

13098

13098

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-13098

LOCALITY

State WASHINGTONGeneral locality STRAIT OF JUAN DE FUCALocality DUNGENESS BAY1966-67

CHIEF OF PARTY

John O. Boyer, CDR, Pacific Marine Center
Allen L. Powell, RADM, Atlantic Marine Center

LIBRARY & ARCHIVES

DATE

DESCRIPTIVE REPORT - DATA RECORD

T - 13098

PROJECT NO. (II): PH-6706		
FIELD OFFICE (III):		CHIEF OF PARTY
PHOTOGRAMMETRIC OFFICE (III): Atlantic Marine Center		OFFICER-IN-CHARGE J. Bull, RADM Director, Atlantic Marine Center
INSTRUCTIONS DATED (II) (III): OFFICE (Aerotriangulation) November 18, 1966 OFFICE (Compilation) January 18, 1967		
METHOD OF COMPILATION (III): Kelsh plotter		
MANUSCRIPT SCALE (III): 1:10,000		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:6,000 pantographed to 1:10,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III): N. A. 1927		VERTICAL DATUM (III): MHW MEAN LOW WATER 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 or mean lower low water
REFERENCE STATION (III): COON, 1962 ✓		
LAT.: 48° 07' 14.9876" (462.9)	LONG.: 123° 06' 10.6740" (220.7)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): = 417,018.84' ✓ x = 1,445,712.18' ✓		STATE WASHINGTON ZONE NORTH
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:
Lyle Riggers		Oct. - Nov. 1966
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
July 26, 1966 Air Photo Compilation		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		Nov. 21, 1966
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. Glaser		Nov. 22, 1966
CONTROL PLOTTED BY (III):		DATE
L. Graves		Jan. 27, 1967
CONTROL CHECKED BY (III):		DATE
C. Bishop		Jan. 27, 1967
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
Robert B. Kelly		Jan. 9, 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	L. O. Neterer Reviewed by A. L. Shands	Feb. 13, 1967 Feb. 13, 1967
Kelsh	CONTOURS	DATE
	Inapplicable	
MANUSCRIPT DELINEATED BY (III):		DATE
L. L. Graves		Feb. 23, 1967
SCRIBING BY (III):		DATE
F. P. Margiotta		May 3, 1968
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
COMPILATION C.H. Bishop		Feb. 24, 1967
FIELD EDIT R. J. Pate		Feb. 2, 1968
SCRIBING & STICK UP R. E. Smith		June 3, 1968
REMARKS:		
FIELD EDIT BY: W. F. Forster, II		

May 23, 1967
~~August 23, 1967~~

4

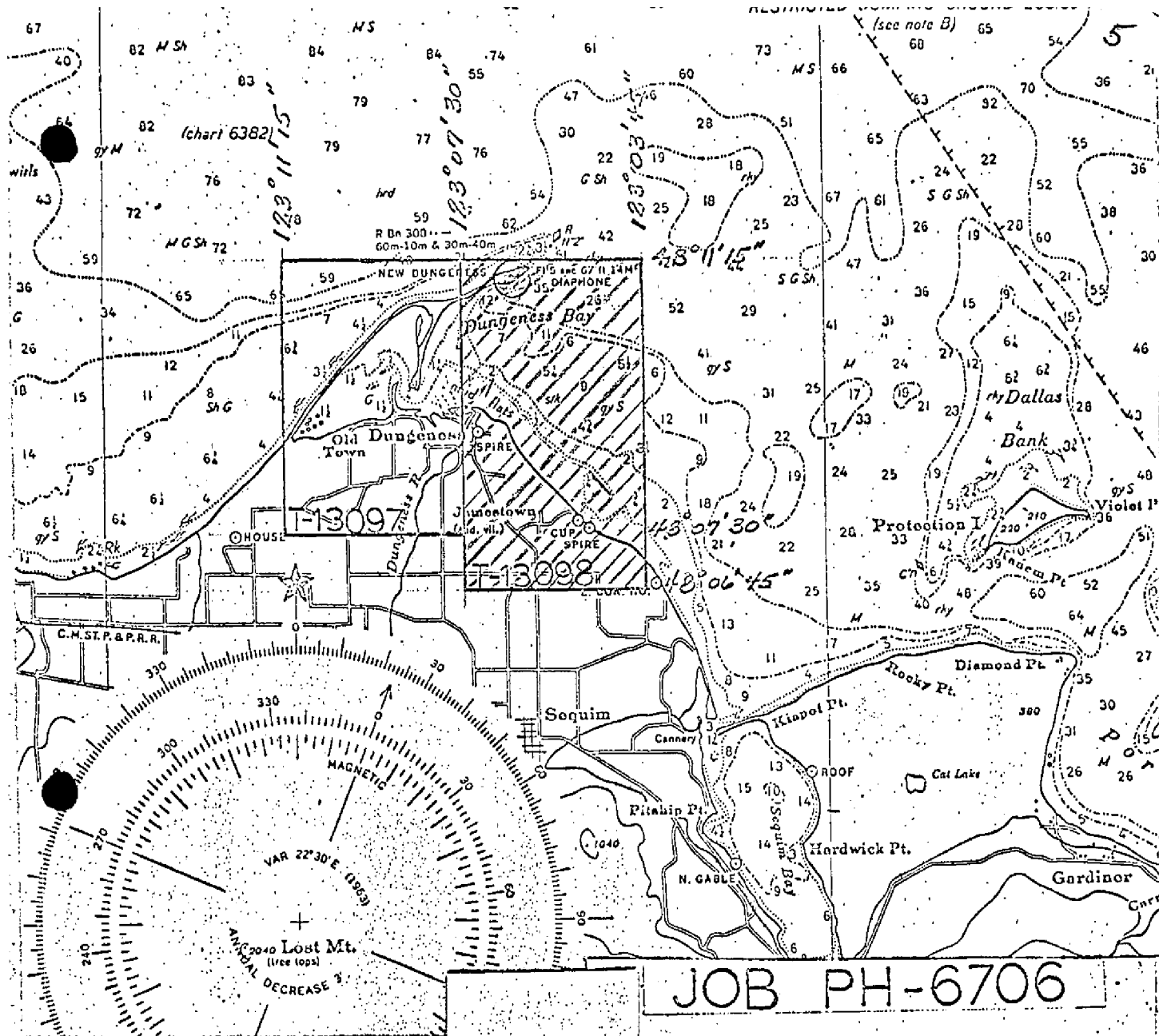
T-13098

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for hydro	February 23, 1967	Superseded
Field edit applied Compilation complete	April 1968	<i>Superseded</i>
<i>Final Review</i>	<i>April 1969</i>	



OFFICIAL MILEAGE
For Cost Accounts---

Sheet Numbers	Area Sq. Mi.
T-13097	3
T-13098	4
Total	7

JOB PH-6706

WASHINGTON

DUNGENESS BAY

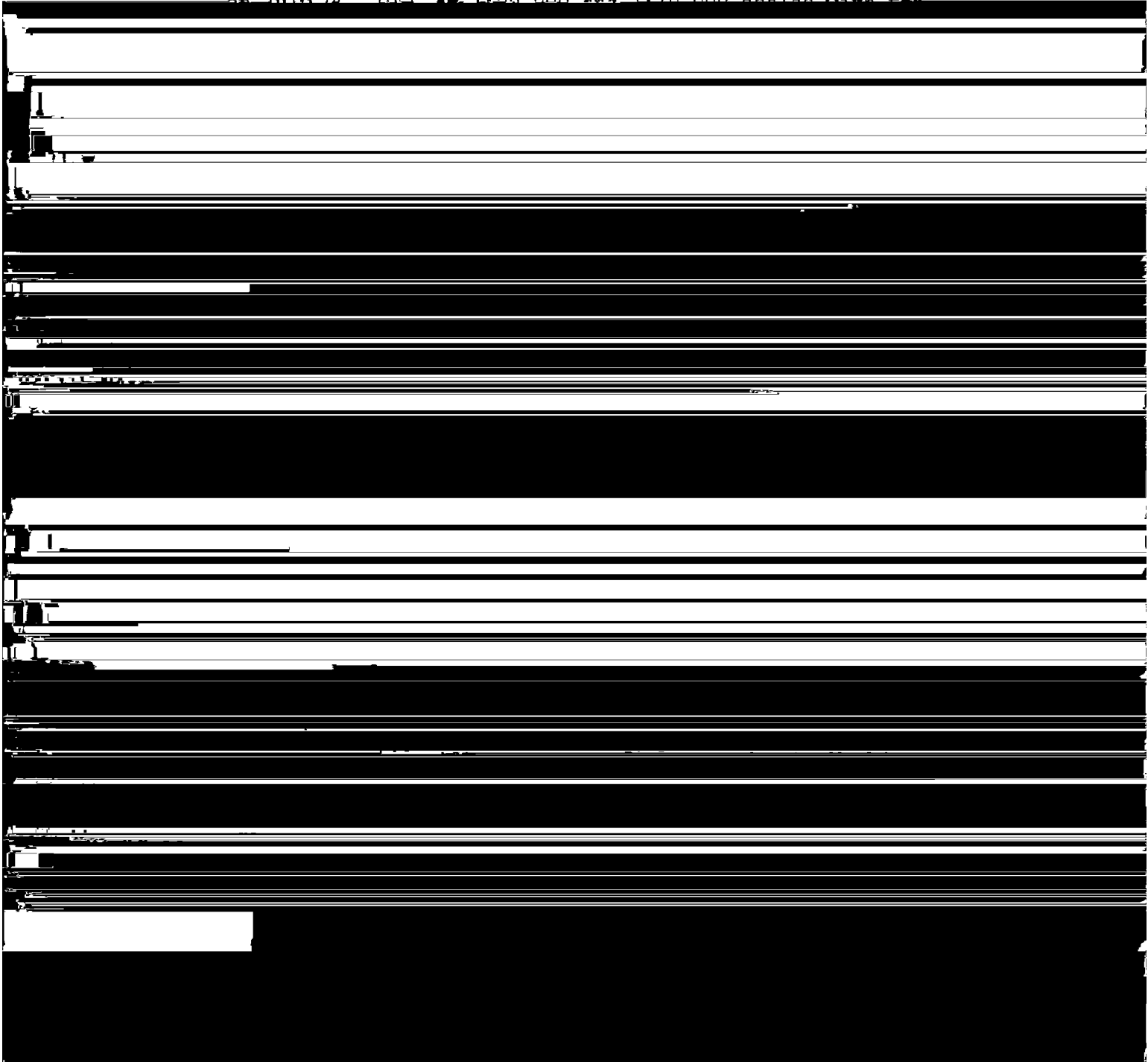
Shoreline Mapping

Scale 1:10,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-13098

Shoreline manuscript T-13098 is one of two 1:10,000 scale maps that comprise Ph-6706. The maps are for New Dungeness Harbor and Dungeness Bay in the Strait of Juan De Fuca, in the state of Washington. The sketch on page 5 of this report shows the position of T-13098 in Ph-6706.

This is a stereo-instrument job in advance of hydrographic surveys of the area. Color photographs were taken on July 26, 1966 at 1:20,000 and 1:70,000 scales with the



7

Field Inspection Report
Dungeness Bay, Washington
Project Ph-6706

Map Manuscripts T-13097 and T-13098
Oct.-Nov. 1966

The contact, color, photographic transparencies furnished the field unit was of excellent quality and no difficulty was encountered in the selection and identification of the photo-control points.

All horizontal control stations established by the Coast and Geodetic Survey was searched for and a Form 526 (Recovery Note, Triangulation Station) is being submitted for each station.

Four new horizontal control stations were located by triangulation intersection methods. They are the four range markers that designate measured, nautical mile course. They were photo identified in lieu of Station TAR, 1940.


All tidal bench marks were searched for and the disposition of each mark has been indicated on its respective Form 685A, Recovery Note, Bench Mark.

Landmarks and fixed aids to navigation were investigated and they have been listed on Form 567 (Non-floating Aids or Landmarks for Charts). One fixed aeronautical aid, a fan marker was also photo identified.

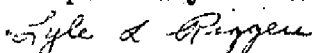
Eleven photo-hydro stations were identified and numbered on the contact, color photography. A list and brief description of the station follows:

- 9701 - North gable, green building with black roof
- 9702 - Base of half-round flume
- 9703 - ~~West~~^{East} gable, white building with red roof (See F. Insp. Photo 66-5-3246A)
- 9704 - Northwest corner, pier
- 9705 - Lone, outbuilding
- 9706 - Box on lone pile
- 9801 - Southeast gable, ~~large barn~~ unpainted shed (See F. Insp. photo 66-5-3236A)
- 9802 - Northwest gable, large barn
- 9803 - East end of 4 pile structure
- 9804 - Southwest corner, pier in ruins
- 9805 - Southwest gable, white house with red roof

Approved:


John O. Boyer, CDR
Chief, Operations Division
Pacific Marine Center

Respectfully submitted,



for: Robert B. Melby
Survey Technician, C&GS
Photo Field Unit
Pacific Marine Center

8

PHOTOGRAMMETRIC PLOT REPORT
JOB PH-6706
DUNGENESS BAY, WASHINGTON

January 9, 1967

21. Area Covered

This report covers T-sheets 13097 and 13098 of Dungeness Bay, Washington.

22. Method

2
STRIP

Two horizontal bridges were run to provide control for graphic compilation. The C-8 was used for the instrumentation of Strip #1 and the C-5 was used for same of Strip #2. Photographs 66-S(C)-3255 thru 3259 and 66-S(C)-3292 thru 3297 were used for field editing and office identification of points. Black and white diapositives made from color negatives were used in bridging of the two horizontal strips. All pass and tie points were drilled on the diapositives. The adjustment on the IBM 1620 utilized 6 control stations for Strip #1 and 5 control stations for Strip #2. One control station was used as a check for Strip #1 and 3 control stations were used as checks for Strip #2.

#1
STRIP

23. Adequacy of Control

Horizontal control accuracy meets the standards for delineating shoreline sheets at 1:10,000 scale. An error was found in distances from EBERLE 1962 substitute stations A & B. The reason for error was due to the reversal of the distances recorded on the control station identification sheet. Correction of error caused all control stations to hold within the accuracy required by the National Map Standards.

Common points were hit between Strips #1 and #2 to augment datum tie. All tie points were averaged between the two strips.

25. Photography

Adequate as to coverage, overlap and definition.

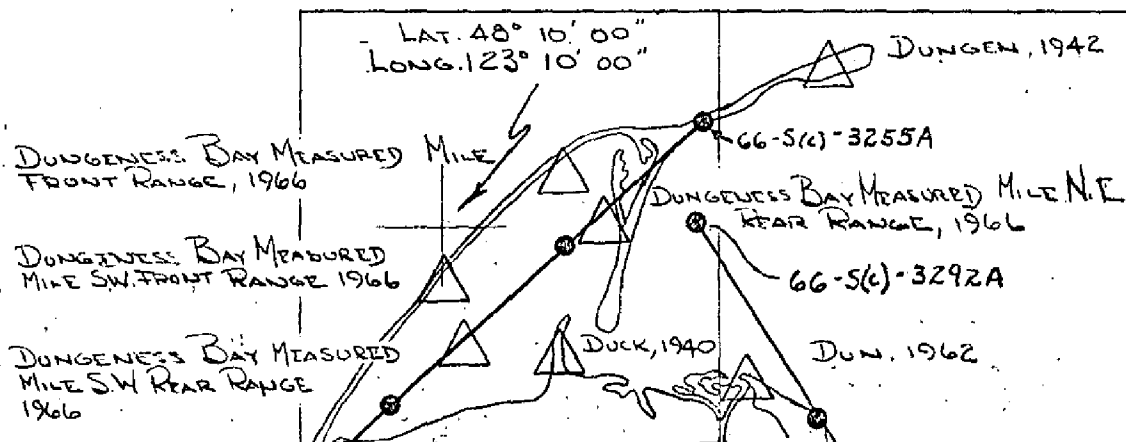
Submitted by:

Robert B. Kelly
Robert B. Kelly

Approved by:

John D. Perrow, Jr.
John D. Perrow, Jr.

AEROTRIANGULATION SKETCH DUNGENESS BAY, WASHINGTON PH - 6706 JANUARY, 1967



COMPILATION REPORT
T-13098

31. DELINEATION:

Delineation of this map manuscript was by Kelsh instrument.

32. CONTROL:

Control was adequate. Refer to the Photogrammetric Plot Report, dated Jan. 9, 1967.

33. SUPPLEMENTAL DATA:

USC&GS Hydrographic Surveys, No. 6650 dated Nov.-Dec. 1940, scale 1:10,000 and No. 6651, dated Dec.-Jan. 1940-41, scale 1:10,000.

These data were used for comparison purposes only.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage features were delineated from office interpretation of the photography.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline field inspection was adequate with the exception of the location of the mean high water line. Inasmuch as the photos were taken at a time of near high water, this supplemental field inspection was not needed. This feature was office interpreted.

No low water lines were delineated.

Other alongshore features were identified by the field inspector, in addition to five photo hydro signal sites. These signals were positioned with the Kelsh Plotter during compilation and are appropriately identified.

36. OFFSHORE DETAILS:

37. LANDMARKS AND AIDS

Forms 567 "Nonfloating Aids or Landmarks for Charts" are herewith submitted for three landmarks recommended for deletion and one non-floating aid for charting. These recommendations and identifications were submitted by the field inspector.

Appropriate copies of Form 567 for an Aero nautical Aid (fan marker) have been submitted to the Washington Science Center under date *March 14, 1967*.

38. CONTROL FOR FUTURE SURVEYS

A descriptive list of the five photo hydro stations for this sheet has been included with "Notes for the Hydrographer".

39. JUNCTIONS

A satisfactory junction has been made to the west with survey T-13097 and on the east with survey T-12052 (RS 873).

There are no contemporary surveys to the north or south.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Report submitted with T-13097 concerning horizontal accuracy. Vertical accuracy is inapplicable.

46. COMPARISON WITH EXISTING MAPS

Only changes of minor significance were apparent during comparison with the USGS Quadrangle, Dungeness, Washington dated 1956, scale 1:24,000.

47. COMPARISON WITH NAUTICAL CHARTS

The scale of 1:150,000 of the USC&GS Chart No. 6401, dated June 28, 1965 did not permit a logical or reasonable comparison.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted:

Albert C. Rauck, Jr.

A. C. Rauck, Jr.

Approved and Forwarded:

W. L. Powell



GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6706 (Dungeness Bay, Washington)

T-13098

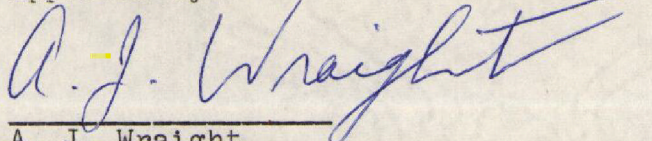
- ✓ Cassolary Creek
- ✓ Dungeness
- ✓ Dungeness Bay
- * Dungeness National Wildlife Refuge
- ** Dungeness River
- ✓ Dungeness Spit
- *** Dungeness Valley
- *** Gaskell Slough
- *** Gierin Creek
- ✓ Grays Marsh
- ✓ Jamestown
- ✓ Kulakala Point
- ✓ Meadowbrook Creek
- ✓ Strait of Juan de Fuca
- *** The Potholes

* Not used, boundaries not recovered

** Not used; part of the east mouth of the river was on this map, but it is now cut off from the river by a dike, and appears to be a slough.

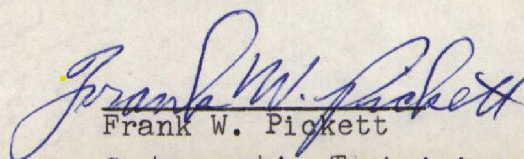
*** Not used, beyond the delineation limits of the shoreline survey
M.M.S.

Approved by:



A. J. Wraight
Chief Geographer

Prepared by:



Frank W. Pickett
Cartographic Technician

49. NOTES FOR THE HYDROGRAPHER

An ozalid copy of this map manuscript has been prepared for your use. On it are noted items which may require further clarification or verification during hydrography or edit.

The following photo hydro signal sites, preselected by the field inspection party, have been shown on the copy (ozalid and cronaflex) of the manuscript.

- 9801 - Southeast gable, unpainted shed
- 9802 - Northwest gable, large barn
- 9803 - East end of 4 pile structure
- 9804 - Southwest corner, pier in ruins
- 9805 - Southwest gable, white house with red roof

#4
15.

FORM C&GS-1002 (9-66)		U.S. DEPARTMENT OF COMMERCE ESSA COAST AND GEODETIC SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW T- 13098			
1. PROJECTION AND GRIDS	2. TITLE CHB	3. MANUSCRIPT NUMBERS CHB	4. MANUSCRIPT SIZE CHB
CONTROL STATIONS -			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY CHB	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX		7. PHOTO HYDRO STATIONS CHB
8. BENCH MARKS CHB	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT Bridge (W.O.)	11. DETAIL POINTS XX
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES

16. AIDS TO NAVIGATION

17. LANDMARKS

18. OTHER ALONGSHORE
PHYSICAL FEATURES

19. OTHER ALONGSHORE
CULTURAL FEATURES

UNITED STATES GOVERNMENT

Memorandum

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

TO : Chief, Photogrammetry Division

DATE: August 23, 1967

In reply refer to:

FROM : Commanding Officer,
USC&GS Ship HODGSON

SUBJECT: Field Edit Report: Projects Job PH-6714, Admiralty
Inlet, and PH-6706, Dungeness Bay, Wn.

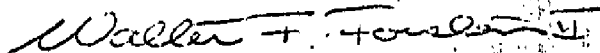
In accordance with Project Instructions OPR 412-Port Discovery - to Dungeness Bay dated 6 February 1967 the above subject assigned field editing was accomplished.

Under separate cover are submitted field edit ozalids and photographs for OPR 412 and subject projects. Signals were located by standard photo-grametric methods and all location of photo-hydro signals are considered final.

Final verification of preliminary control overlays is now being undertaken. After final control verification the mylar cronaflex copies of the "T" sheets will be forwarded to your office.

Attached with this report is a summary per "T" sheet of field editing accomplished. All notes are in purple ink. Little photo-identification of rocks was accomplished on the southern part of the subject survey area because of heavy shadowing. Hydrographic fixes were plotted on all "T" sheets to aid in the final varification of questioned items and uncharted rocks.

The HODGSON is being deactivated as of 25 August 1967. All field data that is remaining aboard will be transferred to Chief Processing, Seattle, Washington.


Walter F. Forster II

Enclosure: Summaries of accomplished
field editing



Field Edit Report

JOB PH-6706

T-13098

All requested items were verified in the field. In addition, 9 piles, one sunken wreck, and an obstruction was found and their location transferred to the paper ozalid in purple ink. Field editing was accomplished for the entire sheet.

Cross reference was made to photos 66S 32 93A and 66S 32 56A. Appropriate notes may be found on these photos.

The field edit ozalid notes are dated May 23, 1967.

U.S. DEPARTMENT OF COMMERCE
FOREIGN ECONOMIC BUREAU
POST AND TELEGRAPH SURVEY

AIDS OR LANDMARKS FOR CHARTS

Sequim, Washington

~~Superior~~ been inspected from seaward to determine their value as landmarks be

by Lyle L. Riggers

Robert B. Melby

Chief of Party

[illegible]

Annual, Publication 20-2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted objects shall be reported on this form. Revisions shall show both the old and new positions. The data should be given on separate sheets. Information under each column heading should be given.

STRIKE OUT TWO

Semin, Washington

3 November, 1966

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be *classification (deleted from)* the charts indicated.

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

Robert B. Kelly

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating 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

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

AERONAUTICAL

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE EXAMINED
TO BE REVISED
TO BE DEFERRED

STRIKE OUT TWO

Atlantic Marine Center

March 14, 1967

I recommend that the following objects which ~~have not~~ been inspected from seaward to determine their value as landmarks be charted on ~~(attached)~~ the charts indicated.

The positions given have been checked after listing by C. H. Bishop

Adrian

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating 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-13098
SHORELINE
September 1969

61. GENERAL STATEMENT

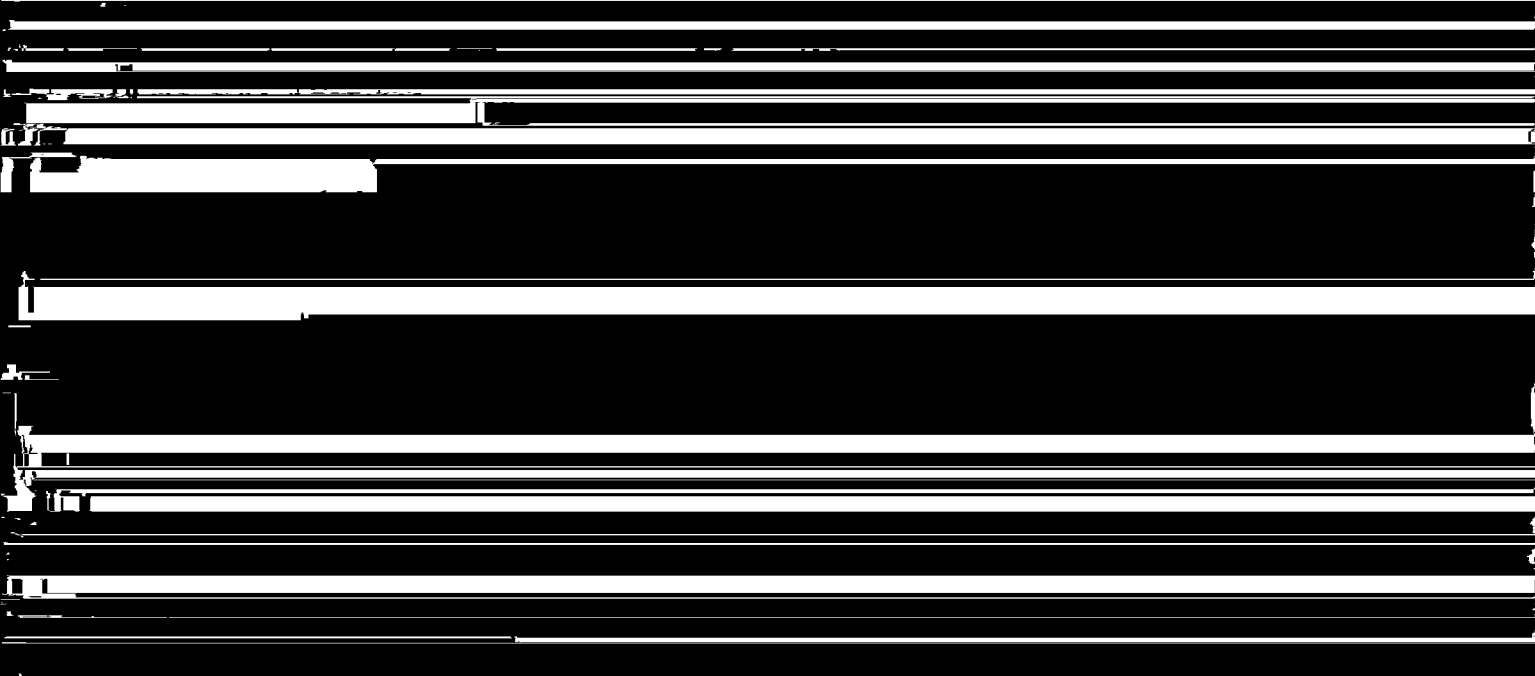
See Summary on page 6 of this Descriptive Report.

An ozalid Comparison Print (pages 24 thru 26), which shows the differences noted in Items 62 thru 65, is included with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Registered Survey T-6819; 1:10,000; December 1940
Registered Survey T-4194; 1:10,000; June 1926

The Comparison Print shows the area covered by the two registered surveys. T-6819 western limits include Dungeness



The registered survey differences with T-13098 are shown in blue on the Comparison Print.

Only portions of the 900 meter long pier on T-6819 northeast from $48^{\circ} 09.15'$, $123^{\circ} 07.2'$ (page 25) remain.

There are shoreline differences to 150 meters near $48^{\circ} 11'$, $123^{\circ} 06'$ (page 24), 125 meters near $48^{\circ} 09.2'$, $123^{\circ} 07.4'$ (page 25), and others reflecting the changing shoreline in exposed areas, see pages 24 thru 26 .

T-6819 shows two 75' radio poles near $48^{\circ} 10.93'$, $123^{\circ} 06.5'$ (page 24), that are not visible on the photographs and were not noted by either the field inspector or the field editor.

63. COMPARISON WITH MAPS OR OTHER AGENCIES

U.S.G.S. quad. DUNGENESS, WASH; 1:24,000; Field check 1956.
U.S.G.S. quad SEQUIM, WASH.; 1:24,000; Field check 1956.

The quadrangle differences with this survey are shown in brown on the Comparison Print.

There are shoreline differences of more than 100 meters on Dungeness Spit near $48^{\circ} 09.6'$, $123^{\circ} 07.5'$ and $48^{\circ} 11'$, $123^{\circ} 06'$ (page 24); and slightly smaller differences near $48^{\circ} 09.2'$, $123^{\circ} 07.5'$, and $48^{\circ} 09'$, $123^{\circ} 06.7'$ (page 25).

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Smooth Sheet H-8929; 1:10,000; May 1967
Smooth Sheet H-8928; 1:10,000 " "

This survey was the source of the shoreline for this area of H-8929 and H-8928. The Comparison Print shows the area covered by the two hydrographic surveys, and shows the offshore details on H-8929 that are not on this survey, in green. There were no differences with H-8928.

H-8929 shows three features offshore that do not appear on this survey. A "deadhead" near $48^{\circ} 10.25'$, $123^{\circ} 07.4'$ (page 24); a "pile (2)" near $48^{\circ} 09.6'$, $123^{\circ} 07.2'$ (page 25); and a "pile", the 5th of a group of 4 on this survey near $48^{\circ} 09.23'$, $123^{\circ} 07.13'$ (page 25). These features were not visible on the photographs and were not noted by either the field inspector or the field editor.

H-8929 labels the "obstruction awash at MHW" near $48^{\circ} 09.3'$, $123^{\circ} 06.9'$ (page 25) as "Metal Obstr. (5)"; and "the wreck awash MHW" near $48^{\circ} 08.9'$, $123^{\circ} 06.25'$ (page 25) is shown on H-8929 as (8).

65. COMPARISON WITH NAUTICAL CHARTS

Chart 6382; 1:80,000; 9th Edition October 14, 1968.

The chart differences with this survey are on the Comparison Print in red.

The chart shows three landmarks that are not on T-13098, noted on the Comparison Print: "SPIRE" near $48^{\circ} 08.8'$,

123° 07.3' (page 25); "CUP" near 48° 07.7', 123° 05.2 (page 26); and "SPIRE" 48° 07.6', 123° 05.0' (page 26). These three landmarks were noted for deletion on a form 567 by the field inspector on November 3, 1966. On inquiry to the Hydrographic Branch of the Nautical Chart Division, it was reported that the 1966 "DELETION" form 567 had not been received by the branch. Appropriate copies of the field party's form 567 were forwarded to Rockville from the Atlantic Marine Center on September 29, 1969.

The difference in Chart 6382 scale with this survey, 1:80,000 against 1:10,000, makes shoreline and positioning of details an approximation, but there are visible differences in the shape of the shoreline of Dungeness Spit (page 24), and near 48° 09', 123° 07' (page 25).

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.

Submitted by:

M. M. Slavney

M. M. Slavney

Approved by:

Allen L. Powell

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

Approved by:

Charles H. Hauer

Photogrammetric
Chief, Cartographic Branch *PHB*

R. H. Houlster

Chief, Photogrammetry Division

~~Chief, Chart Division~~

~~Chief, Operations Division~~

75' Radio Poles

NEW DUNGENESS LIGHT
(NEW DUNGENESS LIGHTHOUSE 1942)
BENCH MARK 3' 1962 (TBM 3)
DUNGEN 1962

Cable Crossing Sign

T-6819

DUNGENESS

07'

Cable Crossing

06'30"

10'30"

T-4194

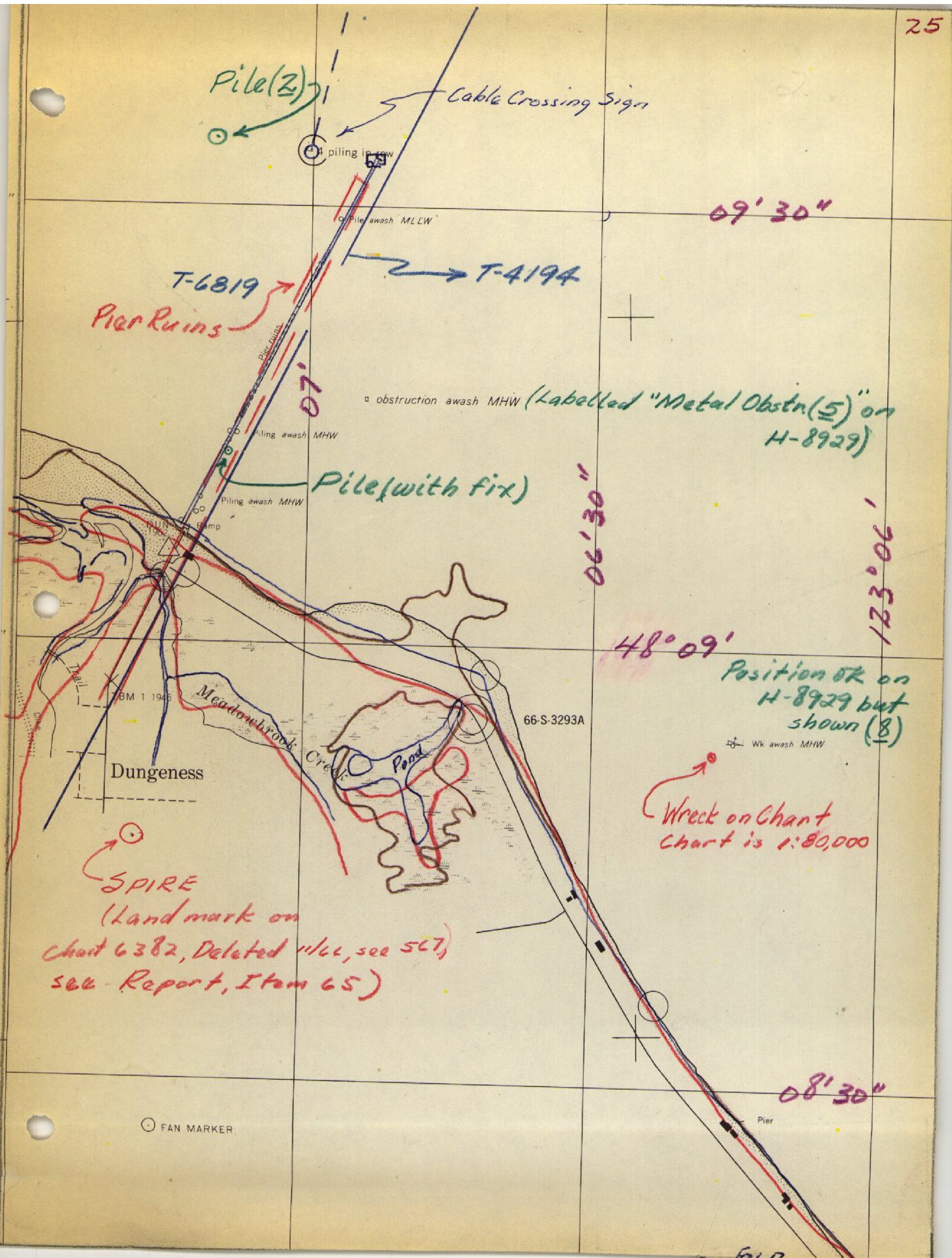
123°06'

Deadhead

D U N G E N E S S

48°10'

T-6819



NOTES TO VERIFIER

T-13098, Joh PH-6706

SMOOTH SHEET - H-8928 (HO-10-1-67), and H-8929 (HO-10-2-67)

Please note Items 64 and 65 in the Final Review portion of the Descriptive Report for T-13098.