Island, elevation 44 feet. Point San Luis is characterized by a low, rock cliff, with Whaler's Island just offshore and being connected with the mainland by the Avila breakwater, the latter extending offshore of Whaler's Island some 600 meters. Of note is the lighthouse pier between Smith Island and Whaler's Island.

The San Luis Obispo Lighthouse about 600 meters west of Whaler's Island marks the south end of extensive offlying rock patches. The cliff line is composed of 20 to 40 feet of gray green rock base with the remainder being a light brown to white clay over. Inshore is a narrow strip of gently sloping grassy land culminating in the steep slopes covered with low brush. Frequent deep, short canyons break the continuity of the beach and the cliff line is very broken. The base of the cliff is on a long beach of boulders with a narrow reef and offlying rock patches continuous.

The farthest southerly point of possible vehicular travel in dry weather is marked by the first canyon south of topographic signal hill. The roads back of the cliff line are of variable location, are not improved, and are not passable in wet weather. Access to the shore line west of the range is had by a poorly graveled road, impassable in wet weather, starting just north of a Union, 1933, winding among the hills and finally following the canyon just east of a Chimney, Adobe Ruins, 1933. The road parallel to the shore line follows in general the old trail, its location being changed or destroyed by crop requirements.

North of topographic station hill the strip at the base of the steep slopes starts to broaden. At McRay, 1933, is a slightly more extensive offlying reef and kelp. Just north thereof a short stretch of sand beach extends. A Chimney, Adobe Ruins, is in the center of a field under cultivation, the soil being adobe, full of shells and small pebbles.

At Olson, 1933, located on a grassy knoll, the cliff is composed of a low green rock base and a top of light brown clay.

Offlying is Pecho Rock, elevation 40 feet. Just east thereof are two small islets.
CHANGES IN COAST LINE

The delineation of the cliff and shore line check closely with the old topography as do the offlying rocks. Some additional rocks have been located and the reefs and foul areas more accurately indicated on the new topography.

The addition of the Pacific Coast Railroad, the high trail to the lighthouse, (their only means of land access), the railroad pier, the oil tanks and the Avila Breakwater constitute changes of note over the old topography.

This survey should supersede all former surveys in all respects except contours. The contours unless shown on this sheet as having been changed are the same as drawn on previous surveys.

STATISTICS

| Shore Line | 17.5 statute miles. |
| Streams    | 1.8 statute miles.  |
| Narrow Gage R. R. | 1.5 statute miles. |
| Roads      | 1.5 statute miles.  |

Harold Clarke,  
Topographer.

Approved and forwarded:

O. W. Swainson,  
Chief 63 Party,  
Commanding PIONEER.
### Plane Table Positions

<table>
<thead>
<tr>
<th></th>
<th>Wet</th>
<th>Red Tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>35° 10'</td>
<td>35° 09'</td>
</tr>
<tr>
<td>Minute</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Elevation</td>
<td>+1314 m.</td>
<td>+1249 m.</td>
</tr>
<tr>
<td></td>
<td>834 m.</td>
<td>853</td>
</tr>
<tr>
<td>Refinery</td>
<td>35 10</td>
<td></td>
</tr>
<tr>
<td>Stack</td>
<td>120 45</td>
<td>120 48</td>
</tr>
<tr>
<td>Kob</td>
<td>35 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>120 45</td>
<td>120 48</td>
</tr>
<tr>
<td>Gay</td>
<td></td>
<td>35 10</td>
</tr>
<tr>
<td></td>
<td>120 45</td>
<td>120 48</td>
</tr>
<tr>
<td>Hat</td>
<td>35 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>120 45</td>
<td>120 48</td>
</tr>
<tr>
<td>Mast</td>
<td>35 09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>120 45</td>
<td>120 48</td>
</tr>
<tr>
<td>Rock</td>
<td></td>
<td>35 09</td>
</tr>
<tr>
<td>Gab</td>
<td></td>
<td>35 11</td>
</tr>
<tr>
<td>Rock</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35 10</td>
<td>35 10</td>
</tr>
<tr>
<td></td>
<td>120 48</td>
<td>120 48</td>
</tr>
<tr>
<td></td>
<td>1195</td>
<td>1467</td>
</tr>
<tr>
<td></td>
<td></td>
<td>350</td>
</tr>
</tbody>
</table>
GEOGRAPHIC NAMES

Sheet N.

The following should be removed from the charts:

Fossil Point (New Union Oil Pier location).

Roads indicated are either impassable or do not exist (see topographic sheet).

The following should be added to the charts:

Stack should be retained on the chart.

Smith Island

Pecho House is now indicated by △ Chimney, Adobe Ruins, is unoccupied and in a state of disintegration.

Pecho Creek should be retained on the chart.
"LANDMARKS"

Sheet N

▲ Union Oil Tank West, 1933

This tank is the south easterly tank of a large group, is about 100 feet in diameter, and about 35 feet high, elevation 135 feet. It is visible from the south and east and should be charted. In fact, all the tanks should be shown on the chart.

▲ R.R. Dock, 1933

This dock, called Port San Luis, is the terminal of the Pacific Coast Railroad; is constructed of wood piling and plank decking; has a large warehouse near the center (topographic signal Mat) and ends about 15 meters east of a chimney of Old Hotel, 1933, this being the edge of the foundation walls, all that remains after the burning of this hotel. This dock should be charted.

▲ Smith Island, High Point, 1933.

This island, 44' in elevation, has sharp dark rock cliffs, culminating in a sharp peak at the west end, is visible from the east and should be charted.

Lighthouse Pier

This pier, indicated by the mast of the derrick located on the platform of the pier consists of wood piling and decking at the outer end, rests on an intermediate rock island at the center and thence to the mainland. This pier should be charted.

▲ Whaler's Island, 1933

This island, elevation 72', has sharp vertical rock cliffs, is brush covered, is an integral part of the Avila Breakwater, extending out 566 meters. This island and breakwater are visible from the south, east, and west and should be charted.

▲ San Luis Obispo Lighthouse, 1933

The lighthouse, elevation 151 feet, tip of spire, and 102' focal plan, should be charted.

High Point, Offlying Rock

This rock, about 420 meters offshore and isolated, elevation 2 feet, (incorrectly indicated 6 feet on charts) is a low rock marking the outer edge of a foul area and should be charted.
Large Rock, south of Pecho Rock, 1933

This rock, elevation 6 feet, located about 1000 meters offshore should be charted.

High Point, Offlying Rock

This rock, elevation 2 feet, located about 650 meters offshore (incorrectly indicated 6 feet on charts) should be charted.

Pecho Rock, 1933

This island, with sharp cliffs rises to an elevation of 40 feet (incorrectly indicated on charts as 31 feet) stands out prominently from all directions, marks the location of an extensive rock group and should be charted.
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.

<table>
<thead>
<tr>
<th>Topo Sheet N.</th>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OIL TANK (Southeast)</td>
<td></td>
<td></td>
<td>Triang. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>(△ Union Oil Tank W., 1933)</td>
<td>35 10</td>
<td>1029</td>
<td>120 45</td>
</tr>
<tr>
<td></td>
<td>PORT SAN LUIS</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>(△ Railroad Dock, 1933)</td>
<td>35 09</td>
<td>1757</td>
<td>120 44</td>
</tr>
<tr>
<td></td>
<td>SMITH ISLAND (44')</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>(△ Smith Id. High Point, 1933)</td>
<td>35 09</td>
<td>1417</td>
<td>120 45</td>
</tr>
<tr>
<td></td>
<td>LIGHOUSE PIER</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>(△ Topo. Signal Mast)</td>
<td>35 09</td>
<td>1196</td>
<td>120 45</td>
</tr>
<tr>
<td></td>
<td>WHALER'S ISLAND (72')</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>(△ Whaler's Island, 1933)</td>
<td>35 09</td>
<td>1065</td>
<td>120 45</td>
</tr>
<tr>
<td></td>
<td>SAN LUIS ORISOPO LIGHTHOUSE</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>(△ S.L.O. Lighthouse, 1933)</td>
<td>35 09</td>
<td>1149</td>
<td>120 45</td>
</tr>
<tr>
<td></td>
<td>ISLAND (2')</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>ISLAND (6') (△ Large Rock)</td>
<td>35 10</td>
<td>1087</td>
<td>120 48</td>
</tr>
<tr>
<td></td>
<td>S. of Pecho Rock, 1933)</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>ISLAND (2')</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>PECHO ROCK (40')</td>
<td></td>
<td></td>
<td>Chartist. 5502 &amp; 5503.</td>
</tr>
<tr>
<td></td>
<td>(△ Pecho Rock, 1933)</td>
<td>35 10</td>
<td>1437</td>
<td>120 48</td>
</tr>
</tbody>
</table>

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, flagstaffs and like objects are not sufficiently permanent to chart.
<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pecho Rock</td>
<td>✓</td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Rock</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pecho Creek</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pecho House</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lone Black Rock</td>
<td>✓</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Point San-Luis</td>
<td>Santa San Luis</td>
<td>✓</td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>San Luis Hill</td>
<td>✓</td>
<td></td>
<td></td>
<td>1075</td>
</tr>
<tr>
<td></td>
<td>Whaler Island</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Smith Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port San Luis</td>
<td>Port San Luis Warf</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stack</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Spelling?*
REVIEW OF TOPOGRAPHIC SURVEY No. 6286

Title (Par. 56) Point San Luis "W Vicinity to Pecho Rock, California

Chief of Party O.W. Swainson Surveyed by H. Clarke Inked by H. Clarke

Ship Pioneer Instructions dated Nov. 19, 1932 Surveyed in October, 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.)
   No new contours added. Several check elevations taken and old contours considered correct and adequate

5. The delineation of contours-formlines is satisfactory. (Par. 49, 50.)
   Taken from previous surveys.

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 with the exception of a rock awash at Lat. 35°10', Long. 120°45', which was brought forward to the present survey. The docks and breakwater are not as they are shown on T1321 as they have been reconstructed for which T628 is authority. Survey T628 supersedes T1321 in part.

An island shown on T1321 has been broken up into several small islands on the present survey.

Chart 5386

The chart is in good agreement except as indicated 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.) 10 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 note of having checked declinatoire.

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 6287 on the North and T 6285 on the South and East.

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:


Examined and approved:

[Signature]  [Signature]

Chief, Section of Field Work  Chief, Section of Field Records

[Signature]  [Signature]

Chief, Division of Hyd. and Top.  Chief, Division of Charts