

ORIGINAL

Form 504
Ed. June, 1923

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 8 1936

State: Alaska

Acc. No.

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. F 1428

LOCALITY

Aleutian Islands

Unalaska Island

Unalaska Bay - West Shore

1935

CHIEF OF PARTY

H. B. Campbell

Applied to new compilation of Chart No 9007	S.B.M. July 1936
Applied to drawing of Chart No 8860	S.B. Mairge Dec 1936
Applied to drawing of Chart No 8802	S.B. Mairge June 1937
Applied to new compilation of Chart No 9007, (extended)	S. Pisegani Aug 1938
Applied to new Chart Comp. of Chart 9024	Sept. 20, 1938 H.M.
" " " " " " " " 9006	June 1943 S.M.A.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. F

REGISTER NO. **T6428**

State Alaska

General locality Unalaska Island

Locality Unalaska Bay²³ west shore

Scale 1:20,000 Date of survey June, 1935

Vessel U.S.S. DISCOVERER

Chief of party H. B. Campbell

Surveyed by H. J. Seaborg

Inked by H. J. Seaborg

Heights in feet above M.H.W. to ground ~~to tops of trees~~

~~Contours~~ Approximate contours Form line interval 100 feet

Instructions dated Project HT-177 April 13, 1934

Remarks: _____

DESCRIPTIVE REPORT

to accompany

Topographic Sheet No. F

North End of Nateekin Bay to Cape Wislow

Unalaska Island, Alaska

June, 1935

Scale - 1:20,000

U.S.C. & G.S.S. DISCOVERER

H. B. Campbell, Commanding

INSTRUCTIONS

The topography was executed in accordance with the Director's instructions, Project HT-177, April 13, 1934.

LIMITS

This sheet is a resurvey of the west shore of Unalaska Bay, extending from triangulation station KIN 1934 at the north end of Nateekin Bay north along Eider Point and Cape Cheerful and then west to Cape Wislow.

Topography embracing Hog Island is included on this sheet also.
(See picture F on page 9 of this report).

JUNCTIONS

The shoreline at the south of this sheet joins sheet E-1935 of this same survey and the northwest ending is marked by a topographic station mark. A junction at the south was made between the form lines of this sheet and sheet H-1935 of this same survey. A number of elevations common to both sheets were cross verified in the field. These elevations and the corresponding form lines were inked in on both sheets.

CONTROL

Nine triangulation stations control this sheet. Stations BETTY and SKUM were not intervisible and neither one of these stations would see any other station on the sheet. Consequently, two azimuth lines were constructed through BETTY, one to station KALEKTA and one to station AMAKNAK for orientation. Likewise an azimuth line was constructed through station SKUM to station KALEKTA. Station KALEKTA is on the opposite shore of Unalaska Bay while AMAKNAK is on Amaknak Island.

METHODS

Ordinary plane table methods were used in making this survey. Traverses were run between triangulation stations from Eider Point north. The traverse from station SKUM west was terminated at topographic station KIL an unmarked disc. In the area south of Eider Point, topographic signals were located first by a series of plane table cuts from the triangulation stations. All signals were located by the perfect intersection of at least three cuts. The plane table then being set up and oriented at various critical signals, shoreline was rodded in without carrying a traverse. However, a traverse was run on the east side of Hog Island from station HOG to a three point fix at the north end of Hog Island. A three point fix was obtained at the south end of Eider Point reef for the location of the reef and to afford a position for cutting in peaks. All traverses run were adjusted in the usual manner.

TRAVERSES

From	To	Length St.Mi.	Closure Meters	Closure per mi.
Eider ² 1934	Waterfall 1934	1.7	13	7.6
Betty ² 1934	Waterfall 1934	1.0	3	3.0
Betty 1934	Skum 1934	3.3	20	6.0
Skum 1934	Kil	4.5	Dead end	
Hog 1934	3-point fix	1.0	2	2.0

CHARACTER OF SHORELINE

For the most part the rocky bluffs as shown on this sheet present a steep, rugged, and almost vertical appearance, rising abruptly or nearly so from the high water line. These bluffs are of horizontal strata and those about Cape Cheerful have a distinct reddish hue. In places it is impossible to walk along the shore due to the steepness of the bluff at the water line, while in others it is dangerous due to the continuous fall of rocks and stone. This is especially true of the shore about Cape Cheerful. Large slides of loose rock can be seen all along this cape. (See pictures A and B on page 8 of this report). The area from the base of the bluffs out to the high water line and beyond is very rocky and strewn with boulders. Glacier Valley, which borders on Broad Bay, is flat and covered with tall grass about 15 feet above high water. A sizeable stream courses through the middle of this valley. The shore along Broad Bay is composed of a very coarse sand. Similar shorelines and valleys are found at Wide Bay and Wislow Bay (recommended name). The shore along the small valley $\frac{1}{2}$ mile southeast of station SKUM is composed of large round boulders worn smooth by the action of the water.

HIGH WATER LINE

The high water line is defined by the outside edge of the heavy black line.

FOUL AREAS, ROCKS, REEFS

A short black dash line has been used to represent the outside limit of the foul area obtainable by the topographic party. The area between the foul area line and the high water line is rock infested, including rocks awash and sunken. Rod shots and cuts were taken to the outermost line of rocks and the line showing foul area includes all rocks closely

grouped which extend from the high water line. In addition, individual sunken and rocks awash, which because of their outer position could not be rightfully included within the foul area line, have been shown by the customary symbol and note.

The short dash line has been used to show the reef outline at Eider Point and at the north end of Hog Island. Eider Point reef is a composite pile of boulders which bare 2 to 4 feet at M.L.L.W. The reef at the north end of Hog Island has numerous rock ledges jutting up from the rocky bottom. The low water line was defined along the sandy beaches. Rocks above high water have been shown by the customary symbol.

ELEVATIONS AND FORM LINES

All elevations above M.H.W. are shown with figures in red. This applies to high water rocks as well as ground elevations. The position of all land points has been indicated by a red dot and the height figures placed over or to one side of the dot. The form line interval is 100 feet. Most of the elevations south of Eider Point were obtained by plane table cuts taken in this area. However, due to the bluffs north of Eider Point along Cape Cheerful, it was impossible to obtain elevations from shore set-ups in this region. A roll sheet which spanned across to the east shore of Unalaska Bay was constructed and the elevations were obtained by a series of cuts from across the bay. This work was carried along incidental to the topographic work of the east shore of Unalaska Bay. The elevations were then transferred to the original sheet and the form lines drawn in by laying offshore in a launch. The form lines west of SKUM were obtained by setups along the shore. All of the plane table work was supplemented in some degree by sextant cuts. All field data was recorded in sketchbooks as well as sketches of ridge lines of peaks as seen from different positions. ~~These books will be submitted as part~~

~~of the report~~ All form lines were verified by offshore observations.

VERIFICATION AND CHANGES TO TOPOGRAPHY

This survey was compared ^{with} ~~to~~ the current issue of Chart 9007. The shoreline agrees very closely between stations KIN and WATERFALL. But the shoreline north and west of WATERFALL is out considerably, being at station BETTY some 540 meters too far out to the northeast. The outlet of the river in ~~Glacier~~ ^{Makushin} Valley to Broad Bay has shifted north. However, because of the sandy nature of this shore, this outlet is subject to being shifted during the stormy season. The new location of the extinct volcano places it about 250 meters southwest of the chart position and the highest point is 2293 as compared to 2314, the height given on the chart.

LANDMARKS

The cascade (see pictures C and D on pages 8-9 of this report), the base of which is station WATERFALL 1934, is the most distinguishing feature of Cape Cheerful as viewed from the east and can be seen most of the time when the Cape itself is obscured by fog. The new height determination is 133 feet. The extinct volcano west of Eider Point is a crater with three points, the highest being 2293 feet. However, this volcano is not very prominent and can not be identified when well north of Cape Cheerful or along the east shore of Unalaska Bay. It is recommended that the flat-topped peak (called Table Top ^{Mt.} ~~Ns.~~ 2710) be charted as a landmark on Chart 8860. This peak does not come within the limits of Chart 9007. Adjacent topography will serve to identify it. (See picture G on page 9 of this report). Cape Cheerful itself is distinctive because of its bold headlands rising 1000 ft. from the waterline. The cascade (see picture E on page 9 of this report) just north of

Broad Bay is of no great importance as it can only be seen in a restricted area to the southeast. Wislow Island can be distinguished as being apart from the mainland and is a good landmark on approaching Unalaska Bay from the west, provided one is close (enough, in.)

GEOGRAPHIC NAMES

While working in this area, frequent contact was made with fishermen, prospectors, and the like in regard to the names in local use. There seems to be no reason to change the following names as they are well established:

Hog Island ✓	Eider Point ✓	Extinct Volcano ✓
Broad Bay ✓	Cape Cheerful ✓	
Makushin Shadler Valley ✓	Wislow Island ✓	

Wide Bay seems to be the most widely accepted name for the bay west by south of Eider Point although to a few 'locals' it is known as Wood Bay.?

It is recommended that the flat-topped peak $3\frac{1}{2}$ miles west of Eider Point be called 'Table-Top ~~XXX~~ ^{Mt.}'. O.K.

NOTE: Names were inked in prior to knowledge of change of practice.

COAST PILOT

Middle of Page 285. The 'extinct crater' cannot be seen or identified from the west.

STATISTICS

Statute miles of shoreline, high water	23.7
Statute miles of shoreline, (marsh, creeks, rivers) . . .	2.2
Statute miles of shoreline, low water.	19.1
Number of offshore rocks	33
Number of elevations determined.	68

Area, square statute miles 33.75

Number of recoverable positions:

Triangulation 9

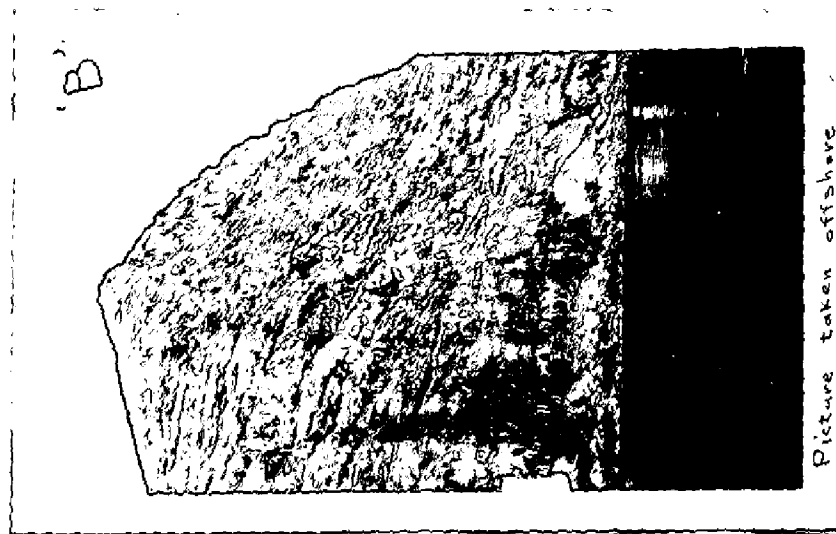
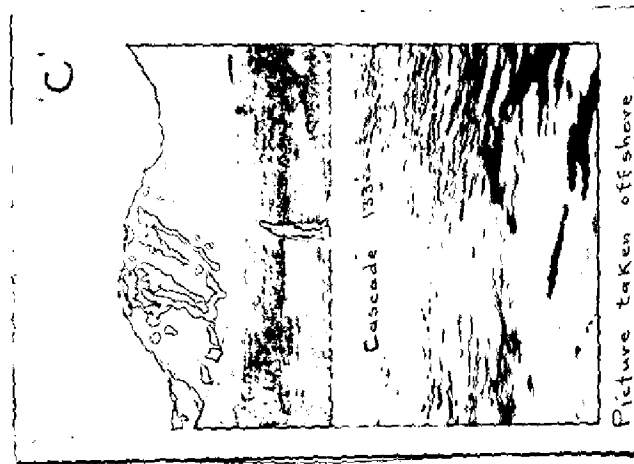
Plane table 8

Respectfully submitted,

H. J. Seaborg
H. J. Seaborg, Aid,
Coast and Geodetic Survey.

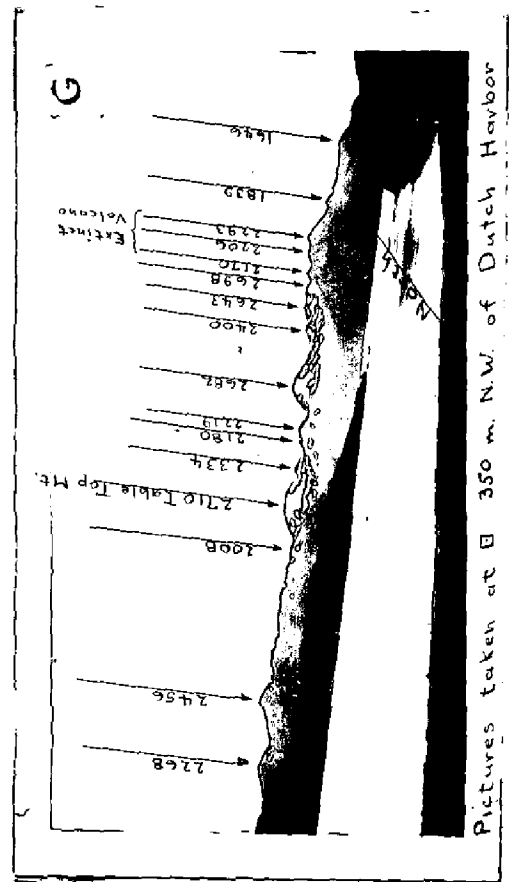
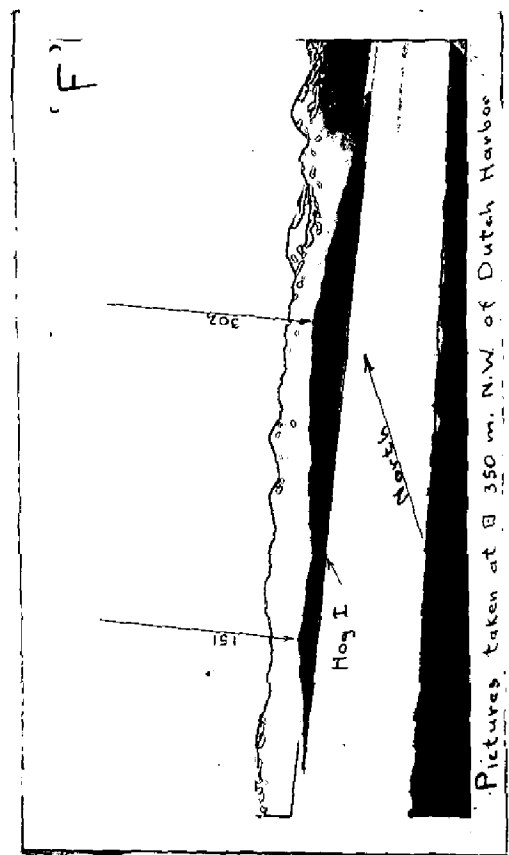
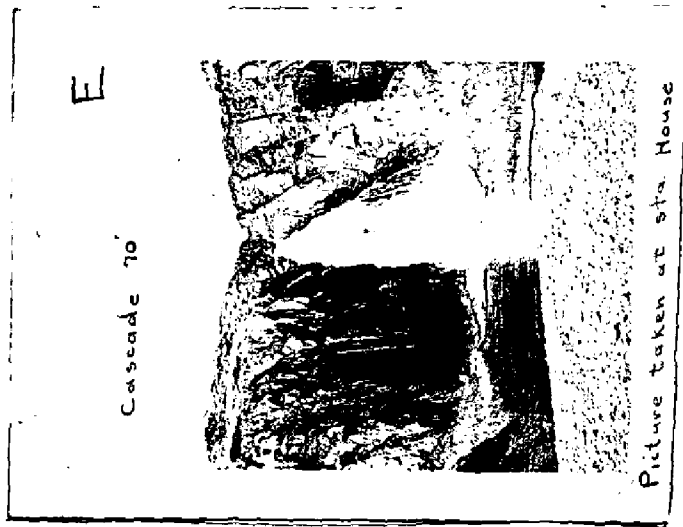
Approved and forwarded:

H. B. Campbell
H. B. Campbell, H. & G. E.,
Chief of Party, C. & G. S.



yep?





LIST OF RECOVERABLE STATIONS

Name	Latitude	D.M.	Longitude	D.P.	Height	Description
Kil	54 00 ✓	1643 ✓	166 45 ✓	101 ✓		Unmarked disc. ✓
Wit	54 00 ✓	1762 ✓	166 41 ✓	282 ✓	60 ✓	North point of ✓ large lone rock ✓
Egg	54 00 ✓	1550 ✓	166 39 ✓	215 ✓	55 ✓	High point of ✓ large lone rock ✓
Elk	54 00 ✓	683 ✓	166 37 ✓	510 ✓	20 ✓	Center of high ✓ est of two rocks. ✓
Fall	53 57 ✓	1757 ✓	166 35 ✓	501 ✓	20 ✓	High point of ✓ sharp rock. ✓
Top	53 56 ✓	157 ✓	166 38 ✓	561 ✓	70 ✓	Top of waterfall ✓
Box	53 54 ✓	1370 ✓	166 33 ✓	1038 ✓	6 ✓	Center of north ✓ end, Hog Island ✓
Ho	53 54 ✓	889 ✓	166 34 ✓	702 ✓	10 ✓	Center of large ✓ rock ✓

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Unalaska Bay

January, 19 36

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

H. B. Campbell

Chief of Party.

[illegible]

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstuffs and like objects are not sufficiently permanent to chart.

Remarks

Decisions

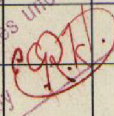
1		
2		
3		
4		USGB decision
5		
6		
7	appears to be a good laminar; see photo.	
8		
9		
10		
11		USGB decision 9/16/38 6th Report S.M.
12		USGB decision
13		
14		
15		
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27		

GEOGRAPHIC NAMES

Survey No. 6428

Name on Survey	<div>On Chart No. 9007</div> <div>On previous survey No. T1950 (1862)</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div> <div>C.P. Chart 5860</div> <div>T6428</div>									
	A	B	C	D	E	F	G	H	K	
<u>Unalaska Bay</u> ✓	*	-						-	-	1
<u>Unalaska Island</u> ✓	*	-					✓	-	✓	2
<u>Cape Wislow</u> ✓	-							-	*	3
<u>Reese Bay</u>				✓						4
Wislow Bay										
<u>Wislow Island</u> ✓								✓		5
<u>Cape Cheerful</u> ✓	*	-					✓		-	6
<u>Table Top Mt.</u>				✓						7
<u>Wide Bay</u>				✓						8
<u>Eider Point</u> ✓	*							✓	-	9
<u>Broad Bay</u> ✓	*							✓	-	10
<u>Makushin</u>										
<u>Alakier Valley</u> ✓	*									11
<u>Mc Lees Lake</u>										12
										13
										14
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										24
										25
										26
										27

Names underlined in red approved

by 

on 4/28/36

M 234

Names underlined in red approved
by ESR on 4/28/36

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } No. H
 PHOTOSTAT OF } No. T 6428

{ received April 9, 1936
 { registered April 14, 1936
 { verified
 { reviewed
 { approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	
----	--

C. K. Green *April 18-36*

REVIEW OF TOPOGRAPHIC SURVEY No. 6428

Title (Par. 56) *West Shore of Unalaska Bay, S.W. Alaska*Chief of Party *H.B. Campbell* Surveyed by *H.J. Seaborg* Inked by *H.J. Seaborg*Ship *Discoverer* Instructions dated *April 13, 1934* Surveyed in *June 1935*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions.
Only one magnetic meridian shown
3. The control and closures of traverses were adequate. (Par. 12, 29.)
Traverses adjusted where necessary
4. The amount of vertical control that the Manual specifies for ~~contours~~-~~formlines~~- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)
Insufficient number of elevations taken in some parts.
5. The delineation of ~~contours~~-~~formlines~~- is satisfactory. (Par. 49, 50.) ✓
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *No maps but some very good pictures submitted with Descriptive Report*
7. High water line on ~~marshy and mangrove coast~~ is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, ~~coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
See reverse side
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. Locations and elevations of summits are given. (Par. 19, 51.) ✓
12. The ^{grass} ~~tree~~ line was shown on mountains. (Par. 16g.)
No trees in this area - Grass line not shown

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 9

T1950 (1867)

This survey of 1867 is only a reconnaissance survey and is only comparable in a general way.

The present survey supersedes T1950 in part.

Chart 9007

A comparison between the present survey and Chart 9007 is adequately given on page 5 of the Descriptive Report. (Note difference in outlet of stream in Glacier Valley). The present survey is much more in detail than this chart.

Chart 8860

That portion of Unalaska Island, not shown on Chart 9007 and covered by the present survey, is very sketchy on the chart. The present survey is an original detailed survey in this area.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *1 card submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown ✓ and declination was checked. ✓ (Par. 17, 52.) *Declination checks that shown on chart very closely*
18. The geographic datum of the sheet is *Unalaska (Unadjusted)* and the reference station is correctly noted. (Par. 34.)
19. Junctions with contemporary surveys are adequate. ✓
Joins T6427 (1935) on the South
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by ✓
24. Remarks:

Reviewed in office by

Chas. R. Bush Jr. June 8, 1936.

Examined and approved:

C. H. Green
Chief, Section of Field Records*R. O. Polbit*
Chief, Division of Charts*Fred. L. Peacock*
Chief, Section of Field Work*W. A. Gaud*
Chief, Division of Hyd. and Top.