

13014

13014

FORM C&GS-504

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

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Field No. \_\_\_\_\_ Office No. T-13014

LOCALITY

State Texas

General locality Baffin Bay

Locality Rivera Beach

1967 - 68

CHIEF OF PARTY

J. Bull, RADM, Director, Atlantic Marine Center

LIBRARY & ARCHIVES

DATE \_\_\_\_\_

DESCRIPTIVE REPORT - DATA RECORD

T- 13014

PROJECT NO. (I):		
PH-6711		
FIELD OFFICE (II):	CHIEF OF PARTY	
None		
PHOTOGRAMMETRIC OFFICE (III):	OFFICER-IN-CHARGE	
Atlantic Marine Center	J. Bull, RADM - Director	
INSTRUCTIONS DATED (II) (III):		
FIELD	February 7, 1967	
AEROTRIANGULATION	May 18, 1967	
OFFICE COMPILATION	June 29, 1967	
METHOD OF COMPILATION (III):		
Kelsh		
MANUSCRIPT SCALE (III):	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):	
1:20,000	1:8,000 pantographed to 1:20,000	
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):	
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):	VERTICAL DATUM (III):	
N. A. 1927	MHW <del>MEAN LOW WATER</del> EXCEPT AS FOLLOWS: Elevations shown as (25) refer to mean high water Elevations shown as (5) refer to sounding datum i.e., mean low water <del>MEAN LOW WATER</del>	
REFERENCE STATION (III):		
GRULLO, 1949 ✓		
LAT.:	LONG.:	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
27° 22' 54.180" (1667.6m)	97° 41' 38.552" (1059.3m)	
PLANE COORDINATES (IV):	STATE	ZONE
=	Texas	South
ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.		

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):		DATE:
None*		
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Air Photo Compilation - March 25 & 26, 1967 Date of Photography: March 26, 1967		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		May 8, 1967
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
L. F. Van Scoy		May 11, 1967
CONTROL PLOTTED BY (III):		DATE
F. P. Margiotta		July 18, 1967
CONTROL CHECKED BY (III):		DATE
L. O. Neterer, Jr.		July 19, 1967
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
I. I. Saperstein		July 19, 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	W. S. Davis Reviewed by A. L. Shands	Aug. 25, 1967 Aug. 25, 1967
Kelsh	CONTOURS	DATE
	Inapplicable	
MANUSCRIPT DELINEATED BY (III):		DATE
C. Blood		Aug. 28, 1967
SCRIBING BY (III):		DATE
R. White		April 22, 1968
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
COMPILATION	R. J. Pate	Nov. 6, 1967
FIELD EDIT	R. E. Smith	April 9, 1968
SCRIBING & STICK UP	F. P. Margiotta	April 28, 1968
REMARKS:		
FIELD EDIT BY: E. W. Hartford		March 18, 1968
* Refer to "Pre-Marking Report" attached		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

*Wild RC-8*  
USC&GS Type "L"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
67L(c) 397 thru 401	3/25/67	0307	1:40,000	See REMARKS
67L(c) 433 thru 437	3/26/67	1054	"	"
67L(c) 446 thru 450	"	1115	"	"
67L 503R thru 507R	"	1223	"	"
67L 493R thru 497R	"	1214	"	"
67L 464R thru 468R	"	1159	"	"

PREDICTED TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Galveston, Texas *	-	-	-
SUBORDINATE STATION: Aransas Pass *	-	-	-
SUBORDINATE STATION:			

Atlantic Marine Center  
WASHINGTON OFFICE REVIEW BY (IV):

*M. M. Slawney*

DATE: *May 1969*

PROOF EDIT BY (IV):

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

*13\*\**

RECOVERED:

*13\*\**

IDENTIFIED:

*1*

NUMBER OF BM(S) SEARCHED FOR (III):

*0*

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

*0*

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

*0*

REMARKS:

\* Refer to No. 3301, page 240, 1967 Tide Table. Diurnal Tide. Inside Bay areas have a Mean range of tide of less than  $\frac{1}{2}$  foot.

*\*\* 2 stations are north of T-13014 Limits.*

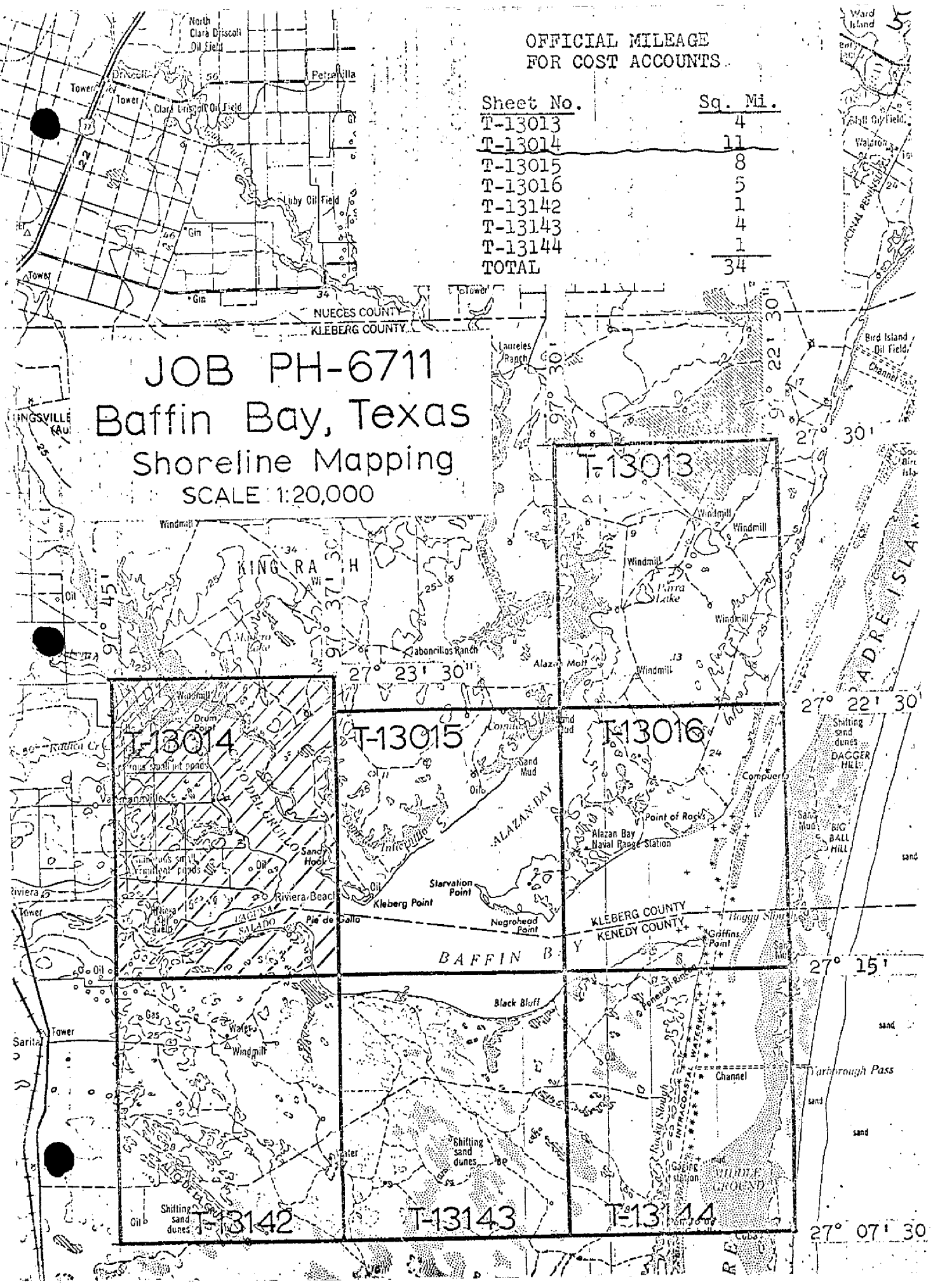
T-13014

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore Area for Hydro	November 1967	Superseded
Field Edit applied Manuscript complete	April 1968	<i>Superseded</i>
<i>Revised during final review May 1969</i>		

OFFICIAL MILEAGE  
FOR COST ACCOUNTS

Sheet No.	Sq. Mi.
T-13013	4
T-13014	11
T-13015	8
T-13016	5
T-13142	1
T-13143	4
T-13144	1
<b>TOTAL</b>	<b>34</b>

**JOB PH-6711**  
**Baffin Bay, Texas**  
**Shoreline Mapping**  
**SCALE 1:20,000**



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-13014

Shoreline manuscript T-13014 is one of seven 1:20,000 scale maps that comprise Ph-6711. These maps are for the area of Baffin Bay, Texas, and that part of Laguna Madre at the entrance to Baffin Bay. The sketch on page 5 of this report shows the position of T-13014 in Ph-6711.

This is a stereo-instrument job in advance of hydrographic surveys of the area. There was no field inspection; field work preceding compilation consisted of locating and marking control before photography. An analytic bridge was run in the Washington Office using 1:60,000 RC-9 photography of March 25, 1967, from which pass points were identified and located for controlling the compilation photographs.

Color photographs at 1:40,000 scale were flown on March 25, and 26, 1967 with RC-8 camera (L); from which black and white diapositives were made for instrument compilation, with ratio color prints furnished for photo-hydro, and ratio black and white prints for field edit. Infra-red 1:40,000 scale photographs were flown on March 26, 1967 with the RC-8 camera (L); from which ratio cronapaque prints were furnished for compilation of the mean high water line, and subsequently for photo-hydro support.

The map was field edited in March 1968. Field edit was done on an ozalid print, a cronaflex and on ratio prints 67-L-399, 434, 448, 449, ~~465R~~, and ~~467R~~. The map was scribed and stuck-up after applying the field edit.

Final review was done at the Atlantic Marine Center during May 1969.

The compilation manuscript was a vinylite sheet 8 minutes and 30 seconds in latitude and 7 minutes and 30 seconds in longitude. The smooth manuscript is on cronaflex for registry and record after final review.

FIELD INSPECTION REPORT  
Job PH-6711  
T-13014

There was no Field Inspection prior to compilation.



REPORT ON PRE-MARKING FOR  
SHORELINE MAPPING OF  
BAFFIN BAY, TEXAS  
JOB PH-6711

Pre-marking of twelve horizontal control stations for shoreline mapping of Baffin Bay, Texas, was done in accordance with project instructions dated February 7, 1967.

Nine stations were marked by 12 foot square white plastic panels pointed out by two 3 foot by 24 foot wings, as in array no. 3 in the instructions. Two or three of these stations differ significantly from the standard array due to terrain conditions at the station sites. These differences are adequately pointed out on the C S I Cards.

Three stations were marked by 12 foot equilateral triangles with three 3 by 24 foot wings pointing them out. These targets are composed of white-wash.

Six of the control stations were marked by placing the center panel directly over the station, or as in the case of SALT 1912, over one of the reference marks.

It was necessary to re-locate six of targets, due either to terrain conditions, or the fact that the stations were outside the flight lines. The following stations were marked direct:

LOS OLMOS 1949 - MAP (west of) T-13142 Line 60-1  
CRAWFORD 2, 1912 - MAP T-13143 Line 60-1  
SALT, 1912 - MAP T-13144 Line 60-1 REFERENCE MARK  
TANQUES DE LUIS WINDMILL, 1949 - MAP T-13013 Line 60-3  
GRULLO, 1949 - MAP T-13014 Line 60-3  
MIDWEST, 1939 - MAP (east of) T-13013 Line 60-3

Station SALT, 1912 reference mark was substituted for GRIFFUTS POINT 4, 1949. TANQUES DE LUIS WINDMILL, 1949 was used in lieu of moving or relocating a target from ROX, 1912, which was indicated on the project diagram.

The targets for the following stations were relocated:

KENEDY RANCH WATER TANK 1931 MAP T-13142 Line 60-1  
METHOD: Eccentric occupation - sun azimuth and distance.  
PENESCAL 2, 1912 MAP T-13144 LINE 60-1  
METHOD: Triangulation, with two measured bases.  
KLEBERG 2, 1949 MAP northwest of T-13014 LINE 60-3  
METHOD: Eccentric occupation - Sun azimuth and distance.

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PORTALES, 1949 MAP north of T-13014 LINE 60-3

METHOD: 2 point fix with three stations occupied.

HINDJOSO, 1949 MAP T-13013 LINE 60-3

METHOD: Angle and distance.

UNION, 1939 MAP east of T-13016 LINE 60-1

METHOD: Triangulation, w/measured base, sun azimuth and check azimuth.

All stations were marked and ready for photography on March 13, 1967 as per instructions. An additional week was needed to complete locations. Photography was flown on March 26, 1967.

No special problems were encountered. The landowners and/or managers were most cooperative and provided a lot of welcome assistance in recovering various stations. Special appreciation is extended to the National Park Service for the aid rendered in reaching the stations on Padre Island.

Many area residents state that they are looking forward, with expectations, to its issue of the new charts.

Distances were measured with a standardized steel tape using 20 lbs tension. Angular measurements were made with a wild T-2 theodolite. Four positions of the circle were used. Field computations were made where indicated.

*Richard E. Kesselring*

Richard E. Kesselring  
Surveying Technician

*approved and forwarded*  
*Jay K. Wilson*  
*Chief Photo Party 62*  
*4/5/67*

PHOTOGRAMMETRIC PLOT REPORT

Job PH-6711

Baffin Bay, Texas

July 19, 1967

21. Area Covered

This report covers Baffin Bay, Texas, consisting of seven (7) 1:20,000 scale T-sheets, T-13013 thru T-13016 and T-13142 thru T-13144.

22. Method

Analytic aerotriangulation methods were used to bridge three strips of 1:60,000 scale panchromatic photography, taken with the RC-9, "M" camera. Common tie points were dropped from Strips 1 and 3 to control Strip 2.

Furthermore, points were measured on the bridging photography common with the 1:40,000 scale compilation "L" photography. The compilation photography consists of black and white diapositives printed from color film.

The attached sketch of the strips bridged shows the placement of triangulation furnished and those that were used in the final strip adjustment. Closures to control have been tabulated. State plane coordinates (Texas South Zone) have been furnished for all bridge points on the IBM readout.

23. Adequacy of Control

All horizontal control was premarked with white panels and no difficulty was encountered with the identification.

Although no control was available for Strip 2, tie points from Strips 1 and 3 were used in the adjustment of Strip 2 and is believed adequate.

Vertical control needed for the adjustment was taken from USGS quadrangles.

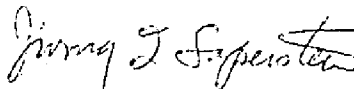
25. Photography

The definition and quality of the "M" photography was good. Photo coverage is inadequate to compile the southern half of T-13144.

In addition to the color photography, several strips of 1:40,000 scale infrared photography were flown and ratios were made to compilation scale along with the color photography on black and white base.

Because of the large water area it may be difficult to set models 67-L-452-453 and 453-454; therefore, in order to compile part of the shoreline on T-13143, several shoreline points were measured and identified on ratio prints 67-L-470R, 471R and 472R. It will be possible to compile this stretch of shoreline graphically, if unable to set the above models.

Respectfully submitted,



I. I. Saperstein

Approved and forwarded,



Henry P. Eichert  
Acting Chief  
Aerotriangulation Section

BAFFIN BAY, TEXAS  
Fit to Control (feet)

STRIP 1

	x	y
1. KLEBERG 2, 1949 subpoint	-0.4	-1.2
2. CRULLO, 1949	+0.2	+2.4
3. PORTALES, 1949 subpoint	-3.9	+1.6
4. HINDJOSO, 1949 subpoint	0.0	-1.9
5. TANQUES DE LUIS WINDMILL, 1949	+1.2	-1.9
6. MIDWEST, 1939	0.0	+0.7

STRIP 2

18801	-4.4	- 2.9
18802	-5.2	- 6.6
18803	-1.2	+ 1.1
18804	-0.9	- 1.4
20801	+0.5	- 1.9
20802	+4.7	- 0.7
20803	+1.7	+13.0
22801	+2.6	- 1.1
22802	-1.6	- 8.0
25801	-2.3	+ 2.5
25802	-0.4	+ 2.6
25803	+0.9	- 0.1
25804	-2.9	- 3.7

STRIP 3

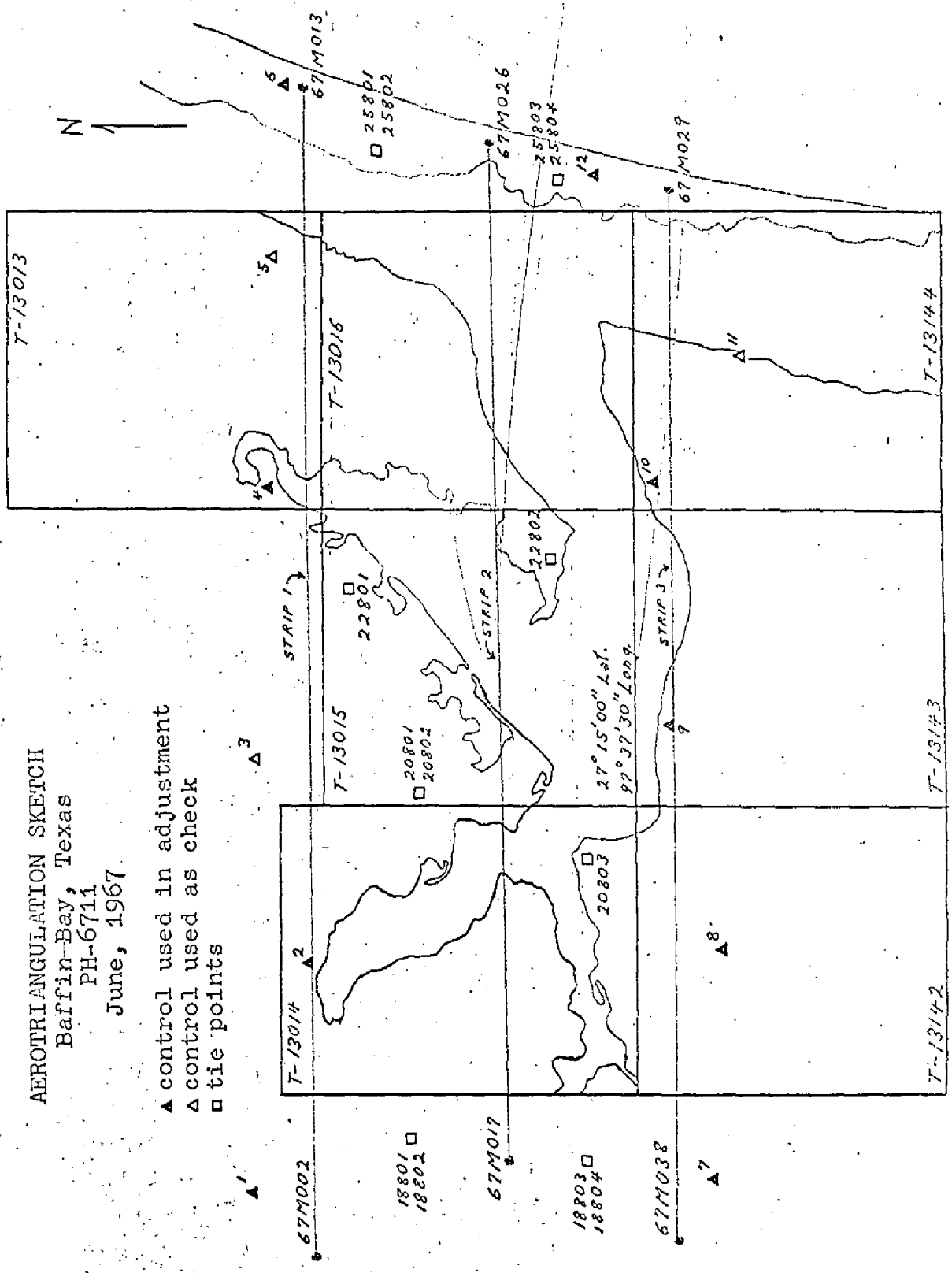
7. LOS OLMOS, 1949	-0.3	-0.3
8. KENEDY RANCH WATER TANK, 1931 subpoint	-0.5	+1.9
9. CRAWFORD 2, 1912	-0.7	-3.7

BAFFIN BAY, TEXAS, Fit to Control, cont.  
STRIP 3

	x	y
10. PENESCAL 2, 1912 subpoint	+0.6	+2.7
11. SALT RM, 1912	-1.8	+2.8
12. UNION, 1939 subpoint	-0.2	-0.6

AEROTRIANGULATION SKETCH  
 Baffin Bay, Texas  
 PH-6714  
 June, 1967

- ▲ control used in adjustment
- △ control used as check
- tie points







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COMPILATION REPORT  
T-13014

31. DELINEATION:

The Kelsh plotter was used. Photography was adequate.

There was no field inspection.

32. CONTROL:

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours are inapplicable.

Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

Shoreline and alongshore details were delineated from office interpretation of the photographs. In general the approximate low water line was not shown. Oil wells on the south shore of Laguna Salada between Long.  $97^{\circ} 42' 00''$  and Long.  $97^{\circ} 44' 00''$  were not identifiable on the photographs and were not mapped.

36. OFFSHORE DETAILS:

No statement.

37. LANDMARKS AND AIDS:

Appropriate copies of Form 567 for Landmarks and Aids have been submitted to the W.O. under date April 1968.

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Junctions are in agreement with T-13142 to the south and T-13015 to the east. There is no contemporary survey to the north or west.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS Quadrangle RIVIERA BEACH, TEX., scale 1:24,000, dated 1952.

47. COMPARISON WITH NAUTICAL CHARTS:

There is no chart that covers the area of this manuscript at this time.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None

ITEMS TO BE CARRIED FORWARD:

None

Approved and Forwarded:

Submitted:

For *P. A. Stark*  
J. Bull, RADM, USESSA  
Director, Atlantic Marine Center

*L. L. Graves*  
L. L. Graves  
Cartographic Technician

May 11, 1967

48: GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6711 (Baffin Bay, Texas)

T-13014

- ✓ Baffin Bay
- Cayo de Grullo (*Cayo del Grullo on NAME QUAD*) *STANDARD*
- \* Challo Well
- ✓ Drum Point
- ✓ Laguna Salada *Laguna de los Olmos on NAME QUAD* *STANDARD*
- ✓ La Parra Landing
- ✓ Las Puertas Artesian Well
- \* Loma Prieta Flowing Well
- ✓ Loyola Beach
- ✓ Pie de Gallo
- ✓ Radicha Creek
- ✓ Riviera Beach
- ✓ Sandy Hook
- ✓ Valderos Creek
- \* Vattman Creek
- \* Visnaga Windmill
- \* Zancudedo Windmill

*\* Not used, beyond delineation limits of shoreline survey.*

Approved by:

*A. Joseph Wraight*  
A. Joseph Wraight  
Chief Geographer

Prepared by:

*Frank W. Pickett*  
Frank W. Pickett  
Cartographic Technician

T-13014

49. NOTES FOR THE HYDROGRAPHER

Predicted tide table indicate a range of tide within these surveys of less than one-half foot. The MHWL was compiled from infrared photos believed to be at or near MHW, but occasional measurements from identifiable photo points to the MHWL should be made to verify the compilation.

The USGS Quadrangle maps indicate many of the foreshore areas as occasionally inundated. Verify and/or correct the compilation of the MHWL as regards this inundation.

There was no field inspection prior to compilation.

FORM C&GS-1002 (9-66)		U.S. DEPARTMENT OF COMMERCE ESSA COAST AND GEODETIC SURVEY	
<b>PHOTOGRAMMETRIC OFFICE REVIEW</b> T-13014			
1. PROJECTION AND GRIDS <b>RJP</b>	2. TITLE <b>RJP</b>	3. MANUSCRIPT NUMBERS <b>RJP</b>	4. MANUSCRIPT SIZE <b>RJP</b>
<b>CONTROL STATIONS</b>			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY <b>RJP</b>	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) <b>XX</b>	7. PHOTO HYDRO STATIONS <b>XX</b>	
8. BENCH MARKS <b>XX</b>	9. PLOTTING OF SEXTANT FIXES <b>XX</b>	10. PHOTOGRAMMETRIC PLOT REPORT <b>Bridge (W.O.)</b>	11. DETAIL POINTS <b>Kelsh</b>
<b>ALONGSHORE AREAS (Nautical Chart Data)</b>			
12. SHORELINE <b>RJP</b>	13. LOW-WATER LINE <b>RJP</b>	14. ROCKS, SHOALS, ETC. <b>RJP</b>	15. BRIDGES <b>XX</b>
16. AIDS TO NAVIGATION <b>CHB</b>	17. LANDMARKS <b>CHB</b>	18. OTHER ALONGSHORE PHYSICAL FEATURES <b>RJP</b>	19. OTHER ALONGSHORE CULTURAL FEATURES <b>RJP</b>
<b>PHYSICAL FEATURES</b>			
20. WATER FEATURES <b>RJP</b>	21. NATURAL GROUND COVER <b>RJP</b>	22. PLANETABLE CONTOURS <del>RJP</del> <b>XX</b>	
23. STEREOSCOPIC INSTRUMENT CONTOURS <b>XX</b>	24. CONTOURS IN GENERAL <b>XX</b>	25. SPOT ELEVATIONS <b>XX</b>	26. OTHER PHYSICAL FEATURES <b>RJP</b>
<b>CULTURAL FEATURES</b>			
27. ROADS <b>RJP</b>	28. BUILDINGS <b>RJP</b>	29. RAILROADS <b>XX</b>	30. OTHER CULTURAL FEATURES <b>RJP</b>
<b>BOUNDARIES</b>			
31. BOUNDARY LINES <b>XX</b>		32. PUBLIC LAND LINES <b>XX</b>	
<b>MISCELLANEOUS</b>			
33. GEOGRAPHIC NAMES <b>RJP</b>	34. JUNCTIONS <b>RJP</b>	35. LEGIBILITY OF THE MANUSCRIPT <b>RJP</b>	
36. DISCREPANCY OVERLAY <b>XX</b>	37. DESCRIPTIVE REPORT <b>RJP</b>	38. FIELD INSPECTION PHOTOGRAPHS <b>XX</b>	39. FORMS <b>RJP</b>
40. REVIEWER <i>R.J. Pate</i> <b>R. J. Pate</b> <b>11/6/67</b>		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> <b>A. C. Rauck, Jr.</b>	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER <i>L.L. Graves</i> <b>L.L. Graves</b> <b>4/8/68</b> Reviewed by <b>R.E. Smith</b> <b>4/9/68</b>		SUPERVISOR <i>Albert C. Rauck, Jr.</i> <b>A. C. Rauck, Jr.</b>	
43. REMARKS  <b>Field Edit applied from cronaflex T-13014, Field Edit ozalid T-13014, and photographs 67L-399, 67L-434, 67L-448 and 67L-449, 465 R and 467 R.</b>			

FIELD EDIT REPORT,  
BAFFIN BAY, TEXAS  
PH-6711

GENERAL NOTES

This report is submitted for seven (7) sheets, field edited March 4 through March 15, 1968.

All field edit notes were made in violet ink on the discrepancy prints and were referenced to photographs.

52 ADEQUACY OF COMPILATION

The compilation of buildings, roads and trails, flood areas, and all shoreline features appeared to be good. Location of rocks compiled was found to be very good. Most piers compiled are now in ruins.

54 RECOMMENDATIONS

NONE

56 ROCKS

All rocks in question were verified and noted on the discrepancy print. These rocks are a marine growth formed from worms and shells; this hard substance is locally known as wormrock. Therefore very few rocks bare; only one area, Pt. Penascal, that these rocks bare one to two feet. One rock was located at the edge of the Intracoastal Waterway. This rock is very near the edge of the channel, and just south of Light 115. It was located by sextant fix and plotted on the cronaflex copy (sheet T-13016).

A sextant fix was taken on rocks awash at Point Penescal; this is a rocky area that extends north from rocks that bare at Pt. Penascal.

There are many submerged rocks in Baffin Bay. These rocks should be located by the Hydro Party, for they would be very difficult to find by random searching.

57 WELLS AND PIPELINES

All wells were located from the photos except one; it was located by intersection method. Numerous pipelines at the head of CAYO DEL GRULLO were not shown. This water is mostly too shallow for navigation. Two wells have no pipelines running from them. The location of wells and pipelines are noted on photos 67-430, 448, and 449.

58 LANDMARK BUILDINGS AND BLUFFS

Compilation of this feature is good. It is recommended that most all buildings be charted as there are so few in the area. Deletions are shown on the discrepancy sheet and additions are on photos 67-410, 426, 434, 448, and 449.

There are very few Bluffs; ones recommended for charting are noted on photos 67-399, 429, 430, 434, and 452.

59 BOAT RAMPS AND MHW DISTANCES

There are only three (3) boat ramps in the Bay at present. they are noted on the discrepancy sheet and referenced to photos.

There is no evidence of any change in the MHWL since photography. Several places were visually checked, and a few distances were taped; these are shown on photos 67-399, 426, 429, 430, 432, 452, and 456.

60 NAUTICAL AIDS AND LANDMARKS

There are numerous Lights, <sup>Piles,</sup> and Platforms along the Intracoastal Waterway. These were located by radial plots, <sup>which</sup> excepting two Daybeacons and several pile<sup>s</sup> were located by sextant fix and plotted directly on the cronaflex copy.

There are 37 new daybeacons in sheets T-13014, 15, and 16; these were located by intersection method. Corner and end daybeacons were checked with a no-check coordinate position and scaled on the cronaflex copy. These are a single pile about 15 or 16 feet above the water with a red triangle at the top with reflective numbers.

There are only a few nautical landmarks consisting mainly of Windmills, and one Tower. These were used as photo-hydro stations, and were plotted directly on the cronaflex copy with the height and year.

All field edit notes are in violet ink, and are found on the following photos: 67-399, 410, 426, 429, 430, 432, 434, 448, 449, 452, and 456.

Forms 567 submitted in duplicate for all aids and naut. landmarks.

18 March 1968  
Submitted by:



E. W. Hartford  
Surveying Technician

**NON-FLOATING AIDS OR LANDMARKS FOR CHARTS**

TO BE CHARTED  
TO BE CHARTED  
TO BE CHARTED } STRIKE OUT TWO

Atlantic Marine Center April 5, 1968

I recommend that the following objects which have ~~(marked)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(charts)~~ the charts indicated.

The positions given have been checked after listing by *L.L. Graves*

L. L. Graves

J. Bull, RADM, USESSA  
Director, AMC

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE*		LONGITUDE*							DATUM
				° ' "	D.M. METERS	° ' "	D.P. METERS						
TEXAS													
	CAYO DEL CRULLO												
	WINDMILL (Steel) ht= 45 (63)			27 23	00.39	97 41	51.35	N.A. 1927	Photo. T-13011	Feb. 1968		X 893SC *	
	WINDMILL (Steel) ht= 45 (57)			27 20	31.29	97 39	18.99	N.A. 1927	Photo. T-13011	Feb. 1968		X 893SC *	
	WINDMILL (Steel) ht= 40 (52)			27 19	49.06	97 38	03.27	N.A. 1927	Photo. T-13011	Feb. 1968		X 893SC *	
	WINDMILL (Steel) ht= 30 (37)			27 15	20.21	97 38	27.92	N.A. 1927	Photo. T-13011	Feb. 1968		X 893SC *	
	TOWER (Microvare, steel, red and white) ht= 163 (185)			27 15	01.72	97 44	07.56	N.A. 1927	Photo. T-13011	Feb. 1968		X 893SC *	
	* Chart 893SC is a proposed chart												

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.7, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *non-floating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

\* TABULATE SECONDS AND METERS





REVIEW REPORT T-13014  
SHORELINE  
MAY 1969

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid Comparison Print (pages 28 through 34), which shows the differences noted in items 62 and 64, is included with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Registered Survey T-9191; 1:20,000; Field Completion 1952  
Registered Survey T-9195; 1:20,000; Field Completion 1952

The area of T-13014 covered by T-9191 is north of  $27^{\circ} 22' 30''$ ; T-9195 covers the area south of  $27^{\circ} 22' 30''$ .

The surveys are generally in fair agreement, with allowances made for natural erosion and build-up in low areas over the intervening 15 years. The T-9191 and T-9195 differences with this survey are shown in blue on the Comparison Print.

The aids to navigation, the well platforms, and submerged pipelines are new since 1952, see pages 32, 33 and 34.

The shoreline shift of about 20 meters, in the vicinity of Loyola Beach (page 30) is not the largest on the survey, but it is noticeable because of the built up nature of area.

T-13014 supersedes the previously registered surveys for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

U. S. G. S. quad. RIVIERA BEACH, TEXAS; 1:24,000; Field check 1952.  
U. S. G. S. quad. RIVIERA BEACH N. W., TEXAS; 1:24,000;  
Field check 1952.

The quadrangles are reductions of T-9191 and T-9195, see Item 62, and the same comparisons are applicable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Boat sheet H-9002 (745-20-1-68); 1:20,000; 1968

The boat sheet differences with T-13014 are shown in green on the Comparison Print.

The Incomplete Manuscript of T-13014 was furnished the hydrographer for the boat sheet. The field editor made no appreciable shoreline changes, so there are only minor shoreline differences. The wells and pipelines near  $27^{\circ} 16.7'$ ;  $97^{\circ} 41'$ , page 33, were identified by the field editor on photo 67-L-448; they are not on the boat sheet.

The boat sheet shows numerous rocks awash, piles, markers and etc., that are not visible on the photographs and were not noted by the field editor, see pages 29, 30, 31, 33, and 34. For comment on the rocks, see paragraph 3 of Item 56 of the field edit report.

The boat sheet labels the "Northerly and tallest of 5" tanks,  $27^{\circ} 21.25'$ ,  $97^{\circ} 41.8'$ , page 29, a landmark. The tanks are compiled on T-13014 but none of them was designated a landmark by the field editor.

The boat sheet shows a light on a well at  $27^{\circ} 20.9'$ ;  $97^{\circ} 41.3'$ , page 29, whereas, the field editor labels the same object "Well no light" on the field edit ozalid and cronaflex; it is noted that the hydrographer was in this specific area a month after the field edit was completed for T-13014.

The boat sheet shows two piers at  $27^{\circ} 20.1'$ , and  $27^{\circ} 20.25'$  at longitude  $97^{\circ} 41.5'$ , page 30, which were not noted by the field editor and are not visible on the photographs. In this same area the field edit and the boat sheet differ in identifying which of two piers is in ruins, and which is in good repair. The boat sheet also shows a "pier ruins" at  $27^{\circ} 17'$ ,  $97^{\circ} 40.25'$ , page 33; the field editor though has shown a "new pier" very close to this same position. Conversation with the hydrographer revealed that work was being done on several of the piers in the various areas of this survey during the field edit done in March 1968, and the hydrography which was finished in August 1968.

The boat sheet shows signals OIL,  $27^{\circ} 16.5'$ ,  $97^{\circ} 38.4'$ , GAS,  $27^{\circ} 16.7'$ ,  $97^{\circ} 38.1'$ , and ACK,  $27^{\circ} 17.05'$ ,  $97^{\circ} 37.9'$ ; each of these is about 8 meters west or northwest of a "lighted well" shown on T-13014. The field editor, when contacted by phone, stated that the lighted wells are on the east end of platforms, and that each platform also has an oil heater, whose stack is about a foot in diameter and about 15 feet tall, and about 25 feet from the well. These stacks were used as hydro-signals, see page 34.

The boat sheet shows two Geographic names: NEUBAUER POINT and NEUBAUER ROCKS, which are not on T-13014, see page 3/.

These names are not on the approved name list and are not on the Geographic Name Standard. It is noted that they were not on the previously registered survey T-9195.

A wreck, near 27° 16.6', 97° 42.3', on the boat sheet is not visible on the photographs, and was not noted by the field edit, page 33 .

This survey shows two wells and dolphins near 27° 16.2', ✓ 97° 42.8', see 32 , which the boat sheet says were "removed and pipe removed to 25 feet below surface" in July 1968. It is noted that the field editor stated "these two wells reported to be razed within two months" on photo 67-L-448.

65. COMPARISON WITH NAUTICAL CHARTS:

There is no nautical chart coverage of T-13014 at this time.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with the Job Instructions, Bureau requirements and the National Standards for Map Accuracy. No accuracy tests were run in the field.

Approved by:

*Allen L. Powell*  
Allen L. Powell, RADM, USESSA  
Director, Atlantic Marine Center

Reviewed by:

*M. M. Slavney*  
M. M. Slavney

Approved by:

*Charles L. ...*  
Chief, Cartographic Branch *0118*

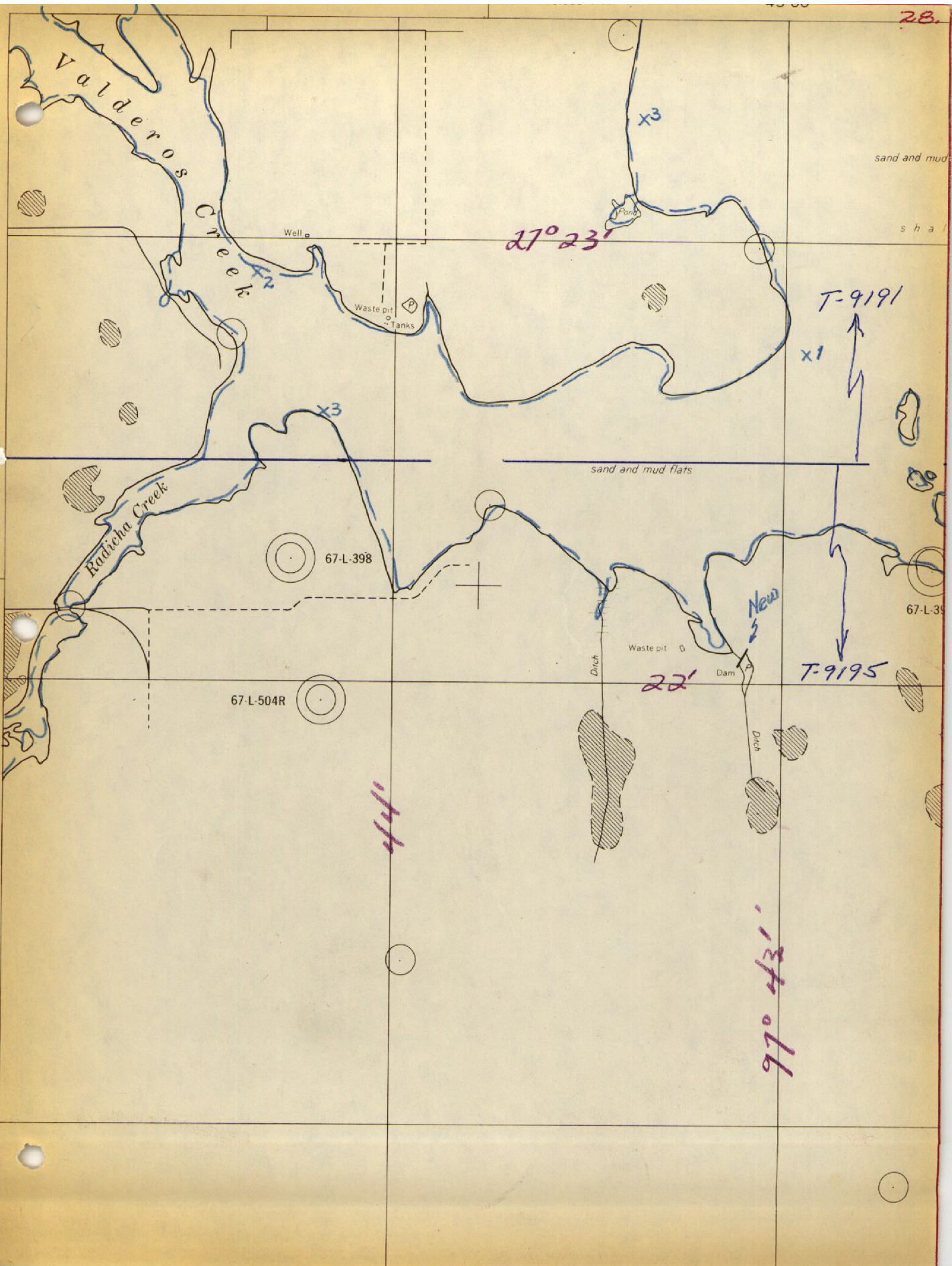
*R. H. ...*

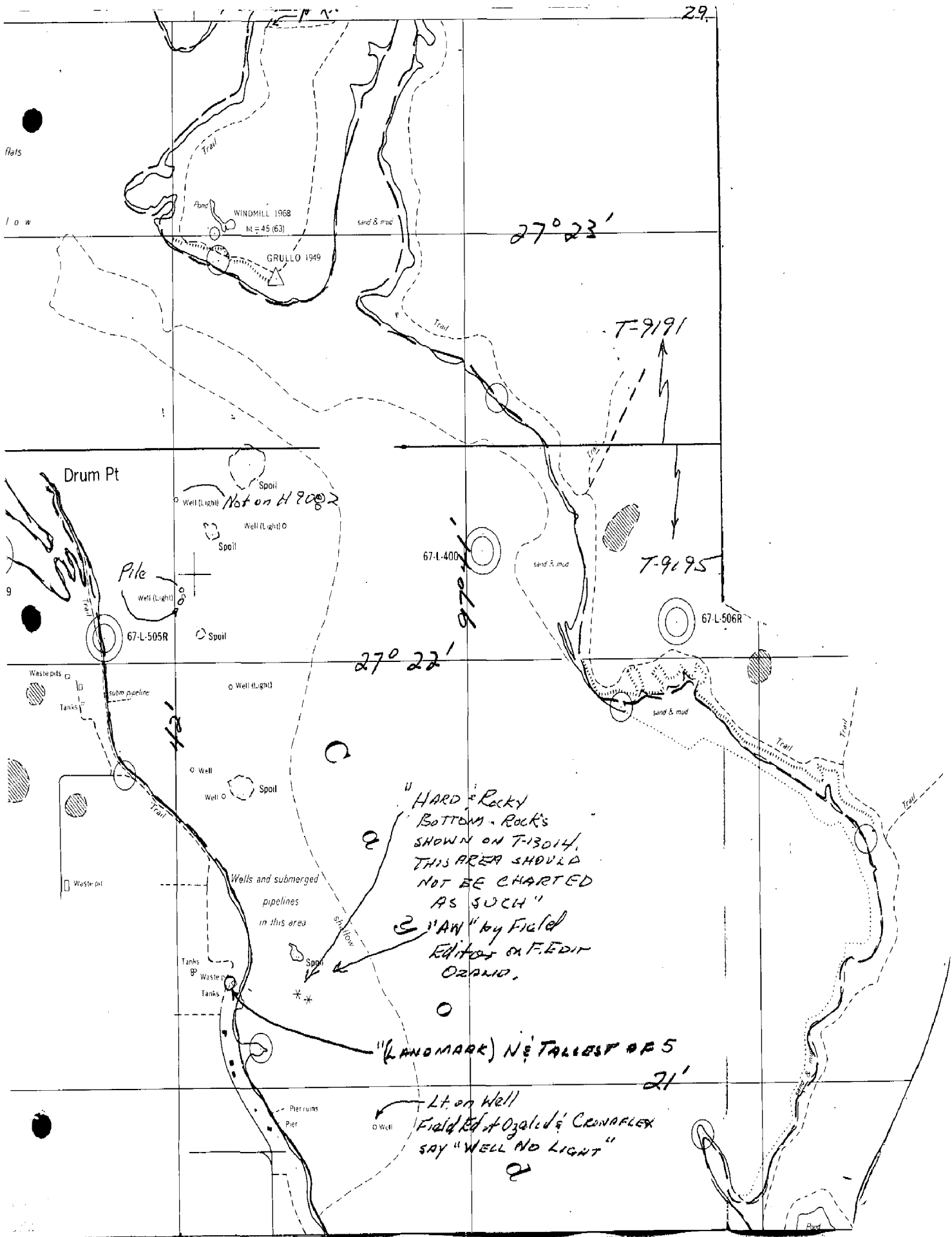
Chief, Photogrammetry Division

~~Chief, Chart Division~~

~~Chief, Operations Division~~







29.

flats

low

27° 23'

T-9191

T-9195

27° 22'

"HARD & ROCKY BOTTOM. ROCKS SHOWN ON T-13014. THIS AREA SHOULD NOT BE CHARTED AS SUCH"

"AN" by Field Editor of F. EDIT OZALID.

"(LANDMARK) N & TALLEST 21'

Lt. on Well Field Ed of Ozalid & CRONARLEX SAY "WELL NO LIGHT"

Drum Pt

WINDMILL 1968  
ht = 45 (63)

GRULLO 1949

Trail

67-L-400

67-L-506R

67-L-505R

Spill  
Well (Light) Not on H 9002

Well (Light)

Spill

Pile

Well (Light)

Spill

Well (Light)

Well

Well

Spill

Wells and submerged pipelines in this area

Spill

Tanks

Waste

Tanks

Pier ruins

Pier

Well

Waste pits

Tanks

Sub pipeline

Well

Waste pit

9

flats

IN RUINS ON H-9002  
Not IN RUINS on H-9002  
Pier on H-9002

THIS DELIM. IS FROM FIELD EDIT  
OZALID & CRONAFLEX.

Pier on H-9002  
"XX" OUT ON  
F. EDIT PHOTO 67-L-434

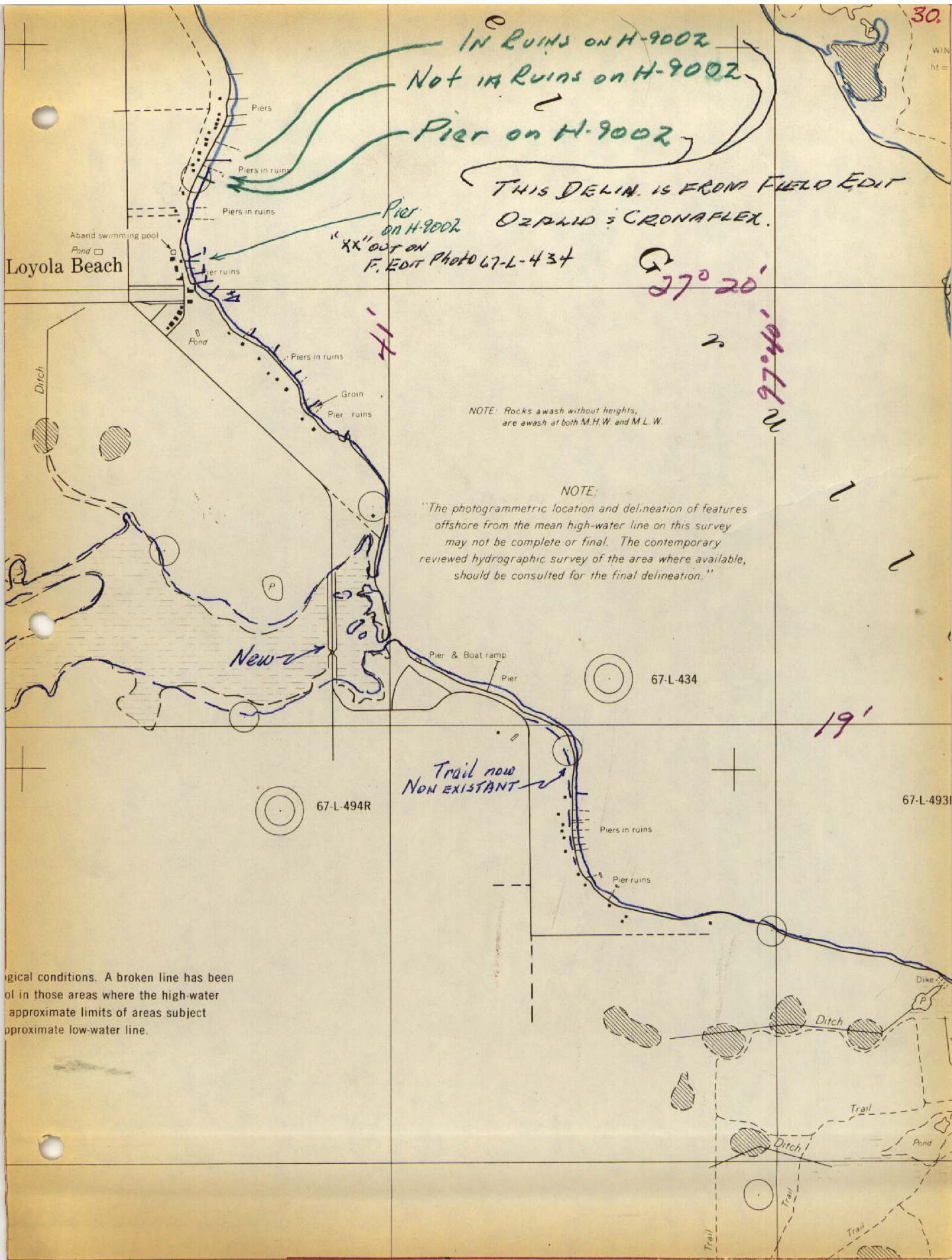
27° 20'  
97° 46' W

NOTE: Rocks awash without heights,  
are awash at both M.H.W. and M.L.W.

NOTE:  
"The photogrammetric location and delineation of features  
offshore from the mean high-water line on this survey  
may not be complete or final. The contemporary  
reviewed hydrographic survey of the area where available,  
should be consulted for the final delineation."

Trail now  
NON EXISTANT

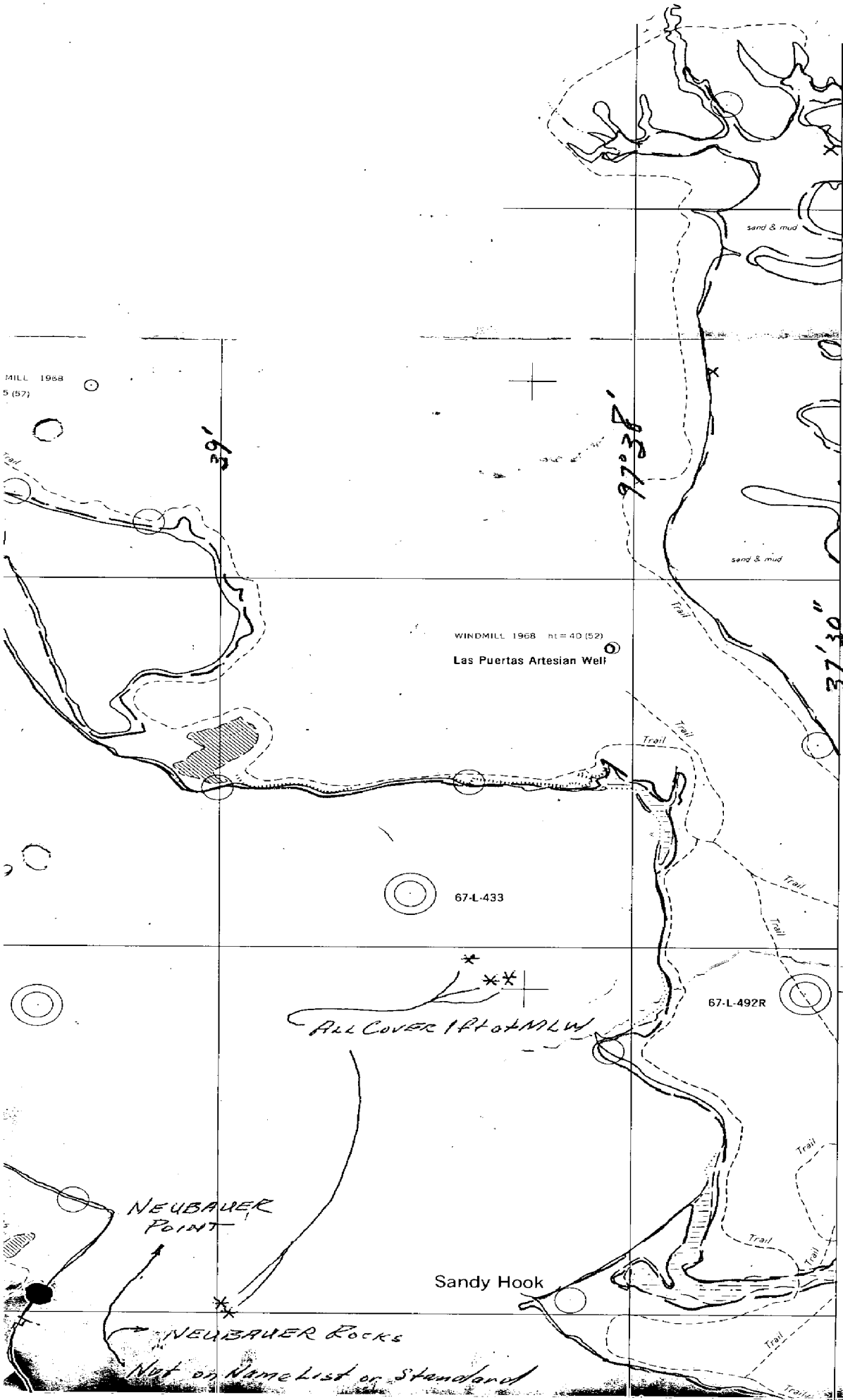
19'



logical conditions. A broken line has been  
ol in those areas where the high-water  
approximate limits of areas subject  
approximate low-water line.



MILL 1968  
5 (57)



31.  
y = 610,000 FT.

WINDMILL 1968 ht = 40 (52)  
Las Puertas Artesian Well

67-L-433

67-L-492R

\*  
\*\*  
+  
*All COVER 1 RT of MLW*

NEUBAUER  
POINT

Sandy Hook

NEUBAUER ROCKS

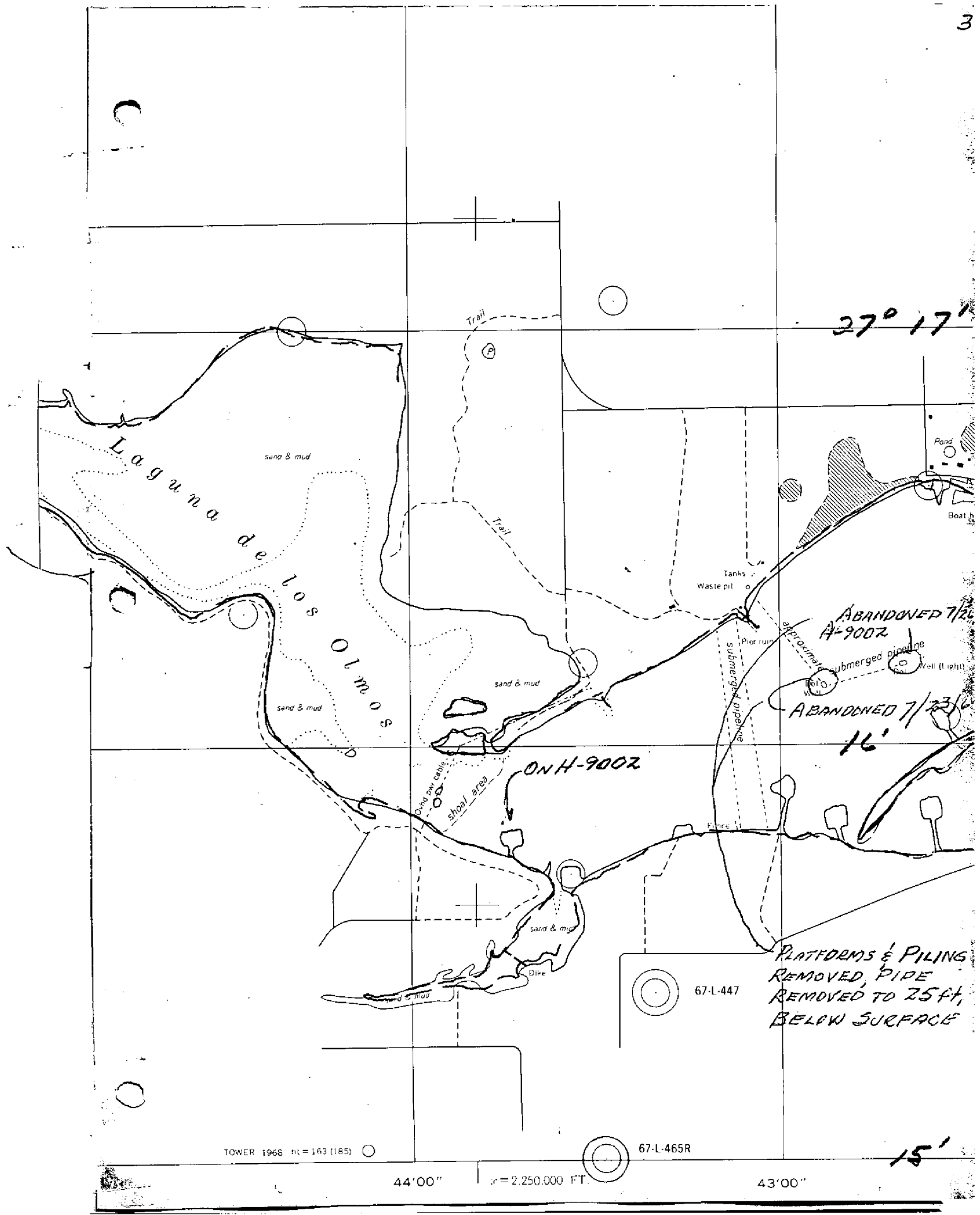
*Not on Name List of Standard*

20'00"

19'00"

y = 500,000 FT.

18'00"



27° 17'

Laguna de los Olmos

sand & mud

sand & mud

Trail

Trail

Tanks  
Waste pit

ABANDONED 7/26  
A-900Z

ABANDONED 7/23/6  
16'

ONH-900Z

Diving per cables  
Shoal area

PLATFORMS & PILING  
REMOVED, PIPE  
REMOVED TO 25 FT.  
BELOW SURFACE

TOWER 1968 hL=163 (185)

67-L-465R

44'00"

1:2,250,000 FT.

43'00"

15'

H-9002 Not listed or identified by F. Editor

Landmarks on (Tallest Palm)

Riviera Beach

COVERED iff at MLW

17'

Pier Ruins

PILES

approximate submerged pipeline

Not on H-9002 - they were not on the compilation furnished the Hydrographer, but were noted on Field Edit Photo 67-L-448

IN RUINS ON H-9002

Well (Light) - subm - Well (Light)

L

A

MARKERS

U

N

A

S

A

L

A

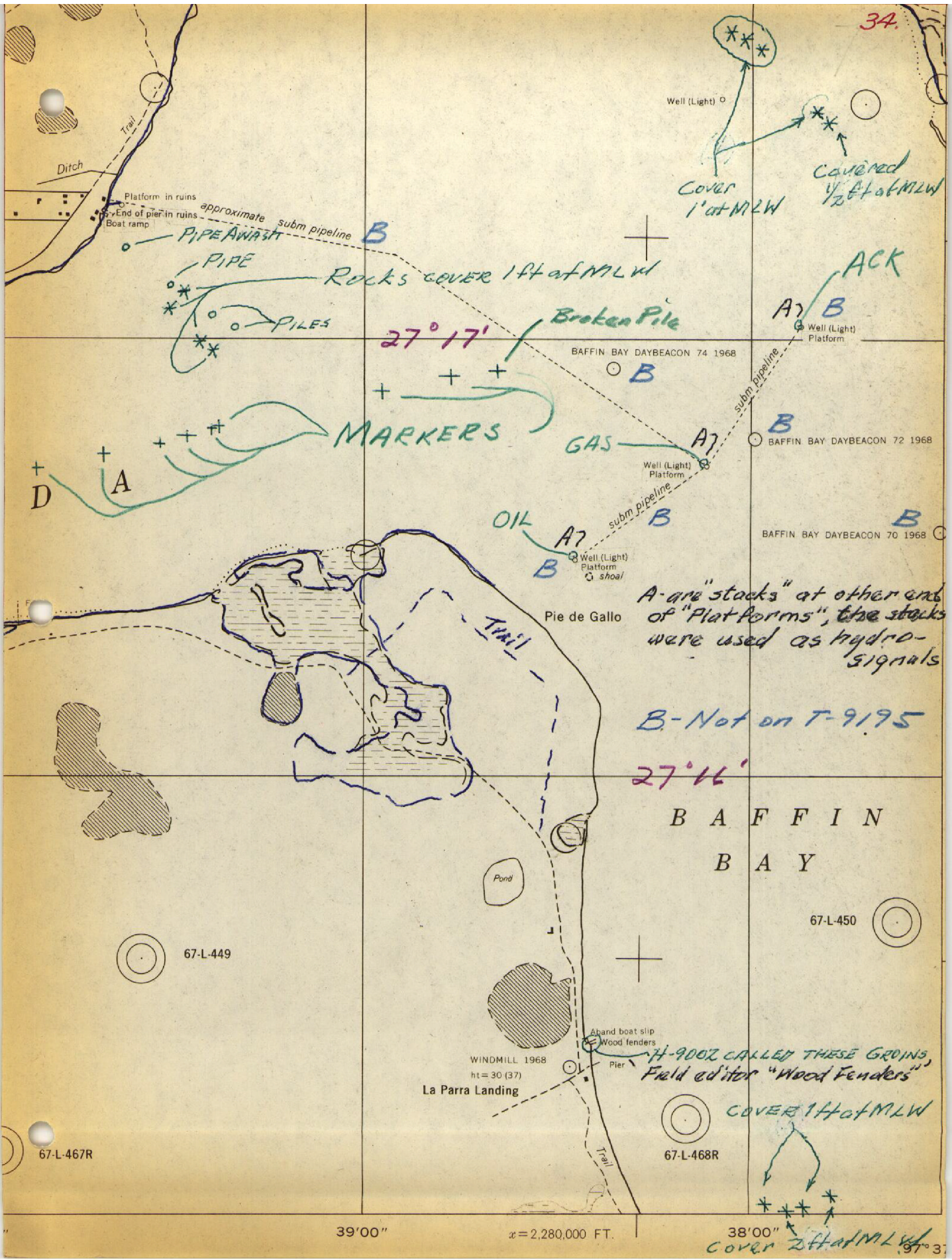
27°16'

B = Not on T-9195

67-L-448

67-L-466R

34.



39'00"

α = 2,280,000 FT.

38'00"

COVER 2ft at MLW

37° 3'

NOTES TO VERIFIER  
T-13014, Job Ph-6711  
BOAT SHEET NO. H-9002 (745-20-1-68)

Please note item 64 of the Final Review Report and the  
Comparison Print, pages , , , and .