4982

Diag. Cht. No. 5602-2.

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. 21

4982

LOCALITY

Cape Vizcaino
~~Northern Coast~~

~~Rockport to~~ Newport Landing

to Rockport

1929.

CHIEF OF PARTY
F. C. Engle
F. E. T. Siems

U. S. GOVERNMENT PRINTING OFFICE: 1928

4982

DESCRIPTIVE REPORT
TO ACCOMPANY HYDROGRAPHIC SHEET NO. 21

SCALE 1:20,000

ROCKPORT TO NEWPORT -- NORTHERN CALIFORNIA

PARTY OF STR. DISCOVERER

F.G. Engle,
H.& G. Engr.,
Commanding.

May & June, 1929

Port & Starboard Motorsailers

LIMITS:

The surveys on this sheet covers the waters adjacent to the shoreline from latitude 39° 44.3' opposite Rockport, south to latitude 39° 34.2' near Newport, where it joins the work on sheet no. 22. This work extends from the shore line offshore to the 20 fathom curve.

SURVEY METHODS:

The port and starboard motorsailers, using the ship as a base, completed the surveys on this sheet between May 17 and June 5, 1929. Both launches worked on the sheet at the same time, necessitating two boat sheets. In general, the 10 fathom curve was developed with the hand lead and the hand sounding machine was used outside the 10 fathom curve. For hand lead sounding a 12 lb. lead and a phosphor bronze wire center lead line were used. Frequent checking proved the leadline corrections to be small or negligible. For machine sounding an 18 lb. lead and stranded wire were used. The launch was stopped and backed until dead in the water for each machine sounding. The sheave was read to tenths of fathoms most of the time. In a few cases the sheave was read to fathoms and feet. The unit used is clearly indicated by the heading in the sounding record.

The sheaves used were tested at the beginning and end of the season. No appreciable error was found.

The spacing of sounding lines on this sheet conform to Par. 12 of Instructions dated March 25, 1929. The photostat of 1643-a is returned with the smooth sheet.

DANGERS: There are no dangers within the limits of this sheet outside of the 10 fathom curve. The shore line is rocky with many rocks, bare and awash, near the shore line. Detached rocks lying outside of the general foul area were located by the launch party and are plotted on the smooth sheet with a note relative to the stage of tide they bare.

ANCHORAGES: There are no good anchorages within the limits of this sheet. Rockport harbor is used for loading lumber on small coastwise vessels. The vessels are moored in the small bay and are loaded by means of a trolley and cable. There is no dock. Very little protection is afforded from the prevailing NW swell. The bottom in this vicinity is sandy.

While working in this vicinity, the DISCOVERER anchored NW of Abalone Point, latitude 39° 41', in about 15 fathoms. This anchorage could be used only in good weather.

COMPARISON WITH PREVIOUS SURVEYS: The 6½ fathom shoal shown on bromide 1643a in lat. 39° 42.9', long. 123° 49.9', was developed. This depth was verified and no less depth was obtained. The 10 fathom shoal in lat. 39° 41.4', long. 123° 48.8', extending from shore out to this point, was verified, checking the previous survey.

A shoal with a least depth of 11.3 fathoms was found in lat. 39° 39.7', long. 123° 48.8'; the least depth shown on the bromide was 17¼ fathoms.

The three shoal soundings in the vicinity of lat. 39° 39', long. 123° 48' were verified. On the 13½ fathom shoal 1/5 mile NNW, a sounding of 14 fathoms was obtained. A slightly less depth was found on the 12¾ fathom and the 8¾ fathom shoals in this vicinity.

A least depth of 1½ fathoms was found on a shoal in lat. 39° 37.5', long. 123° 47.6'. A sounding of 7¾ fms. was found about 200 meters west

of this shoal. Both soundings are less than those shown on the bromide.

The 8 fathom shoal shown on the bromide in lat. 39° 36.4', long. 123° 47.6' was verified. Not so

The 10 fathom shoal opposite Newport Landing was found to extend farther off shore than was shown on the bromide.

There are no buoys at Newport Landing at the present time.

TIDAL DATA: The portable automatic tide gauge at Mendocino Bay was used to obtain tide reducers for the soundings on this sheet. On a few days, when the Mendocino gauge was out of order, the tide gauge at San Francisco was used, with a time correction of 6 tenths of an hour (later at San Francisco). The plane of reference was mean lower low water. For Mendocino Bay MLLW = 1.6 ft. on the staff.

Respectfully submitted;

George L. Anderson

George L. Anderson,
Jr. H. & G. Engineer.

Approved and forwarded:

F. B. T. Siems

F. B. T. Siems,
Chief of Party,
Commanding DISCOVERER.

RECOMMENDATION FOR ADDITIONAL WORK:

Lumber schoners pass close inshore to avoid heavy swell and prevailing northerly winds. There are indications of abrupt changes in depths: (Latitude 39° 37.5 ', longitude 123° 47.6' with 1-1/2 fathoms in a general depth of 7 to 8 fathoms, and latitude 39° 39.7' longitude 123° 48.8' with a 11 fathom spot on the 20 fathom curve). The hydrography shows many other indications of shoals. It is considered that the hand lead is not an adequate means of finding the least water on these rocky shoals and that the entire area within the 30 fathom curve should be dragged.

F.B.T. Siems,
H.& G.Engr.,
Commanding.

STATISTICS

DATE, 1929	LETTER	VOL.	POS.	SOUNDINGS	MILES(STAT.) SDG. LINE	VESSEL
May 17	a	1	90	297	14.0	PMS
" 18	b	1	126	465	18.0	PMS
" 19	c	1	138	489	23.0	PMS
June 4	d	1 & 2	183	476	20.0	PMS
" 5	e	2	148	362	20.6	PMS
May 17	a	1	113	179	14.0	SMS
" 18	b	1	164	382	17.0	SMS
" 19	C	1 & 2	177	379	20.0	SMS
			1142	3039		

Field Records Section

Report on H-4982. Surveyed in 1929

Chief of Party - F.G. Engle - R.T Sierns

Surveyed by - P.W Knox - G.L. Anderson

Protracted by - J.G. Bose.

Soundings By - C.J Wagner

(1)	The records conform to the requirements of G.S.
(2)	The plan and character of the development fulfill the req. of G.S.
(3)	The specific instructions cover the work on several sheets and it is decided to omit reference to compliance or non-compliance with them in this report.
(4)	Sounding line crossings are considered adequate
5	No depth curve except the 10 fm curve can be completely drawn.
6	The shore line and all rocks except a few located by the hydro. party at the inshore end of sounding lines was taken from T-4209 scale 1:5000 T-4496 - T-4497 scale 1:10000 which were photostated down to the required scale and transferred to this sheet in the office.

considering the unchanging character of this part of the coast it is considered that the combined extracts of the older surveys with this will give a true and fairly complete detail of the area covered by this survey.

The following are observations upon the discrepancies given on page 4. Top D.R. and which have been indentified by the letters a b c in the 5th.

'a' It was quite possible to miss this as there was a half tide at the time of passing. Its position would seem to be about 30 m from the boat at the nearest point. It should be noted that the + 170 m N.W. of the one in question was not observed by the hydro party. This rock is from T-4497. There was however a high tide at the time. The old survey 1643a shows generally shoaler depths all around this spot. retained

'b' This rock is plainly shown on 1643a but cannot be verified. Sounding line 25-26-27-h Vol 13 1643a passes thru here but no reference is made to it. It should be noted that there are two 5½ fms sounding in the record at 26-h but the old sheet shows Three 5½ fms. However the 6 6 fms 30 m S.W. of + on this survey is a confirmation of something having been detected there in the old work. retained

Here also the depth on the old survey is approx one fm less.

There are other sunken rocks and a + shown on 1643a near here ++ (100 m. North TRUE) and * 150 m. east. X. South.

c This rock is about 100 on N.E of that discussed under b Vol. 13 – 1643a says that reef begins at 25-h at Two fms and ends beyond 28-h at ⁂. There is very likely a recession of the reef towards shore S.E of 25-h and in all probability there is a + there and perhaps several.
The old survey findings should be accepted (at this point) for the reason that the tide reducer was practically Zero when opposite these rocks.

retained

Observations in comparison with previous surveys: D. R. (Hydro) Page # I.
It is noted that the depths in the vicinity of the 6½ fms shoal referred to in the comparison are roughly 1 fms less on the old survey.
OK
The 10 fms shoal in 39°.41'.4 is said to be verified but its westerly limit appears to be Long. 123°-49 – It seems as if a change had taken place here. Bottom is bk S. S and Crs. bk S
OK
It is stated that "The three fms shoal soundings in vicinity of Lat. 39°.39' Long. 123°.48' were verified.
If this refers to 6 ft - 18 ft and 13 ft found on 1643a then it seems that the verification is not convincing for 4982 shows a 7 fms adjacent to where the 6 ft or 1 fms is on 1643a and a 66 fms adjacent to a 2½ fms on 1643a.

H. 4982 Page 4

Additional discrepencies observed during verification

This survey does not lap over that of 1926 (H-4588[a]) but the area has been W.D. (W.D. 4588[b]) ✓
The W.D. developed the 18-ft sounding.

List of Rocks awash, Sunken rocks and Soundings of a menacing nature not verified in this survey or in conflict with it. FROM — H — 1643[a] ✓

Feature	Lat.	Long.	Remarks
$5\frac{1}{2}$ fms	39°-43.8	123° 50·2	✓ retained
+	" 43.3		50[m] S.E △ COTT RK. retained
*	" 43:2		200[m] S.E. △ COTT RK. retained
$2\frac{4}{6}$ fms	" 43:0	" 49:7	
$6\frac{1}{4}$ fms	" 42.65	" 49·28	Least depth found is $9\frac{1}{2}$ fms retained on the East. retained
$5\frac{1}{4}$ fms	" 41·6	" 48·55	retained
$2\frac{4}{6}$ fms	" 41·55	" 48·14	Note also $2\frac{5}{6}$ fms — 100[m] N.E retained
$2\frac{4}{6}$ fms	" 41·4	" 48·05	falls on 46 • approx (Note how the 10 fm curve swings out. Note $8\frac{3}{4}$ fms retained in Long 48.88)
3 fms	" 40·98	- 47·95	retained
3 fms	" 40·3	- 47·8	retained
$2\frac{5}{6}$ fms	" 40·1	- 47·87	retained
7 fms	40·27	" 48·12	Note an $8\frac{1}{2}$-200[m] S.W retained on this survey. H. 4982 The $9\frac{3}{4}$-200[m] S.E on 1643[a] should have a blue curve retained
$3\frac{1}{2}$ fms	40·02	" 47·85	
*	" 39·99	" 47·75	retained
$5\frac{1}{4}$	" 39·75	" 47·95	retained
Reef	39.25	47.55	A condition indicated here which seems to have escaped observation in this survey. The old survey shows that the reef extends West and South some distance and is defined by the two * and one + a $2\frac{1}{6}$ fm a 3 fm and a one fm Just east of the 7 fms of this survey in Lat. 39°—39°.26 NOTE $7\frac{3}{4}$ in Long 123°-47.9

Positions on old survey checked and found O.K. No shift noted in relation between topographic features O.K. retained

List of Rocks awash sunken Rks etc (continued)

Feature	Lat.	Long.	Remarks
Shoal or reef	39°38'25"	123°47'55"	In decided contrast with these soundings obtained in last survey.
5½ fms	" 38'05	" 47'5	retained
5½ fms	" 37'85	" 47'54	retained.
*	" 37'74	" 47'43	retained.
+	" 37'25	" 47'05	retained
+	" 35'58	" 47'25	shown as on 4982 (+)
+ +	" 35'35	" 47'05	retain
12 fms and +	" 35'03	" 46'95	retain
+	" 34'85	" 46'95	This is on B.S. but not on smooth sheet nor record (Plotted) retain
9 fms	" 34'68	" 47'10	Note 10 fms 300m S.E. on H.4982 retained
6 fms	" 34'55	" 46'9	retained
+	" 34'45	" 46'72	retained.

In the development of the shoal Lat. 39°37'45" Long 123°47'6 note that the 12 is about 40m South West of the 16 on 1643a as similar displacement, but not so much is noted in the case of the rock awash 300m East. No verification of the 15 ft sounding between the rock and the 16 fms (on H4982) was obtained.

Believed to be same feature 15 fo Rock verified 29-30a Vol. 13-1643 retain - shown on 4982 ~~as~~ F.S.

* *	39° 41'9	123° 48'2	retained
*	" 41'81	" 48'18	"
	" 41'68	" 48'17	"

Numerous small rocks on 1643a not shown on H.4982

In Lat 39°-39:25

The 6ft sounding is over a rock and position 20-2 Vol 13 - 1643a is on this rock. The pos. was rechecked on the old work and found OK. retain

Referring to the 8¼ fms shoal in Lat 39° 36.4 it is stated in the D.R. that this shoal was verified

There are no soundings on the smooth sheet to show that this is true. As a matter of fact, the depth curve drawn thru here, shows the deep approaching the shore more closely than at points North and South of the spot in question.

The two soundings are questionable (8¼ fms)

Sounding line 2-3 S Vol-9 runs North and South thru the spot and that part of the line has no 8¼ fms

7-8 S comes off shore and ends before reaching the 8¼ fms The positions were checked and found OK. but no other line seems to go thru here

The contrast between the 8¼ and adjacent soundings is not considered sufficiently pronounced to warrant further investigation.

(All reviewed)

DOUBTFUL SOUNDINGS ON H-4982

11 1/4 fms in Vol. 13 - 1648a 2-3 S

A 7¾ fms sounding is noted in Lat 39° 40 Long. 123 48.2

Where the area has a general shoaling tendency the 5½ fms between 89.90-C Vol 3 Lat 39° 38.7 Long 123 47.68 has a forbidding aspect. and should have been investigated. This sounding is in approx 9½ fm depths on H-1643a. retained

H. 4982

DOUBTFUL SOUNDINGS (CONTINUED)

There is some difference in sounding values at 88-89.a where they are greater than on 87-89-b (88-89-b) Vol-3 erroneously plotted Lat. 39°.39.6 plotted

Note the 7½ in Lat. 39.37.5 - 200m N.W of the 1½ shoal.

Note a 3½ Lat. 39° 39.85 This however is well bracketed with soundings and looks safe 3½ old 1643a.

PLACE NAMES

"Newport Landing" according to 1643a is in the triangular cove south of Brushby Pt. Topo 4497 shows that it is in the cove just North of Brushby Pt.

Page 7 - Vol 2 says "No Pos. 153-157 inclusive" yet the work was plotted. The plotting was checked and accepted but pos. 158 was found to be out over 100 meters.

Pos. 161-C Vol 2 was out 130-Meters The nearness of the word SUP to ⊙Sg. caused the man protracting to use ⊙Sg. instead of ⊙SUP

A superficial comparison of the 5 fm curve of 1643a and this sheet showed no consistent difference except in Latitude 39°.42 on 43'. What differences there are appear to be in favor of greater depths at the same points on H. 4982.

Respectfully submitted J. Fleming May. 14-1930

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 4982

Newport Landing - Rockport, California

Surveyed in 1929

Instructions dated March 25, 1929 - DISCOVERER

Chief of Party, F. G. Engle, F. B. T. Siems

Surveyed by R. W. Knox, G. L. Anderson

Protracted by J. C. Bose

Soundings plotted by C. J. Wagner

Inked and verified by J. Fleming

1. The records conform to the general requirements of the Hydrographic Manual with these exceptions: No list of signals used is forwarded with the record books; no record of sheave tests is shown (records carry statement that sheave is O.K.).

2. The spacing of sounding lines conforms to paragraph 12a of the specific instructions. However, paragraph 12b is not complied with. Numerous submerged rocks and reefs inside the 10 fathom curve are shown on the old sheet, 1643a, which were neither found nor investigated by this party. These are too numerous to overlook and as the old survey seems to be accurate and conforms to the standards required these have all been retained and shown on this sheet, H. 4982 in a suitable color. As paragraph 12 of the specific instructions states that all soundings inside the 20 fathom curve on sheet 1643a should be carefully transferred, it is believed that the instructions intended that these critical soundings and shoals should be developed and investigated by this party. This was not done. The 5 fathom sounding on H. 4982 in approximately Lat. 39°42'.9, Long. 123° 49'.6 falls about 120 meters northeast of a group of 10-11 fathom soundings on H. 1643a and the same distance west of a 4 3/4 fathom sounding on H. 1643a. This condition should have been further developed.

   The 10 fathom sounding in Lat. 39° 40'.7, Long. 123° 48'.4 was not developed.

The 8 1/2 fathom sounding in Lat. 39° 40'.2, Long. 123° 48'.2 was not developed. However, this falls about 50 meters north of a 9 1/4 fathom sounding on H. 1643a. This should have been fully developed as it is known that lumber schooners stay well inshore, running north, to avoid the prevailing northwesterly winds from March to August of every year.

The 5 1/2 fathom sounding in Lat. 39° 38'.7, Long. 123° 47'.7 (400 meters southwest of Switzer Rock), sheet H. 4982, should have been fully investigated as the question arises whether this sounding should not have been 9 1/2 instead, as it falls in an area of no shoal indications on H. 1643a. However, it has been retained.

Five hundred seventy meters southwest of △ Bell Point, sheet 1643a, shows a 2 1/2 fathom sounding with a 1 3/4 and a rock awash about 180 meters to the west and east respectively. This sheet, H. 4982, verifies the 1 3/4 and the rock awash but shows no indication of the 2 1/2 fathom sounding which falls in an area of 6 fathoms. No mention is made of this in the descriptive report and as the 2 1/2 fathom sounding was verified from the old records it has been retained.

About 1540 meters S x W of △ Abalone Pt. is a group of three shoal soundings (2 1/4, 1 and 3 respectively) which the descriptive report for H. 4982 says were verified. From the sheet and records it is not evident that this verification was made as the least soundings obtained was 6 1/6 fathoms. These have been retained.

About 1070 meters S x E of Switzer Rock, sheet 1643a shows a 1/2 fathom sounding which was neither verified nor investigated. This was retained. In passing it might be added that these shoal soundings were all verified from the old records.

On page 3 of the descriptive report for H. 4982 is the statement that the 8 fathom shoal in Lat. 39° 36'.4, Long. 123° 47'.6 was verified. It is evident that the correct datum was not used. The position of this shoal is 39° 36' 870 m., Long. 123° 47' 1040 m. It is not evident from the records or the sheet that this shoal was verified. In fact, upon verifying the existence of this 8 1/4 fathoms on the old sheet, 1643a, it was found to be 11 1/4 instead, the old plotting of soundings being in error. It has been retained as 11 1/4 (see 2-3 S, Vol. 13, sheet 1643a).

The 9 fathom shoal on 1643a in Lat. 39° 34'.6, Long. 123° 47'.05 was not investigated. Sheet H. 4982 shows a 10 fathom sounding 300 meters southwest of this 9 fathom sounding. Neither this sheet nor the old sheet has any sounding between these two shoal soundings and a 9-10 fathom bank may exist here. The 9 fathom sounding was retained.

3. Comparison with previous surveys:

This survey, H. 4982, would lead one to believe that the bottom here is a gradually sloping rocky bottom. Sheet 1643a gives just the opposite impression, showing the bottom to be very much broken, with numerous detached submerged rocks. This latter is believed to more closely approximate the true conditions here. Sheet 1643a shows numerous shoals and submerged rocks which have been missed by this party. These have all been retained and shown in an appropriate color on this sheet. Between the 10 and 20 fathom curves both surveys agree fairly well with a few exceptions, notably the 11 fathom shoal found on H. 4982 near the 20 fathom curve, Lat. 39° 39'.8, Long. 123° 48'.8 and the extension of the 10 fathom curve in Lat. 39° 41'.4, Long. 123° 49'. Inside the 10 fathom curve there is no agreement due to the failure of this party to investigate the shoals shown on 1643a. In the report on this sheet by the cartographer (J. Fleming) attached to the descriptive report for H. 4982 is a list of conflicting data and discrepancies between these two sheets. These have been checked and the disposition of these cases has been noted in pencil on the report. It should be noted that the three rocks awash"reported not found" on page 4 of descriptive report for T. 4496 and lettered a, b, c, have been retained. On H. 1643a in Lat. 39° 35' 1100 m., Long. 123° 47' 320 m. is a group of +'s and one bare rock. These should be charted and shown as on H. 4982. The +shown on 1643a in Lat. 39° 35' 1775 m., Long. 123° 47' 500 m. should be omitted as it is part of the reef shown on H. 4982. Sheet 1643a shows a group of 3 shoal soundings in Lat. 39° 37'.5, Long. 123° 47'.5 (1 3/4, 2 1/2, and *). About 260 meters southwest of △ Bells Point is a group of four rocks on 1643a. These should be omitted and charted as on H. 4982. About 320 meters E x N of △ Switzer Rock is a group of rocks which should be shown as on H. 4982. One hundred thirty meters southeast of Switzers Rock is a x on 1643a. This should be shown on the location of the * on H. 4982 about 50 meters south as it is an evident mislocation of the same feature.

The sunken rock shown on H. 4982 about 250 meters WSW of ⊙ Arch in approx. Lat. 39° 41'.7, Long. 123° 48'.1 should be shown as 1/6 fathom which sounding was obtained on 1643a. About 350 meters southwest of △ Hardy Rock sheet H. 4982 shows a ~~sunken rock at~~ * at 1/3 tide while sheet 1643a shows a 1/6 fathom sounding here. Pos. 79 b, Vol. 1, sheet H. 4982 bears this notation: "Rock bares 1 ft." As there was 1 foot of tide at the time, the rock awash 1/3 tide is correct and has been so retained.

The bare rock shown on 1643a 470 meters northwest of △ Hardy Rock should be shown as a rock awash at H. W. and to agree with H. 4982 in position. Sheet 1643a shows a 1/6 fathom sounding 310 meters south of Sea Lion Rock which falls on a sunken rock on H. 4982. It is recommended that the 1/6 be charted. About 100 meters northwest of this 1643a shows a 1/2 fathom sounding while H. 4982 shows another sunken rock. It is believed that these two features are identical and it is therefore recommended that the 1/2 be charted in the position of the sunken rock on H. 4982. In Lat. 39° 43'.6, Long. 123° 50'.1, sheet 1643a shows the word "Breaks". This should be retained; see descriptive report for H. 4588a. The inshore ends of the lines ontthis sheet H. 4982 between Cottaneva and Sea Lion Rocks falls within the limits of the wire drag survey, H. 4588a, of 1926 and no depths shoaler than the effective drag depths were found.

4. Junctions:

This sheet joins H. 4983 on the south satisfactorily.

On the north and west there are no junctions as this sheet was done to fill on the area covered by 1643a.

5. Additional work:

See recommendation of Commanding Officer, DISCOVERER, on page 4 of the descriptive report for H. 4982. If a party is ever in that locality again additional development and investigation should be made of the shoals and submerged rocks shown on H. 1643a and the shoals on H. 4982 mentioned previously as not having been fully developed.

6. Notes to compiler:

The two 8 1/4 fathom soundings shown on H. 1643a in Lat. 39° 36' 870 m., Long. 123° 47' 1040 m. were incorrectly plotted on 1643a. Pos. 2-3 S, Vol. 13, sheet 1643a plainly shows these to be 11 1/4 fathoms and they should be so charted.

The 3 1/4 fathom sounding 470 meters west of △ Bruhel Pt. on sheet 1643a should be charted as 2 3/4 fathoms. See pos. 31 h, Vol. 13, sheet 1643a.

7. Reviewed by I. E. Rittenburg, August, 1930.

Only the more important soundings from H. 1643a that fell within the sounding limits of H. 4982 have been transferred to the latter sheet. On account of the complexity of the area, however, the compiler is cautioned that before removing any shoal or critical soundings from the chart, this report be examined to make sure that the soundings have been investigated. Inshore of the work on this sheet, the old survey can be used for the completion of the chart.

offshore area has been W.D.

A. L. Shalowitz

Approved:

A. M. Sobieralski
Chief, Section of Field Records (Charts)

F. S. Borden
Chief, Section of Field Work (H. & T.)

Practically all the rocks and shoals reported to be close to shore and as the shore is very broken and exposed, a detailed survey to verify all the dangers would be enormously expensive. As vessels should avoid coming too close to shore in this area, a compilation showing all the dangers on both surveys, except where there is evidence that the two co-incide, should answer all practical purposes.

Ams.

ecm

(FOR FIELD RECORDS SECTION FILES)

April 21, 1930.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 4982

Locality: California (Vicinity of Rockport)

Chief of Party: F. G. Engle, in 1929
Plane of reference is mean lower low water, reading
1.6 ft. on tide staff at Mendocino City
ft. below B. M.

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

RSW

Chief, Division of Tides and Currents.

Form 537
Ed. Sept., 1929

REG. NO. 4982

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. 21

REGISTER NO. 4982

State California

General locality ~~Northern Coast~~. Cape Vizcaino

Locality ~~Rockport to~~ Newport Landing to Rockport

Scale 1:20,000 Date of survey May 17 to June 5, 1929.

Vessel Str. DISCOVERER'S LAUNCHES.

Chief of Party F. G. Engle & F. B. T. Siems.

Surveyed by R. W. Knox & G. L. Anderson

Protracted by J. C. Bose

Soundings penciled by C. J. Wagner

Soundings in fathoms ~~feet~~

Plane of reference Mean Lower Low Water

Subdivision of wire dragged areas by - - - - - - - - - - - - -

Inked by J. Fleming May - 14 - 1930

Verified by J.F.

Instructions dated March 25, 1929.

Remarks: F. G. Engle in command during field work.

Office work done under the supervision of F.B.T. Siems.

U. S. GOVERNMENT PRINTING OFFICE: 1930

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4982

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

Number of positions on sheet	1142
Number of positions checked	323
Number of positions revised	6
Number of soundings recorded	3029
Number of soundings revised	41
Number of signals erroneously plotted or transferred	

Date: May 14 1930

Cartographer: John Fleming