8695

Diag. Cht. No. 1282-2.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ECFP-12.5-1-62 Office No. H-8695

LOCALITY

State Texas

General locality Galveston Bay

Locality Vicinity of Red Fish Bar

1962

CHIEF OF PARTY

S. L. Hollis, Jr.

LIBRARY & ARCHIVES

DATE 1-25-65

USCOMM-DC 37022-P65

8695

Form 537
(Ed. June 1946)

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.

REGISTER No. H-8695

Field No. ECFP-12.5-1-62

State TEXAS

General locality Galveston Bay

Locality Vicinity of Red Fish Bar

Scale 1: 12,500 Date of survey 3 July "62 to 9 Oct. "62

Instructions dated 211/pt. S-2- ECFP, dated 25 April 1962

Vessel CS-183 and Skiff NO. 758

Chief of party Steven L. Hollis, Jr. LCDR.

Surveyed by R. A. Lewis & W.V. Hull

Soundings taken by ~~fathometer~~, graphic recorder, hand lead, ~~wire~~ and Pole

Fathograms scaled by Party Personnel

Fathograms checked by Party Personnel

Protracted by W.L. JONNS (Norfolk Office)

Soundings penciled by W.L. JONNS " "

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 16—66520-1

DESCRIPTIVE REPORT
TO ACCOMPANY

Hydrographic Survey H- (Field No. ECFP 12.5-1-62)

Project: OPR-428

Scale: 1:12,500

EAST COAST FIELD PARTY

S.L. Hollis, LCDR.
Chief of Party

Surveyed by: R.A. Lewis

* * * * * * * * * * *

A. PROJECT

Work on Project OPR-428 was executed in accordance with instructions 211/pt. S-2-ECFP, dated 25 April 1962.

B. SURVEY LIMITS AND DATES

This survey is in the vicinity of Red Fish Bar, Galveston Bay, Texas and covers that portion of the bay between lat. 29° -27.0' to 29° -32.0', long. 94° -47.5' to 94° -57.0'.

This survey makes juncture with contemporary survey H-8693 (ECFP 10-5-62) on the south, survey H-8694 (ECFP 10-6-62) on the north & west, survey H-8743 (20-3-62) now in progress on the north, and survey H-8745 (20-2-62) on the east & south (not in progress at this time).

C. SOUNDING VESSELS

Launch CS-183 and Skiff 758 were used in this survey. A 16 ft. aluminum skiff, designated Skiff No.2, was used one day to obtain detached positions.

Vessel	Identifying Color
Launch CS-183	violet
Skiff 758	red
Skiff No.2	green

D. SOUNDING EQUIPMENT

Model 255C, EDO graphic recorders, serial Nos. 11 and 13 were used to obtain soundings on Launch CS-183. 808J fathometers Nos. 113S and 57-34 were used on Skiff 758.

D. SOUNDING EQUIPMENT (CONT'D)

Corrections to be applied to echo soundings were determined from daily bar checks and simultaneous comparisons. An abstract of these comparisons is tabulated in Appendix "B" of this report.

A sounding pole was used to obtain soundings in less than 7 ft. on Launch CS-183. An armed lead was used to obtain bottom samples.

No unusual difficulties were encountered with the sounding equipment.

E. SMOOTH SHEET

Smooth plotted by Norfolk Hydrographic Processing Branch on a machine made projection.

F. CONTROL

Horizontal control was obtained by standard visual three-point sextant fix methods. Appendix "A" of this report contains a complete list of control used and the quality and source of control.

G. SHORELINE

Shoreline detail was taken from blueline prints of Manuscripts T-9798 and T-9800. There are small changes in the shoreline to be noted on the small island to the east of West Pass. These changes are shown in red on the boat sheet.

H. CROSSLINES

Crosslines were run at approximately 10% of the regular system of sounding lines. Crossings were in good agreement.

I. JUNCTIONS

Depths at the junctions with the surveys listed in section "B" are in good agreement and depth curves can be adequately drawn at these junctions.

Junctions with the two 20,000 sheets will be compared at the completion of the surveys. (See Review Para. 5)

J. COMPARISON WITH PRIOR SURVEYS (This is a boat sheet comparison)

A comparison was made with Prior Surveys H-5510 - 1933-34 - scale 1:20,000 and H-8394 - 1933-34, scale 1:20,000. The area northwest of Eagle Point is in fair agreement however numerous changes were found in other areas. The area in the vicinity of

J. COMPARISON WITH PRIOR SURVEYS (CONT'D)
Red Fish Bar and eastward shows the greatest amount of change. These changes are listed under item K. Comparison with Chart.

The following features shown on the prior survey were investigated by this survey with a modified sweep. These items are not shown on the chart and were not listed as "Preliminary Review Items".

Prior Survey Feature	Position	Remarks
Pile - bare	lat. 29° -27.97' long. 94° -51.23'	Area swept - nothing found.
Stake	lat. 29° -29.70' long. 94° -52.62'	Area swept - nothing found.
2 piles	lat. 29° -29.45' long. 94° -54.48'	Area swept - nothing found. Pile D.P.'d 40m west of this posit.
Stake	lat. 29° -29.49' long. 94° -54.60'	Area swept - nothing found.

K. COMPARISON WITH CHART (This is a comparison with the boat sheet)

This survey was compared with Chart 1282; 19th Edition; Feb. 1962; scale 1:80,000. The area east of the ship channel, vicinity of Middle Pass, Trinity River Channel and Red Fish Bar shows considerable change due to extensive shell dredging. The area in the vicinity of Eagle Point shows little change. The following changes are to be noted:

Charted feature & Depth	Position	Remarks (boat sheet)
Smooth sheet 8ft ~~3ft approx Pos sheet 66~~ 8 ft. depth	lat. 29° -31.9' long. 94° -55.2'	The bottom in this vicinity is slightly irregular with depths ranging from 7 to 10 ft. 9
5 ft Spoil bank bare MHW	lat. 29° -31.7' long. 94° -53.8'	This small island is now covered 5 ft. MLW.
5ft 1 ft. depth spoil area	lat. 29° -31.9' long. 94° -53.45'	This spoil area is now covered 3 ft. MLW.
9ft 17 ft.	lat. 29° -30.8' long. 94° -53.3'	This survey reveals depths of 8 ft. in this vicinity.

K. COMPARISON WITH CHART (CONT'D)

Charted Feature & Depth		Position	Remarks
24 ft. depth	lat.	29° -30.4'	The deepest sounding obtained in this area was 15 ft.
	long.	94° -53.0'	
6 ft. shoal (A) Presurvey	lat.	29° -31.4'	This shoal ~~has shifted~~ falls approximately 200 meters southeast. (dredging area)
	long.	94° -52.1'	
Island unnamed	lat.	29° -30.4'	This island is now covered at all stages of tide with the exception of 3 small isolated shell reefs, approx. 10 meters in diameter, that are awash at MLW.
	long.	94° -52.3'	
reef awash	lat.	29° -30.75'	This survey shows depths of 6 ft. covering reef. (5 ft on smooth sheet)
	long.	94° -52.4'	
reef awash	lat.	29° -30.9'	This reef is no longer in existence. Area now covered with depths of 8 to 12 ft. 6' approximately 50 meters SSW on smooth sheet
	long.	94° -51.3'	
reef awash	lat.	29° -30.9'	This survey shows irregular bottom in this area ranging from 7 to 26 ft. 8 to 26' on smooth sheet
	long.	94° -50.6'	
6 ft. shoal (E) Presurvey	lat.	29° -29.5'	The charted 6 ft. shoal with least depth of 4½ ft. is shown on this survey as having broken up with only 3 small isolated shoals remaing. These shoals have least depths of 6 ft. and are approx. ¼ mile apart having depths of 7 to ~~18~~ 9 ft. separating them.
	long.	94° -50.5'	
6 ft. shoal	lat.	29° -29.1'	Chart shows least depth of 4 ft. - this survey shows least depth of ~~6~~ 5 ft.
	long.	94° -49.6'	
6 ft. shoal (E) Presurvey	lat.	29° -28.2'	Chart shows least depth of 3 ft. this survey shows least depth of 5 ft.
	long.	94° -49.3'	

Charted Feature & Depth	Position	Remarks
Hanna Reef	lat. 29° -29.8' long. 94° -48.3'	Chart shows northwest point of Hanna Reef bare at MHW in this position. Present survey shows depths of 7 ft. at this position with no indication of the reef extending this far to the northwest.
Reef bare MHW	lat. 29° -31.5' long. 94° -49.1'	Chart shows small island and reef at this position. Present survey shows least depth of 6½ ft. with no island or reef in evidence.
Reef bare MHW	lat. 29° -31.8' long. 94° -48.7'	Chart shows small island and reef. Present survey reveals shoal with least depth of 3 ft.
Reef bare MHW	lat. 29° -31.7' long. 94° -48.8'	Chart shows small island and reef. Present survey shows this area covered at MLW with a least depth of 6⅞ ft., 2 ft. depths were obtained 300 meters to the east.
1½,2,3 ft. depths	East of Ship Channel	Chart shows numerous shoal depths of 1½ to 3 feet in this vicinity. Present survey reveals irregular bottom in this vicinity due to shell dredging with depths ranging from 6 to 25 ft. The isolated 104 ft. hole at lat. 29° -32.0', long. 94° -50.7', is believed to have been caused by an oil well "blow out".
6 ft. depth curve (E) Presurvey	lat. 29° -29.1' long. 94° -52.5'	The charted 6 ft. depth curve, least depth 3½ ft., extending eastward from Eagle Point at this position is shown on this survey as a 6 ft. shoal, detached from the general 6 ft. curve and having a least depth of 5 ft.

Preliminary Review Items

Item No. 8 ---- The charted wreck at lat. 29° -30.87', long. 94° -56.68' was searched for by sweep methods(see section O of this report) with negative results. The privately maintained wreck buoy was located by this survey at position lat. 29° -31.03', long. 94° -56.95'. This position is 550 meters northwest of the charted position indicating either the original position was in error or the buoy has drifted off station. The wreck was searchedfor at both the present position of the buoy and the charted position. It is recommended the wreck symbol be deleted from the chart and removal of privately maintained buoy.

Preliminary Review Items (cont'd)

Item No. 35

These markers between Smith Point and Dollar Point were located hydrographically by this survey in their charted positions. They are single pile markers with a flashing red light.

Item No. (dashed circle "A")

The charted 6 ft. shoal with least depth of 5 ft. was found by this survey in its charted position with a least depth of 6 ft. Due to lack of close development on this shoal it is recommended the 5 ft. least depth be retained on the chart.

Not retained due to general submergence in area. JW

Item No. (dashed circles "A" & "E"

All pipes and markers shown on pre-survey chart in dashed circles, identified as "A" & "E", were designated on the boat sheet by the hydrographer as "A1" thru "A40" and "E1" thru "E3". These items were searched for utilizing sweep methods and in all cases there were no obstructions found within 150 meters of the charted positions. It is recommended all these features be deleted from the chart.

A great number of positions, during sweep operations, were plotted on a mylar overlay in order to reduce congestion on the boat sheet. (Overlay not forwarded by Field Party)

L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede prior surveys for charting purposes.

Even though this survey is complete and accurate, emphasis should be placed on the continual man made changes taking place on the northern portion of the survey. This area is undergoing constant, rather than frequent, change.

M. AIDS TO NAVIGATION

There are 12 4 fixed aids to navigation and 8 floating aids maintained by the U.S. Coast Guard.

The 4 fixed aids privately maintained by Pan American Gas, shown on Chart 1282 and listed in the 1961 Light List, are still in existance and on station.

There was one privately maintained wreck buoy within the limits of this survey. See Preliminary Review Item No. 8 - section "K" of this report for information relative to this buoy.

The above mentioned aids adequately serve the purpose for which they were established.

N. STATISTICS

Vessel	Number of Positions	Naut. Mi. SDG.
Launch CS-183	2771	401.2
Skiff 758	1207	161.2
Skiff No. 2	42	0.0
TOTALS	4020	562.4

Total area surveyed 33.0

A portable automatic tide gage, located at Eagle Point, furnished tide control for the survey. Data for reduction of soundings were taken directly from the station records without time or range corrections. See Appendix C, TIDAL NOTE, for additional information on this station.

The current station lat. 29° -30.0', long. 94° -52.2', (see instructions Par. 31(12)), was not observed during this survey.

O. MISCELLANEOUS

A modified sweep was used to search for submerged objects. This sweep was comprised of two trawl boards, identical to those used by shrimp trawlers, with a 120 ft. length of small chain (size 2-0, rod size 3/16") between them. These boards were bridled and towed behind the launch in such a manner as to bounce along the bottom. The chain between the boards was dragged along the bottom approximately 100 ft. behind the survey vessel. Upon striking or snagging an object the towing cables from the launch to the boards, which were normally 60' apart, would come together slowly allowing sufficient time for the coxswain to stop the launch. The sweep was then pulled aboard until the object which was snagged would be under the stern of the launch. A lead line then could be eased down the chain to obtain a sounding on the object.

A special report, giving specific information on construction of this sweep, will be submitted under separate cover.

Respectfully submitted,
Robert A. Lewis
Robert A. Lewis

Approved and forwarded,
Steven L. Hollis
Steven L. Hollis, LCDR.
Chief of Party

INDEX OF APPENDICES

NORFOLK RECORDS PROCESSING BRANCH
LIST OF SIGNALS
H-8695

TRIANGULATION STATIONS

MIT	SMITH POINT (USE), 1900-42
EAG	EAGLE POINT, 1932-50
JIM	RED FISH BAR, INNER RANGE, REAR LIGHT, 1962
BAT	RED FISH BAR, INNER RANGE, FRONT LIGHT, 1962
CUT	RED FISH BAR, OUTER RANGE, FRONT LIGHT, 1962
PAD	RED FISH BAR, OUTER RANGE, REAR LIGHT, 1962
EAR	HOUSTON SHIP CHANNEL, LIGHT 43, 1962
GAM	" " " , LIGHT 44, 1962
FIN	" " " , PIPELINE MARKER, LIGHT 47, 1962
USE	" " " , PIPELINE MARKER, LIGHT 48, 1962
TAM	" " " , LIGHT 49, 1962
KEY	" " " , LIGHT 54, 1962
GIN	" " " , LIGHT 53, 1962
BUM	" " " , LIGHT 59, 1962
COP	" " " , LIGHT 60, 1962
WOO	RED FISH BAR, LIGHT 2, 1962
HER	HOUSTON SHIP CHANNEL, LIGHT 50, 1962

PHOTO-HYDRO STATIONS SOURCE T-9800

GUL DOG ODD SIC ABE HON ORA POL OBI JUT SLY

SOURCE T-9797

DOC ION TRE

SOURCE T-9798

GAS

HYDROGRAPHIC STATIONS

ARM	Vol. 23, pg. 5
JOE	Vol. 16, pg. 62; Vol. 13, pg. 63; Vol. 3, pg. 64
PIP	Vol. 13, pg. 32 & 33
TUF	Vol. 13, pg. 34 & 35
WEL	Vol. 1, pg. 10

NORFOLK OFFICE
FLOATING AIDS TO NAVIGATION
H-8695

BUOY	LATITUDE	LONGITUDE	DEPTH	POS. NO.	DATE
HOUSTON SHIP CHAN.					
(2) Buoy 45	29-27.50'	94-50.92'	14'	9a (gr)	9-12-62
(1) Buoy 46	27.61	50.85	14	34p(pur)	7-27-62
(4) Buoy 51	28.83	51.58	32	206b(red)	8- 2-62
(5) Buoy 52	28.90	51.49	11	16f(red)	8-10-62
(7) Buoy 55	30.08	52.36	9	94k(red)	8-16-62
(6) Buoy 56	30.09	52.19	11	58g(red)	8-13-62
Buoy 57	31.12	53.14	~~24~~ 9	24b(gr)	9-13-62
(3) Buoy 58	31.17	53.04	16	112q(pur)	7-30-62
PRIVATELY MAINTAINED BUOYS					
	29-27.~~14~~ 05'	94-49.92	-	13a(gr)	9-12-62
	27.03	50.18		12a	do
	27.35	50.02		11a	do
	27.32	50.24		10a	do
	27.15	50.50		5a	do
	27.36	50.64		6a	do
	29.34	51.56	10'	3ea(pur)	do
	30.20	49.64	9	57g	7-12-62
	30.29	49.43	8	56g	do
	30.22	47.98	7	18ea	9-12-62
	31.80	47.63	5	21ea	do
	31.73	47.77	5	20ea	do
	31.66	47.90	5	22ea	do
	32.02	50.72		53da	9-11-62
	31.97	51.43		16b(gr)	9-13-62
	31.74	51.80		17b	do
	29.08	52.22	9	2ea(pur)	9-12-62
	28.84	52.78	8	1ea	9-12-62

APPENDIX B

ABSTRACT OF CORRECTIONS TO ECHO SOUNDINGS

Launch CS-183

Day letter	Recorder No.	Fath. depth (ft.)	Corr.(ft)
a,d,e,f,g, h,j	EDO 255C-#13	6.0 - 6.5	0.0
		6.6 - 7.5	+0.2
		7.6 - 9.0	0.0
b,c,	EDO 255C-13	6.0 - 11.5	-0.2
		11.6 - 16.0	+0.2
k,l,m	EDO 255C-#11	6.0 - 7.0	0.0
		7.1 - 9.0	+0.2
		9.1 - 12.0	+0.4
		12.1 - 18.0	+0.6
n, (p day to pos. /8)	EDO 255C-#11	6.0 - 6.5	0.0
		6.6 - 7.5	+0.2
		7.6 - 9.0	+0.4
		9.1 - 11.5	+0.6
		11.6 - 19.0	+0.8
		19.1 - 21.5	+1.0
		21.6 - 23.5	+1.2
		23.6 - 25.0	+1.4
		25.1 - 26.5	+1.6
		26.6 - 28.0	+1.8
		28.1 - 29.0	+2.0
		29.1 - 30.0	+2.2
		30.1 - deeper	+2.4
(p day pos. /9 - end of day) q,r	EDO 255C-#13	6.0 - 7.5	0.0
		7.6 - 10.5	+0.2
		10.6 - 14.0	+0.4
		14.1 - 18.0	+0.6
		18.1 - 21.0	+0.8
		21.1 - 24.0	+1.0
		24.0 - deeper	+1.2
s,t,u,v,w,x	EDO 255C #13	5.0 - 10.0	0.0
		10.1 - 13.0	+0.2
		13.1 - 14.0	+0.4
		14.1 - 16.0	+0.6
		16.1 - 19.0	+0.8
		19.1 - deeper	+1.0

APPENDIX B (CONT'D)

Skiff 758

Day letter	Recorder No.	Fath. depth (ft.)	Corr. (ft.)
a,b,c	808J #113S	0.0 to 20.0	+0.4
d,e	808J #113S	0.0 to 3.5	0.0
		3.6 to 5.5	+0.2
		5.6 to 8.0	+0.4
		8.1 to 11.0	+0.6
		11.1 to 15.5	+0.8
		15.6 to 19.5	+1.0
		19.6 to 22.5	+1.2
		22.6 to deeper	+1.4
f,g,h,j	808J #113S	0.0 to 5.0	0.0
		5.1 to 7.5	+0.2
		7.6 to 12.0	+0.4
		12.1 to 15.5	+0.6
		15.6 to 20.5	+0.8
		20.6 to 24.0	+1.0
		24.1 to deeper	+1.2
k,l	808J 57-34	0.0 to 4.4	0.0
		4.45 to 6.0	+0.2
		6.1 to 18.0	+0.4
		18.1 to 22.0	+0.6
		22.1 to 26.0	+0.8
		26.1 to deeper	+1.0

APPENDIX C

TIDAL NOTE

Hydrographic Survey H- (ECFP 12.5-1-62)

Gage Location:	Eagle Point, Galveston Bay, Texas Lat. 29° -29.8' Long. 94° -54.7'
Gage Type:	Portable Automatic
Staff:	Vitrified scale - no time or height corrections were applied to the results obtained from the gage in reducing soundings.

90th meridian time was used at this station.

APPENDIX D

APPROVAL SHEET TO ACCOMPANY

Hydrographic Sheet H---- (ECFP-12.5-1-62)

The records, corrections, and all field work was supervised by LCDR. Steven L. Hollis.
All office work was supervised by LCDR. Steven L. Hollis, Jr.
The report and records for this survey are complete and adequate to the best of my knowledge.

Approved and forwarded
Steven L. Hollis
Steven L. Hollis, Jr.
LCDR. C&GS
Officer-in-Charge

NORFOLK HYDROGRAPHIC PROCESSING BRANCH
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8695 (ECFP 12.5-1-62)

GENERAL

The Northern and Eastern parts of this survey are constantly changing due to oyster shell dredging and oil well drilling operations. The bottom in this area is very irregular and more developement would have been helpful for delineating the limits of the numerous small shoals found. Theseshoals, as well as the many oil well structures, markers, piles, etc., are shown on a tracing paper overlay by the smooth plotter.

OVERLAYS

Numerous investigations were made with a chain sweep in an effort to locate submerged obstructions, all of which were smooth plotted on overlays numbers 1 through 7. During the course of most of these investigations the fathometer was run and soundings were recorded. Except for a few critical soundings and submerged obstructions, which are plainly noted on the overlays, none of this work was transferred to the smooth sheet as the launch was not able to hold course and maintain an even speed while towing the drag. Overlay no. 7 also shows positions 6 through 12a (pur). Soundings were not plotted as the line is obviously displaced.

Overlay no. 8 shows an enlargement of oil well structures falling in a congested area of the smooth sheet.

CHART COMPARISON

Due to extensive shell dredging the entire survey appears to be generally deeper than charted. Also, many of the charted islands, oyster reefs and spoils banks are no longer in existence.

Lat. 29-31.62' Long. 94-49.65' The 2 foot sounding at position 62q (pur) was not smooth plotted. Later hydrography on a day (pur) showed the shoal had been removed by shell dredgers.

Lat. 29-30.49' Long. 94-52.50 The obstruction found on 17ca (pur) is believed to be the same one located on 31ca. A sounding of 6 feet, as shown on the fathogram just before 31ca, was used. A shoaler sounding of 5½ feet was recorded between 31 and 32ca, how-ever, it was too far away to relate to either position.

The shoreline at the North and South ends of Red Fish Island was transferred from T-9798 as it is in better agreement with hydrography than revisions shown in red on the boat sheet.

Norfolk, Va.
Jan. 19, 1965

Respectfully submitted,
Hugh L. Proffitt
Cartographer

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8695

	Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
✓	Eagle Point										1
✓	Galveston Bay										2
✓	Houston Ship Chan.	← DO NOT INK ON SURVEY DEW									3
✓	Red Fish Bar										4
✓	San Leon										5
✓	Texas										6
✓	Trinity River Chan.	← DO NOT INK ON SURVEY DEW									7
✓	April Fool Point	519				Names approved					8
✓	West Pass	519				6-10-65					9
✓	Smith Point	1525c				A. J. Wright					10
✓	Red Fish Island	519	DEW								11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

FORM C&GS-712
(3-9-64)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

October 11, 1966

Nautical Chart Division: R. H. Carstens

Plane of reference approved in
23 volumes of sounding records for

HYDROGRAPHIC SHEET 8695

Locality: Galveston Bay, Texas

Chief of Party: S. L. Hollis - 1962

Plane of reference is mean low water

Tide Station Used (Form C&GS-681):

Eagle Point, Texas

Height of Mean High Water above Plane of Reference is as follows:

Eagle Point = 1.0 feet

Remarks

J. M. Symons
Chief, Tides and Currents Branch

USCOMM-DC 6680-P64

FORM C&GS-946
(REV. 3-1-64)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
NAUTICAL CHART DIVISION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. 8695

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	8

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	2					
VOLUMES	23					
BOXES						

T-SHEET PRINTS *(List)*

SPECIAL REPORTS *(List)*

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				4020
POSITIONS CHECKED		402		
POSITIONS REVISED		0		
DEPTH SOUNDINGS REVISED				
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		0.5	40 hrs	
JUNCTIONS		1.5	48 hrs	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		32.0		
SPECIAL ADJUSTMENTS		16.0		
ALL OTHER WORK		166.0	169	
TOTALS		216.0	257	

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY Theresa Anne Ware	BEGINNING DATE 6/6/66	ENDING DATE 7/18/66
REVIEW BY Jannie B Powers	BEGINNING DATE 8-07-72	ENDING DATE 11-10-72

Insp. by D.E. Westbrook 12/8/72 3 & hrs. Cartan 12

USCOMM-DC 6641-P64

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8695 FIELD NO. ECFP12.5-1-62

Texas - Galveston Bay - Vicinity of Red Fish Bar

SURVEYED: July 3, 1962 through October 9, 1962

SCALE: 1:12,500 PROJECT NO.: OPR-428

SOUNDINGS: 808J and EDO Depth Recorders CONTROL: Visual fixes on shore signals

Chief of Party	S. L. Hollis, Jr.
Surveyed by	R. A. Lewis
	W. V. Hull
Protracted by	W. L. Jonns
Soundings plotted by	W. L. Jonns
Verified and inked by	T. A. Ware
Reviewed by	F. B. Powers
	Date: November 10, 1972
Inspected by	D. E. Westbrook

1. Description of the Area

This survey covers Red Fish Bar and a portion of Galveston Bay. A Federal Channel Project (Houston Ship Channel) extends through the survey from the northwest to the southeast. Red Fish Island, approximately 1¼ mile long, is located on the west side of the channel, and is a distinctive feature. Several oyster shoals exist between Eagle Point and Red Fish Island and are important dangers.

The general bottom in this area was originally smooth and gently sloping but now it is broken by numerous irregularities caused by oil well construction and random shell dredging. On the northern border of the survey a depth of 104-ft. was obtained which was described by the hydrographer as an oil well "blowout."

The bottom is composed primarily of mud and shell, and a few oyster reefs exist.

2. Control and Shoreline

The origin of the control is adequately covered in Part F of the Descriptive Report.

The shoreline originates with reviewed photogrammetric manuscripts T-9797 (1960-62), T-9800 (1960-62), T-9798 (1960-63), and T-12227 (1962). Minor pier revisions in red ink on the smooth sheet are from the hydrographic information.

3. Hydrography

A. Depths at crossings are in good agreement.

B. The usual depth curves are adequately delineated. The zero depth curves could not be fully delineated because of the small range of tide and shallow foreshore.

Several dashed and brown curves were added to emphasize important bottom features.

C. The development of the bottom configuration and the investigation of least depths are considered adequate, except that a few additional lines should have been run to more completely define the depth curves in some of the more irregular bottom area.

4. Condition of the Survey

The sounding records, smooth plotting, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual.

5. Junctions

Adequate junctions were effected with H-8694 (1962) on the west, with H-8743 (1962-65) on the north, with H-8745 (1963-65) on the east and southeast, and with H-8693 (1962) on the southwest.

Differences of up to 4 feet in the junction between the present survey and H-8743 (1962-65) in the vicinity of Houston Ship Channel in lat. 29° 31.9', long. 94°53.3' are believed to be caused by dredging and spoiling over the three-year period between surveys. The soundings in this area are a composite of the shoalest from each survey. The remainder of the junction is in very good agreement with the present survey.

6. Comparison with Prior Surveys

A. H-323 (1852) 1:20,000
H-324 (1852) 1:20,000
H-414 (1852-53) 1:20,000

These early surveys have been compared with and were superseded by the surveys discussed below. Further consideration is not deemed necessary in the present review.

B. H-5394 (1933-34) 1:20,000
H-5510 (1933) 1:20,000

A comparison between the present and prior surveys reveals changes in both the shoreline and bottom configuration. Most of the islands and reefs on the prior surveys are nonexistent on the present survey. Depths on the present survey are generally ½ to 3 feet deeper than those on the prior surveys, except for the area northeast and east of Red Fish Island. In this area, the general depths are now from 1 to 8 feet deeper. Several dredged areas are 10 to 25 feet deeper on the present survey than on the prior work. In addition, Houston Ship Channel has been extensively dredged since the prior surveys and numerous oil and gas well platforms now exist in the area. These numerous bottom changes can be attributed to the construction of oil and gas well platforms, natural changes and dredging for sand and shell as well as for navigational channels.

The present survey is adequate to supersede the prior surveys within the common area.

7. Comparison with Chart 519 8th Ed., print date July 31, 1971
Chart 152-SC 9th Ed., print date April 15, 1972

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration, supplemented by partial application of information from the present survey boat sheet and smooth sheet before verification and review and from prior and subsequent information furnished by the Corps of Engineers. Only minor differences are noted between the present survey and charted depths. No oil or gas well structures are presently charted in the area covered by the present survey. However, these features were meticulously located by the field party. A general note on the chart alerts the mariner to the existence of these structures.

Attention is directed to the following:

1. The following items were charted on Chart 519 subsequent to the date of the present survey from sources indicated and should be retained on the chart:

a. A submerged wreck PA in lat. 29°29.2', long. 94°53.5' from information published in Notice to Mariners No. 45 of 1968.

b. A submerged wreck (3-ft. rep.) in lat. 29°29.23', long. 94°53.59' from information published in Notice to Mariners No. 28 and No. 36 of 1966.

c. A submerged wreck (2½-ft. rep.) in lat. 29°29.5', long. 94°53.7' from information published in Notice to Mariners No. 14 of 1966.

d. Two visible wrecks, one in lat. 29°29.68', long. 94° 53.58' and the other in lat. 29°29.78', long. 94°54.0' from information published in Notice to Mariners No. 28 of 1966.

e. A visible wreck PA in lat. 29°29.82', long. 94°54.58' from information published in Notice to Mariners No. 8 of 1965.

f. A pipe PA in lat. 29°31.77', long. 94°53.73' from information published in Local Notice to Mariners No. 4 of 1971.

g. A submerged wreck in lat. 29°30.75', long. 94°52.25' from information published in Notice to Mariners No. 14 of 1966.

h. A submerged wreck in lat. 29°30.2', long. 94°52.1' from information published in Notice to Mariners No. 46 of 1967.

i. A danger circle labeled Wreck PA in lat. 29°28.23', long. 94°51.18' from information published in Notice to Mariners No. 27 of 1968.

j. Several piles, platforms, and stakes along both sides of the Houston Ship Channel from Corps of Engineers Chart Letter No. 64 of 1965, Bp 65095 (1963), Bp 65106 (1963), Bp 66216 (1964), Pb 77517 (1969).

k. Several soundings along the Houston Ship Channel from Corps of Engineers Bp 65095 (1963), Bp 65106 (1963), and Bp 77517 (1969).

2. A visible wreck PA on chart 152-SC in lat. 29°29.9', long. 94°48.45' was charted subsequent to the date of the present survey from information published in Notice to Mariners No. 8 of 1966.

3. A submerged pipe on Chart 519 in lat. 29°30.54', long. 94° 52.53' was originally shown as a pile on H-5510 (1933). This feature was investigated and disproved and should be deleted from the chart.

4. The spoil areas located on Charts 152 and 519 within the limits of the present survey originate with Corps of Engineers Bp 47073 (1949), Bp 65095 (1963), and Bp 65106 (1963). These spoil areas should be retained on the chart.

5. The charted topography should be revised to agree with the topography on the present survey except the area surrounding San Leon. This area was charted from Bp 63092 (1962 photography) and Bp 69425 (1965 photography).

6. The subm. pipe on Chart 519 in lat. 29°30.79', long. 94°49.64' originates with H-5510 (1933). Although not specifically investigated on the present survey, the shoal in which the pipe was emplaced has been dredged away and it is believed that the pipe no longer exists. The subm. pipe should be deleted from the chart.

7. The snag on Chart 519 in lat. 29°30.50', long. 94°52.51' originates with the boat sheet of the present survey. This feature should be revised to a 6-ft. sounding Obstr as shown on the smooth sheet.

Except as noted above, the present survey is adequate to supersede the charted hydrography within the common area.

C. Controlling Depths

The charted controlling depths for Houston Ship Channel and Trinity River Channel are based on Corps of Engineers Chart Letter No. 892 of 1971 and United States Power Squadrons Letter No. 1185 of 1970 subsequent to the present survey.

D. Aids to Navigation

Several aids to navigation have been established or relocated sebsequent to the date of the present survey.

The aids presently charted adequately mark the features intended.

8. Compliance with Instructions

This survey adequately complies with the Project Instructions.

9. Additional Field Work

This survey is considered to be an excellent basic survey and no additional field work is recommended.

Examined and Approved:

John D. Boyer
Chief
Marine Chart Division

Robert C. Munson
Associate Director
Office of Marine Surveys and Maps

H-8695 (1962)

Items for Future Pre-Survey Reviews

The bottom is considered adequately developed on the present survey, except in a few instances. Only minor differences were noticed since the prior surveys. These differences are attributed to the construction of oil and gas well platforms, dredging, and natural changes.

Position index - lat. 292, long. 0945
Bottom change - 4
Use index - 9
Resurvey cycle - 10 yrs.

Position index - lat. 293, long.0945
Bottom change - 4
Use index - 9
Resurvey cycle - 10 yrs.

Position index lat. 292, long. 0950
Bottom change - 4
Use index - 9
Resurvey cycle - 10 yrs.

Position index - lat. 293, long. 0950
Bottom change - 4
Use index - 9
Resurvey cycle - 10 yrs.

57'

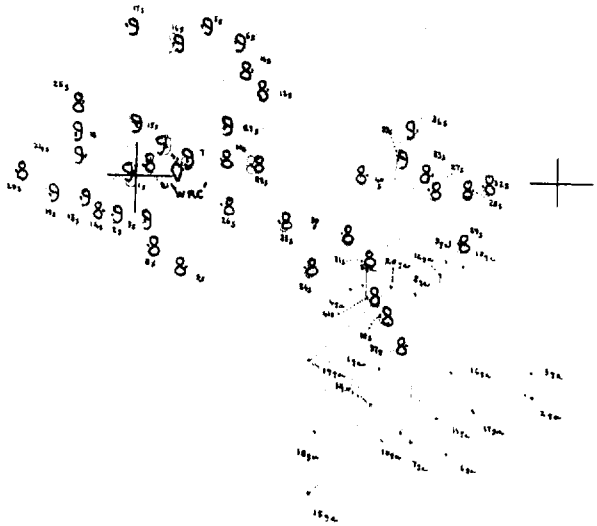
56' 30"

31' 30"

31'

30' 30'

Soundings not transfered to S.S.



TO ACCOMPANY
E.C.F.P.-12.5-1-62 H-8695
Pos. 1-41s
Pos. 1-20ga → No soundings, Pre-survey item Nº 8, subm. wk.

Overlay 1

94° 54'

94° 53'

Shoal soundings not transfered

(Transfered to S.S.)
Approx pos.
shoal awash MLW

29° 30'

ITEM E3
(Transfered to S.S)
Subm stake

Numerous stakes (4)

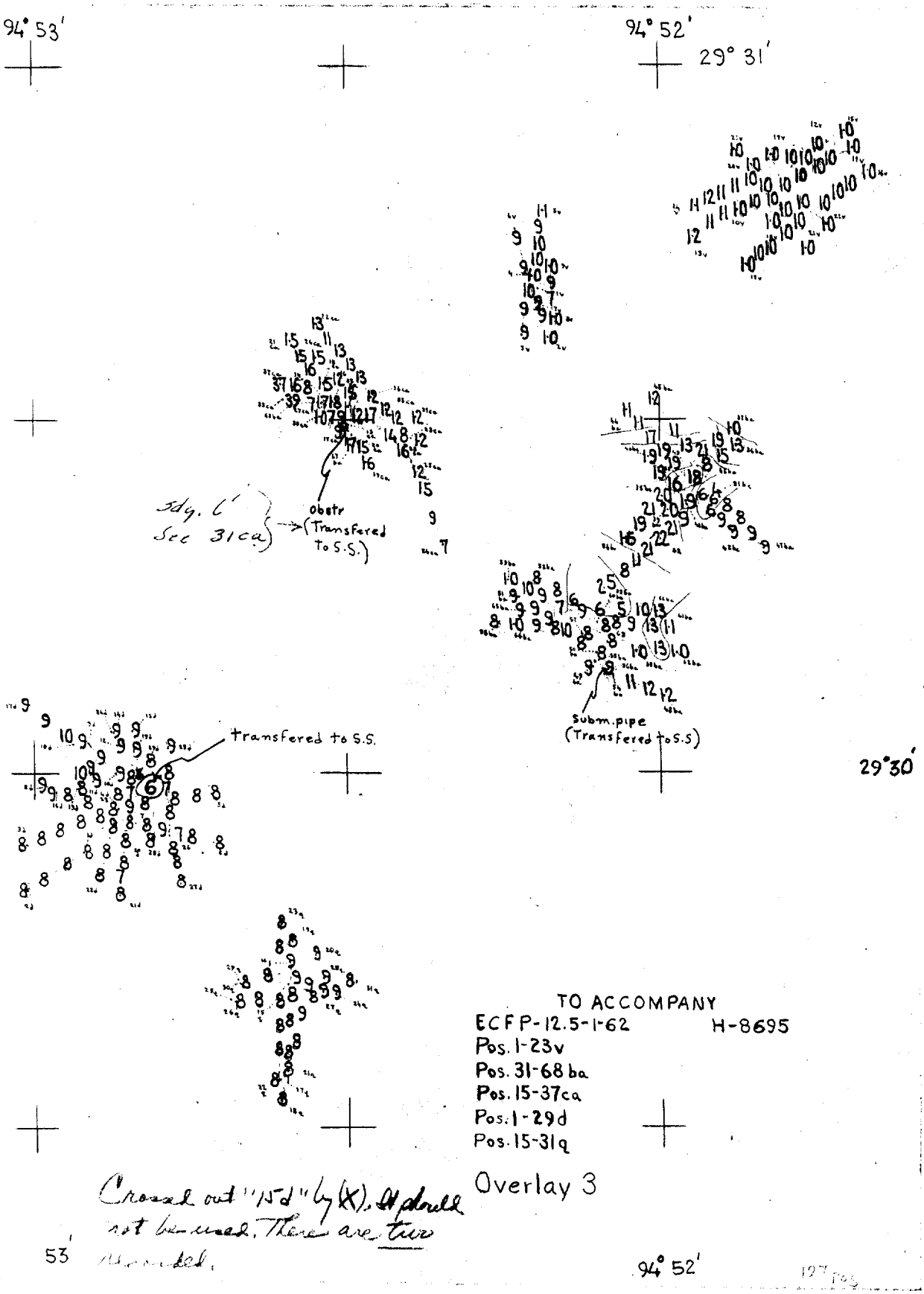
Disregard graph pos

Marker (S)

Soundings doubtful

TO ACCOMPANY
E.C.F.P.-12.5-1-62 H-8695
Pos. 1-60 m
Pos. 1-39e
Pos. 51-64P
Overlay 2

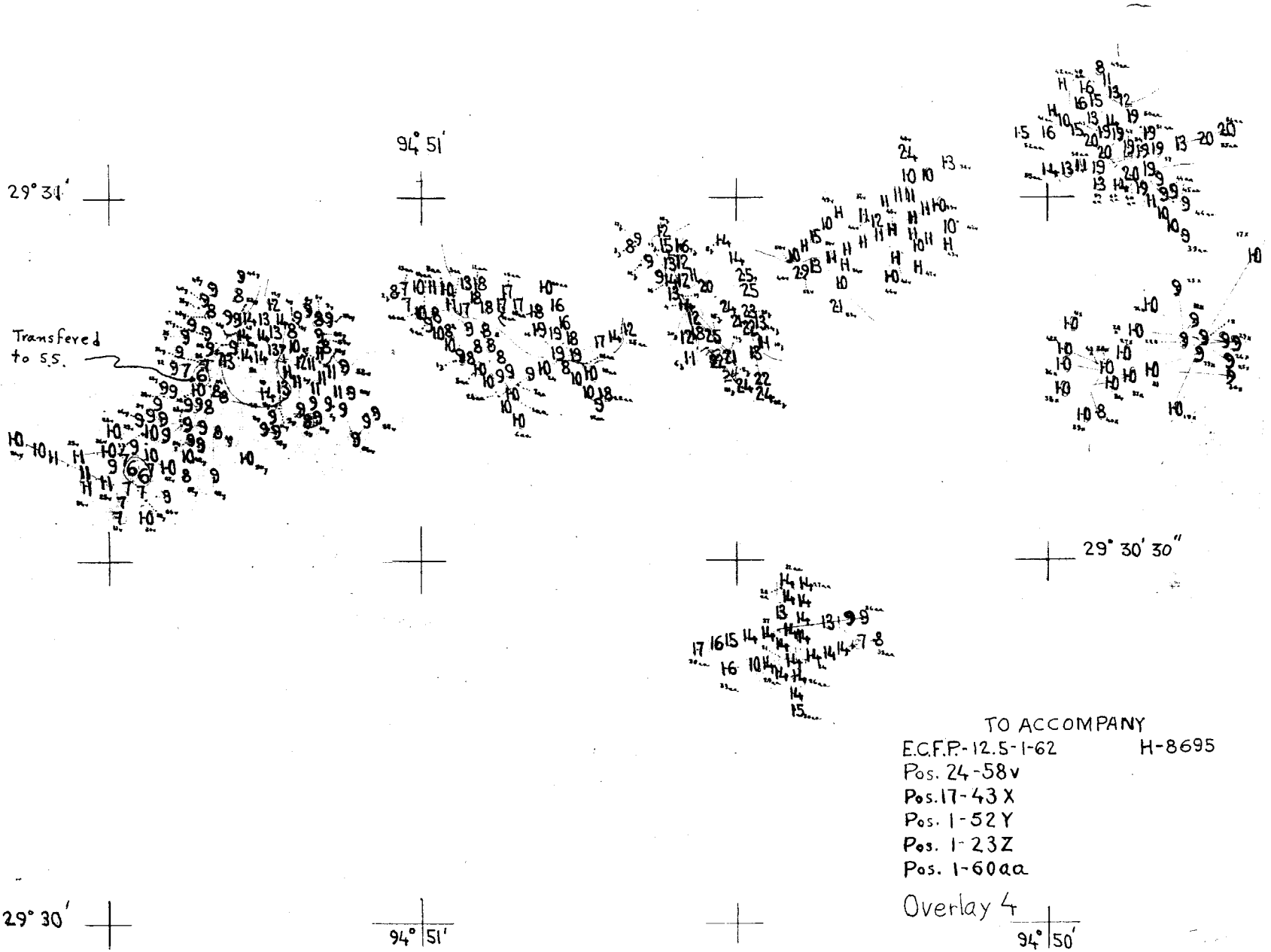
Position Numbers labeled "m" Should be labeled "e" for purple dots. TAW



TO ACCOMPANY
ECFP-12.5-1-62 H-8695
Pos. 1-23v
Pos. 31-68 ba
Pos. 15-37ca
Pos. 1-29d
Pos. 15-31q

Overlay 3

Crossed out "15d" by (X). It should not be used. There are two numbered.



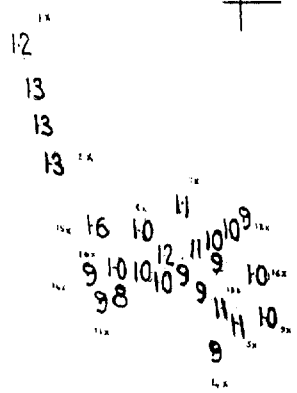
TO ACCOMPANY
E.C.F.P.-12.5-1-62 H-8695
Pos. 24-58v
Pos. 17-43X
Pos. 1-52Y
Pos. 1-23Z
Pos. 1-60aa
Overlay 4

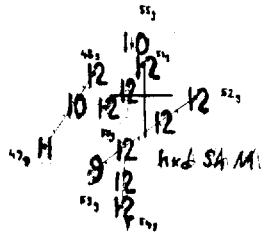
94° 49'

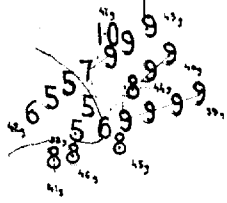
29° 31'

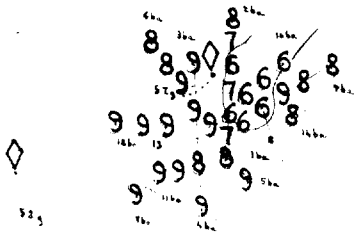
29° 31'

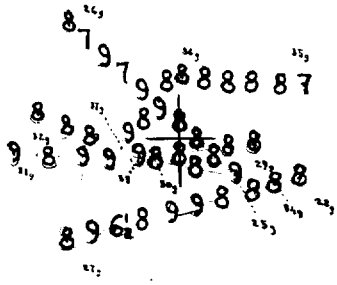
29° 30'











TO ACCOMPANY

ECFP-12.5-1-62 H-8695

Pos. 25-58g

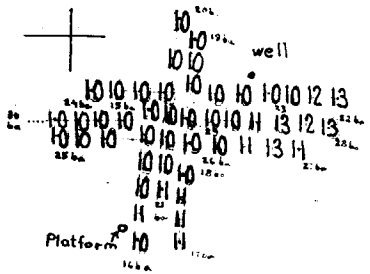
Pos. 1-16X

Pos. 1-14ba

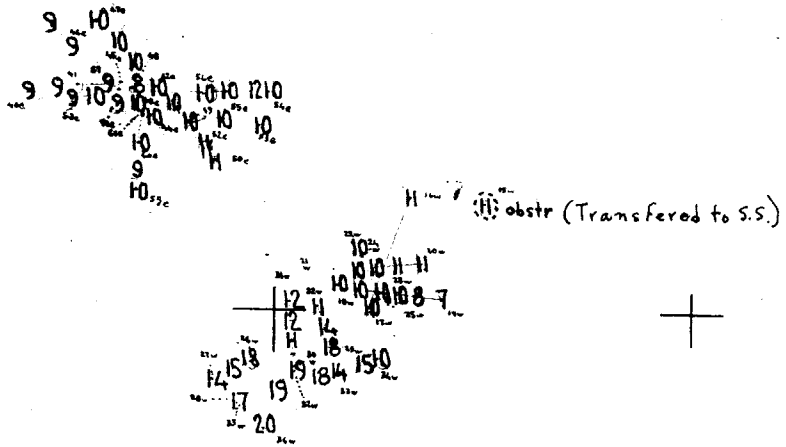
OVERLAY 5

94° 52'

94° 51'

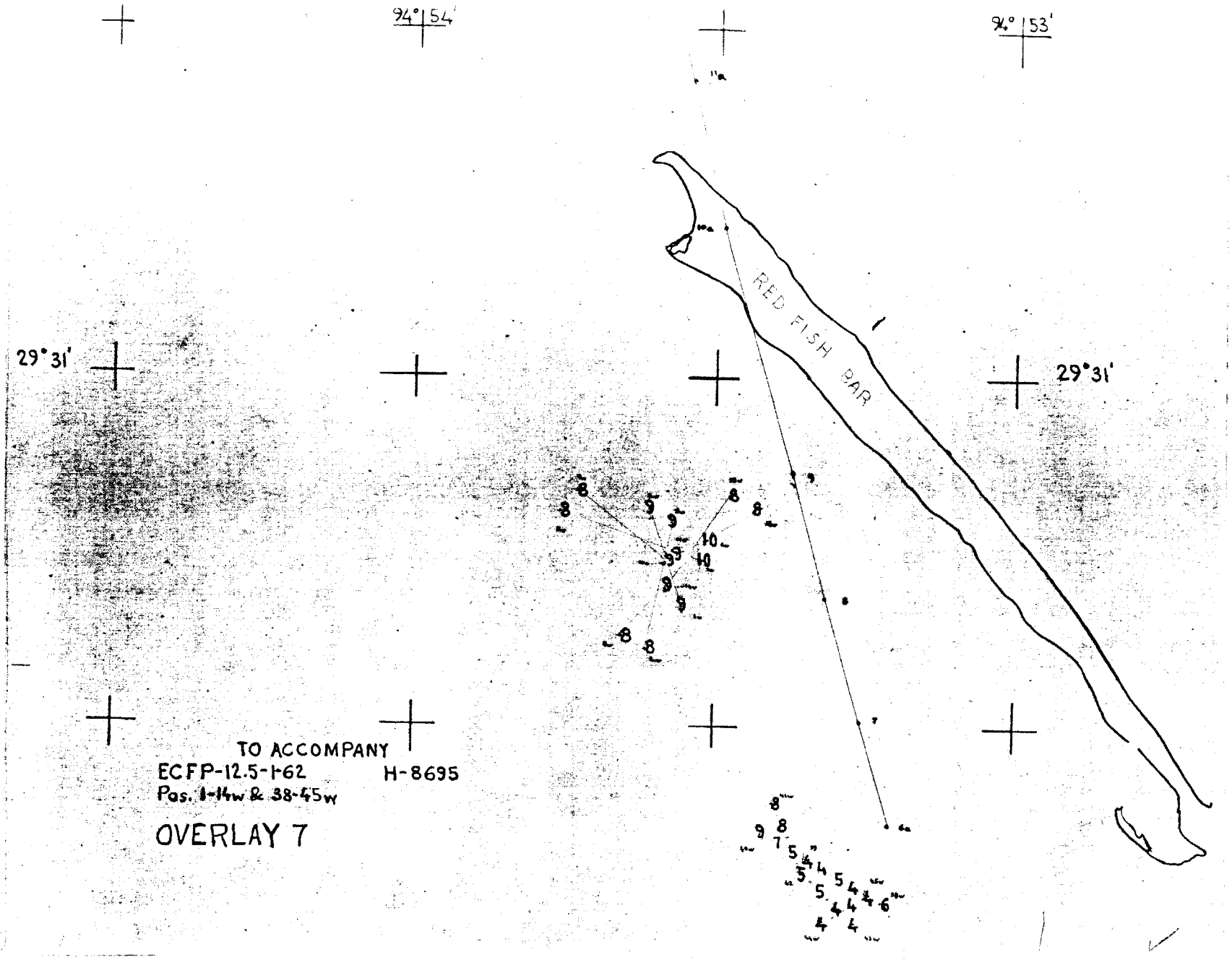


29° 31'



TO ACCOMPANY
ECFP-12.5-1-62 H-8695
Pos. 40-61e
Pos. 15-37w
Pos. 15-30ba

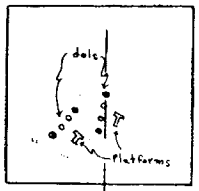
OVERLAY 6

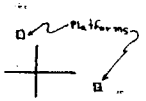

94°54'
94°53'
29°31'
29°31'
RED FISH BAR
TO ACCOMPANY
ECFP-12.5-1-62
H-8695
Pas. 1-14w & 38-45w
OVERLAY 7

51'

94°50'

Scale 1:6250



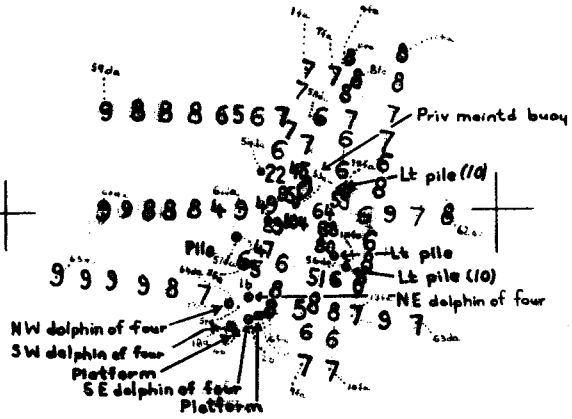


29°32'

TO ACCOMPANY

ECFP-12.5-1-62 H-8695

OVERLAY 8 Detail



29°32'

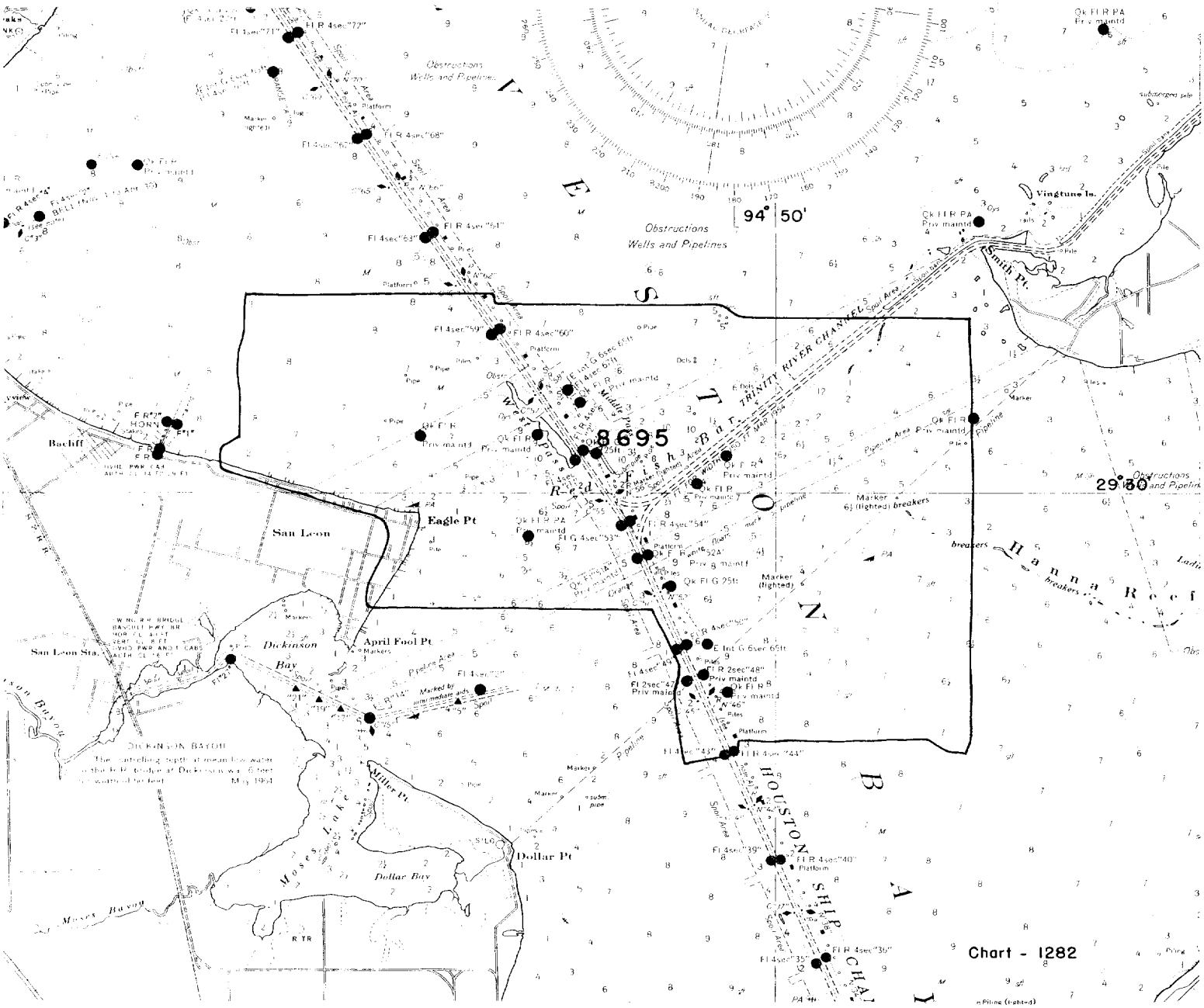
29°32'

TO ACCOMPANY
ECFP -12.5-1-62 H-8695
Pos. 15f
Pos 83-65a
Pos 17-16a
Pos. 1-3b

29°31'

29°31'

94°51'


94° 50'
29° 30'
8695
Bacliff
San Leon
Eagle Pt
April Fool Pt
Dickinson Bay
Dollar Pt
Dollar Bay
Moses Lake
Vingtune Is.
Smith Pt.
Hanna Reef
TRINITY RIVER CHANNEL
HOUSTON SHIP CHANNEL
Obstructions
Wells and Pipelines
Chart - 1282

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8695

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
519	3/24/65	Helen Quimby	[redacted] Part Before [redacted] Verification Review ~~Inspection Signed Via~~ Drawing No. 1
1282	6/16/65	Helmer	[redacted] Part Before [redacted] Verification Review Inspection Signed Via Drawing No. Critical changes thru 519, Dwg #1 before engraving but after compilation # [illegible] pile, stake, marker [illegible] 519 #11
152-SC	8/10/65	L. Van Zant	[redacted] Part Before [redacted] Verification Review Inspection Signed Via Drawing No. applied thru Chr 519 Dwg #1
886	5/18/66	Helmer	[redacted] Part Before [redacted] Verification Review Inspection Signed Via Drawing No. appd critical changes thru 518 & 519
519	12/11/73	O. Williams	Full ~~Part Before~~ After Verification Review Inspection Signed Via Drawing No. 11
1282	2/27/74	O. Williams	Full Part Before After Verification Review Inspection Signed Via Drawing No. NO hydro in area. (3-E)
152-SC	3/26/74	W. Wanless	Full ~~Part Before~~ After Verification Review Inspection Signed Via Drawing No. 11 Applied in part thru Cht 519 Dwg #11
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.