

4365

Diag. Chart No. 1007-2

4365

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Louisiana

1-5613

DESCRIPTIVE REPORT.

Hydrog. Sheet No. 4365

LOCALITY:

Gulf of Mexico
Between
Sabine and Calcasieu Passes

1923-24

CHIEF OF PARTY:

G.C. Jones

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET NO.

(Field No. 0)

VACINITY OF SABINE AND CALCASIEU PASSES

LOUISIANA.

INSTRUCTIONS DATED OCTOBER 15, 1922.

SUPPLEMENTAL INSTRUCTIONS DATED JULY 27, 1923

STEAMER HYDROGRAPHER.

G. C. JONES, COMMANDING.

AREA INCLUDED

The Area included in this sheet lies between SABINE PASS and CALCASIEU PASS, between Long. 93° 22' and 93° 40'. The sheet extends south from the beach to Latitude 29° 25'. In addition to the above 8 square miles immediately off CALCASIEU PASS is included.

CHANGES.

No important changes were found in this area.

The various shoal soundings shown in this area on Chart No. 1116 and marked "P.D." or "E.D." are all nonexistent. A list of those soundings and notations as to special development, if any, follows:

Lat. 29°	39.5'	Long. 93°	26.4'	5 FM reported, no development.
Lat. 29°	36.4'	Long. 93°	30.0'	4 FM. P.D., 4 sq. mi. developed.
Lat. 29°	34.5'	Long. 93°	22.5'	5 FM reported, P.D., No development.

CONTROL.

Very little Bouy work was done on this sheet, that work having been done by the Str. Bacne. The Bouys used were the same as those used by the Str. Bacne, and their locations secured from the Str. Bacne.

On account of excellent seeing conditions for the offshore portion of the sheet the shore fixes were carried to their extreme limit, observers climbing into the rigging at the ends of the lines. As a result some of the positions on the outer ends of the lines are somewhat weak but were still considered better than Bouy fixes.

The earlier part of the sheet was done in very hazy weather which accounts for the fact that most of the lines, even those to the 5 Fathom Curve are broken.

CURRENTS.

The Currents in this area are not so well defined as those to WESTWARD. The same fact that the currents are more wind than TIDAL was noted.

CURRENTS - con't.

In calm weather a slight ^{set} to westward, estimated at 0.3 Kn. to 0.5 Kn. was usually encountered, but could not be definitely counted upon.

TIDES AND TIDAL DATA.

The Tidal reducers were all referred to CALCASIEU PASS. Some of the sheet was completed ^{in base-velocities} at SABINE PASS, but those observations were used in accordance with the time and range corrections determined at CALCASIEU PASS.

48 hour observations were made at the Coast Guard Station, Sabine Pass; Light House Dock, Calcasieu Pass; and a staff outside the jetty, Calcasieu Pass. From those observations the following ratios were computed:

	Rates	Time.
Sabine Pass (Coast Guard Station)	1.0	0.0
Calcasieu Pass (Light House Dock)	1.07	1.4 hr.
Calcasieu Pass (Outside East Jetty)	1.35	1.4 hr.

In other words when tides were observed at Sabine Pass a ratio of 1.35 and a time correction of 1.4 hr was used, and when tides were observed at Calcasieu Pass a ratio of 1.25 and ⁴⁰hr time correction was used.

GENERAL REMARKS.

It will be noted that between Long. 93° 30' and 93° 38' the inner ends of the snip lines and the outer ends of the launch lines fail to agree by 2 feet and in one case by 3 feet. This discrepancy was not discovered until the Smooth Sheet was plotted and after leaving Port Arthur. It is thought to be due to the very soft bottom, the heavy lead used on the snip sinking deeper than the lighter launch lead.

"S" day (snip May 5) does not check entirely with adjacent lines. This is due to a very peculiar wave occurring on that date, apparently not tidal in origin. It appears that that wave approached from a different direction than the normal tidal wave so that time factor used was incorrect and was sharper outside than at Coast Guard Station at Sabine Pass. Allowance was not made for above factors as our information was too indefinite. The lines affected were not rerun as the ground was considered covered and soundings accurate. The discrepancies are on the side of safety in that the lines in question show deeper rather than shallower water.

Some few other discrepancies exist, though nothing serious.

These did not show on the boatsheet and were not , for that reason rerun. They are largely due to the reducers changing at a critical moment.

Such lines as failed to check within 2 feet(except 3 day as referred to above) on the boatsheet were rejected and rerun with better results.

Respectfully submitted,

G.C. Jones
G.C. JONES

Hydrographic Statistics
to accompany
Descriptive Report
on
Sheet "C"

4365

Calcasieu and Sabine Passes, Louisiana.

Date	1924	Letter	Vol.	Positions	Soundings	Stat. Miles	Vessel
Jan.	18	A	1	25	236	16.0	Ship
"	25	B	1	41	245	15.0	"
Mar.	7	C	1	44	283	18.4	"
"	12	D	1	31	226	14.5	"
"	27	E	1	20	117	9.0	"
Apr.	7	F	1	88	377	30.0	"
"	7	F	2	40	268	13.5	"
"	9	G	2	31	169	9.5	"
"	11	H	2	146	853	53.6	"
"	15	J	3	203	1257	68.0	"
"	16	K	3	104	679	39.0	"
"	18	K	4	65	494	30.0	"
"	22	L	4	134	939	52.6	"
"	23	M	5	103	676	39.2	"
"	28	N	5	126	758	42.6	"
"	30	P	6	115	958	54.0	"
May	1	Q	6	94	734	45.0	"
"	1	Q	7	50	439	25.4	"
"	2	R	7	166	1232	78.8	"
"	6	S	8	138	972	55.0	"
"	7	T	8	101	662	38.0	"
"	7	T	9	69	686	39.0	"
"	8	U	9	141	1037	64.0	"
"	8	V	10	17	130	8.0	"
"	9	V	10	30	465	26.6	"
"	16	W	10	11	112	4.6	"
"	19	X	10	55	527	27.2	"
"	20	Y	10	50	298	15.5	"
"	20	Y	11	49	459	26.5	"
"	21	Z	11	66	764	46.5	"
June	2	A'	11	25	194	10.6	"
"	5	B'	12	31	235	14.2	"
<hr/>							
Dec.	27, 1923	A	1	105	567	27.0	Lauson
Jan.	7, 1924	B	1	62	202	15.0	"
"	17,	C	1	70	385	20.0	"
Feb.	27,	D	2	51	252	14.4	"
"	"	E	2	93	515	26.0	"
"	28,	F	2	95	560	27.1	"
"	29,						
Mar.	11,	G	3	45	250	13.0	"
"	24,	H	3	64	358	17.7	"
"	27,	J	3	66	453	21.0	"
<hr/>							
Total				3170	21028	1212.4	

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 4546

Locality: Approaches to Sabine Pass, Gulf of Mexico.

Chief of Party: G. C. Jones, in 1924.
Plane of reference is Mean low water reading
2.9 ft. on tide staff at Galveston Pass
2.7 " " " " " Coast Guard Station, Sabine Pass.

For reduction of soundings, 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 wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each 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



Chief, Division of Tides and Currents.

Nov. 11, 1924

Report on Verification of Hydrographic
sheet H. 4365

The smooth sheet was very clean and well protected conforming to the general instructions for field work.

The sounding books are complete and conform to the requirements.

Sufficient bottom characteristics were given in the records and shown on the smooth sheet.

All changes in the courses were given in the records.

The area covered by this sheet is well developed with no critical soundings.

H. W. Edmonston

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 17, 1924.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4365

Between Sabine and Calcasieu Passes, La.

Surveyed in 1923-4

Instructions dated October 13, 1922 and July 27, 1923.

Chief of Party, G. C. Jones.

Surveyed by G. C. Jones, C. M. Thomas, J. A. Kibler and R. C. Wilson.

Protracted and soundings plotted by C. M. Thomas.

Verified and inked by H. R. Edmonston.

1. The records as well as the plan and character of development conform to the requirements of the General Instructions.
2. The plan and extent of development satisfy the specific instructions.
3. The sounding line crossings are adequate. At the junction of the launch and ship work the ship soundings are generally deeper than the launch. It is believed that the excess is due to the greater height of the sounding stage on the ship and also the fact that the lead used on the ship is heavier than the launch lead, causing it to sink deeper in the soft mud.
4. The information is sufficient for drawing the usual depth curves.
5. The field plotting was completed to the extent prescribed in the General Instructions.
6. The junctions with adjacent sheets are satisfactory.
7. No further surveying is required within the area covered by the sheet.
8. The existence of the 28-foot sounding charted in $29^{\circ} 46'$, $93^{\circ} 30'$, is disproved by this survey.
9. The character and scope of the surveying and drafting are excellent.
10. Reviewed by E. P. Ellis, November, 1924.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4365

State Louisiana

General locality Gulf of Mexico

Locality Between Sabine and Calcasieu Basses

Chief of party G. C. Jones

Surveyed by G. C. J., C. M. T., J. A. K., R. C. W.

Date of survey December 27, 1923 to June 5, 1924

Scale 1: 40,000

Soundings in Fest.

Plané of reference M. L. W.

Protracted by G. M. T. Soundings in pencil by G. M. T.

Inked by Verified by

Records accompanying sheet (check those forwarded):

Des. report, 7 Tide books, 1 Marigrams, 2 Boat sheets,

10 Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks:

- 1 Cahier Tidal data
- 2 Leveling records (Tidal B. M.s)
- 1 Statistical report

4366 Add'l. Wk.

Diag. Cht. No. 5101-2 & 5102-2

4366 Add'l. Wk.

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
E. Lester Jones, Director	
C. & G. SURVEY L & A APR 27 1928 Acc. No.	
State: California	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 4366 Add'l Wk.
LOCALITY	
COAST OF SOUTHERN CALIFORNIA	
Gulf of Santa Catalina	
San Diego - Offshore	
1928	
CHIEF OF PARTY	
F. G. Engle, H. & G. E.	

GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

T O A C C O M P A N Y

HYDROGRAPHIC SHEET NO. 4366 - - - - - SCALE 1:160,000

COAST OF SOUTHERN CALIFORNIA

ADDITIONAL WORK BY DISCOVERER IN 1928.

The work was done in accordance with Par., 11 of the Director's Instructions dated December 16, 1927.

All soundings are by fathometer. The fathometer corrections are based on data forwarded with Sheet No. 4560.

The dead reckoning was plotted using the deviations obtained on ship swing of Jan., 26, 1928 and a log factor of .997 obtained from a log test on Pt. Vicente mile range and long runs between various points.

Position 33 was moved arbitrarily and fixed to make the soundings between Pos., 33 and 40 agree with the soundings from H4265a. Pos., 10 was also moved arbitrarily the same amount and direction as Pos., 73 to make the adjacent soundings fit the previous work. In both cases the movement from what would have been a straight line adjustment throughout is small.

A straight adjustment was made between Pos., 1 and 10. Between 10 and 33 no adjustment was necessary. A straight adjustment was made between Pos., 33 and 48.

Respectfully submitted,



F. G. Engle,
H. & G. Engineer,
Chief of Party.

STATISTICS FOR HYDROGRAPHIC SHEET NO. 4366

COAST OF SOUTHERN CALIFORNIA.

Date	1928:	Letter:	Vol:	Position :	Soundings :	Miles (st.) :	Vessel					
Feb. 17	:	A	:	1	:	50	:	247	:	130.5	:	Ship
				Totals -----	50	:	247	:	130.5	:		

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4366 Add'l. WK.

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. -----

REGISTER NO. 4366 Add'l. Work
on orig Sheet

State California

General locality Southern Coast Gulf of Santa Catalina

Locality Off shore -- San Diego

Scale 1-160,000 Date of survey Feb., 17, 192⁸

Vessel DISCOVERER

Chief of Party F. G. Engle

Surveyed by F. G. E.

Protracted by T. B. Reed

Soundings penciled by T.B.R.

Soundings in fathoms feet

Plane of reference MLLW.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated December 15, 192⁷

Remarks: