

8824

Diag. Cht. No. 8502-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. CS-319 Office No. T-8824

LOCALITY

State Alaska

General locality Alaska Peninsula

Locality Warner Bay to Kuukta Bay

1945

CHIEF OF PARTY

Thos. B. Reed

LIBRARY & ARCHIVES

DATE September 22, 1947

8824

DATA RECORD

T-8824

Quadrangle (II):

Project No. (II): CS-319

Field Office:
Seattle, Washington

Chief of Party: H. E. Finnegan

Compilation Office:
Baltimore, Maryland

Chief of Party: Thos. B. Reed

Instructions dated (II III): Copy filed in Descriptive
29 February 1944 (Supp.) 27 Feb. 1945, Report No. T- (VI)
22 March 1945, 1 April 1946 (Field Supp. 1),
24 February 1947

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: Applied to chart No. Date:

Redrafting Completed:

Registered: Published:

Compilation Scale: 1:20,000 Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.L.L.W.

Reference Station (III): JUDE'S NOSE, 1920 Vol. 5, pg. 101

Lat.: Long.: Adjusted
Unadjusted

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)
150° W. meridian

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
*10936 -*37	9/5/42	1216	1:20,000	5.3' above MLLW
*10945-*46	9/5/42	1231	1:20,000	5.1' above MLLW
11048-50	9/13/42	1115	1:20,000	3.1' above MLLW
11058-*59-*60	9/13/42	1125	1:20,000	3.5' above MLLW

* Rectified prints were also furnished.

21275-9	10/30/47	1227	1:20,000
21267-8	10/30/47	1215	1:20,000

Tide from (III): Predicted Tide Tables - Pacific and Indian Oceans, 1942.
Reference Station KODIAK, Alaska with correction to Chignik,
Anchorage Bay

Mean Range: 6.6' Diurnal
--Spring-Range: 8.7'

Camera: (Kind or source) U.S.Coast and Geodetic Survey mine lens camera-
focal length $8\frac{1}{4}$ ".

Field Inspection by: H.E. Finnegan date: Mar-Sept. 1945

Field Edit by: date:

Date of Mean High-Water Line Location (III): Same as date of photographs

Projection and Grids ruled by (III) T.L.Janson date: 3/28/47

" " " checked by: T.L.Janson date: 3/28/47

Control plotted by: Donald M. Brant date: 4/3/47

Control checked by: Florence M. Senasack date: 4/4/47

Radial Plot by: Frank J. Tarcza and Leroy A. Senasack date: 4/7 to 4/10/47

Topography by: 9-lens plotter; Orvis N. Dalbey and William D. Harris

Detailed by: Ruth E. Rudolph date: 4/16-4/28/47
(Contours inked in the Washington Office) 7/24-7/29/47

Reviewed in compilation office by: J.W.Vonasek date: 8/1-8/14/47

Elevations on Field Edit Sheet manuscript checked by: J.W.Vonasek date: 8/13/47

STATISTICS (III)

Land Area (Sq. Statute Miles): 23

Shoreline (More than 200 meters to opposite shore): 55 statute miles

Shoreline (Less than 200 meters to opposite shore): none

Number of Recoverable Topographic Stations established: 12

photo hydro

Number of ~~Temporary Hydrographic~~ Stations located by radial
plot: 200

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered
by, (II) Field Party, (III) Compilation Party, or, (VI) the
Washington Office.

When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks:

FIELD REPORT

SURVEY NO. T-8824

1. DESCRIPTION OF THE AREA:

T-8824 is one of sixteen topographic surveys in Project No. CS-319 located on the Alaska Peninsula. The instructions for this project are dated 29 February 1944 (Supplemental)

27 February 1945

22 March 1945

1 April 1946 (Field Supplemental No. 1)

24 February 1947

This survey includes the area from Warner Bay south to Kuiu Bay. The entire area is characterized by high rock cliff shore, high, jagged ridges, sharp peaks, and steep slopes of loose rock slides, alder brush, and grass. There are many waterfalls, striking cliffs of contrasting colors, and intermittent stretches of boulder and shale beaches, resulting from broken cliffs and large rock slides. There are numerous pinnacle rocks along the shore, frequently off the capes and points. The water is generally very deep in all of the bays and arms throughout the area.

Unusual jetty like formations of boulder and gravel occur at the south entrance to Ross Cove, located at the head of a small arm on the west side of the entrance to Warner Bay. Similar formations are found at the entrance to Sweater Bay, which is the first arm on the east side of Kuiu Bay. Around these boulder and gravel spits or jetties the water is deep and clear of dangers.

For additional information refer to Season's Report-1945, Project No. CS-319 submitted by H.E. Finnegan.

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8824

26. CONTROL

See radial plot report for layout of control in this area.
A list of stations on Form No. M-2388-12 is included in this report.

27. RADIAL PLOT:

Refer to the report for the combined radial plot covering the areas of Survey Nos. T-8822 to T-8825 inclusive, submitted to the Washington Office 30 April 1947.

28. DELINEATION:

The compilation is in accordance with the written instructions pertaining to Project No. CS-319.

Photographic coverage was not adequate along the southeastern portion of the survey.

29. SUPPLEMENTAL DATA:

United States Coast and Geodetic Survey planetable survey, Register No. 3817, Kuiu Bay dated July 1920. T-8824 was compared with this survey and found to be in fair agreement with the exception of contours. The greatest discrepancy in contours occurs on the north-eastern shore of Sweater Bay where the planetable survey shows the elevation to be 1160 feet. On the manuscript this particular spot is only about 200 feet high and in the immediate area the elevation reaches a maximum of only 900 feet.

30. MEAN HIGH WATER LINE:

Since there was little field inspection of the mean high water line, it was delineated after stereoscopic examination of the photographs. Due to image relief on the east side of Seal Cape, portions of the eastern shore could not be delineated at all and the remainder could not be shown accurately. (10 Dec 48: Using 1947 photos, missing shore line completed on 9-lens plotter)

31. MEAN LOW WATER LINE:

None shown.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

A rock east of Seal Cape has been located using sextant fix data submitted by the field party. This is the only dangerous offlying rock observed south of Seal Cape.

33. WHARVES AND SHORELINE STRUCTURES:

None.

34. LANDMARKS AND AIDS TO NAVIGATION:

None.

35. HYDROGRAPHIC CONTROL:

Two hundred photo hydro stations were located. Two of these, No. 2475 and No. 2476, unable to be radially plotted because of insufficient photographs, were pricked direct after orienting the photographs to the nearest detail points in the same plane.

A list of descriptions is attached to this report. Two copies have been furnished for the use of the hydrographic party.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None.

37. GEOGRAPHIC NAMES:

Geographic names were taken from Charts Nos. 8802 and 8502, and from field data. A list of names is attached to this report.

38. JUNCTIONS:

Junction with T-8825 to the southwest has been made and is in agreement. The eastern end of a bay north of Sweater Bay falls on this survey but will be delineated on Survey No. T-8825.

Junction with T-8822 to the north and with T-8823 to the northwest will be made when those surveys are completed.

To the south is an all water area.

39 and 40. see foot of page 7.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

None available.

45. COMPARISON WITH NAUTICAL CHARTS:

No comparison with United States Coast and Geodetic Survey Charts Nos. 8502 and 8802, scale 1:1,000,000 published August 1944, was made because of the great difference in scale.

45. COMPARISON WITH NAUTICAL CHARTS: (Continued)

The following topographic information shown on T-8620 is of sufficient importance to warrant immediate application to the chart:

None.

The following topographic details above the plane of mean high water are not shown on this manuscript, but are believed to still exist and should be carried forward on the chart:

None.

Low water features are shown in part and will be completed by the hydrographic party.

Respectfully submitted:
29 July 1947

Ruth C. Rudolph
Photogrammetric Aid
Compilation and Descriptive Report

Harry R. Rudolph
Supervisor

Joseph W. Bouasak
Photogrammetric Office Reviewer

Approved and forwarded
Thos O. B. Rind
Officer in Charge
Baltimore Photogrammetric Office

39. DIVISION OF WORK:

a. The radial plot and shoreline compilation was completed in the Baltimore Field Office, and the contours were compiled in the Washington Office on the Reading Plotter.

b. Due to in-sufficient and/or clouded photo coverage, this sheet has not been completed at this time (summer of 1947). Additional coverage is being obtained and the sheet can be finished next year (1948) if the new photography is usable.

40. QUALITY OF CONTOURS:

See footnote on manuscript.

39. (continued)

c. Gaps in contour compilation and shore line delineation completed on 9-lens plotter 10 Dec 48. NW corner of map not completed (all land area) at this time due to lack of control.

GEOGRAPHIC NAMES

Cape Ikti

Devils Bay

Kuiukta Bay

Ross Cove

Seal Cape

Sweater Bay

Warner Bay

NOTES
FOR
HYDROGRAPHIC PARTIES
ALASKA PENINSULA
MAP MANUSCRIPT, SURVEY NO. T-8824
PROJECT NO. CS-319

The $2\frac{1}{2}$ millimeter circles, accompanied with a name and date, are the positions of the topographic stations. The $2\frac{1}{2}$ millimeter circles, accompanied with a number, are the positions of the photo hydro stations. Two copies of the list of descriptions of the photo hydro stations have been furnished for your use.

No comparison with the United States Coast and Geodetic Survey Chart No. 8502, scale 1:1,000,000 published August 1944 was made because of the great difference in scale.

The following topographic information shown on T-8824 is of sufficient importance to warrant immediate application to the chart:

None.

The following topographic details above the plane of mean high water are not shown on this manuscript but are believed to still exist and should be carried forward on the chart:


None.

Low water features are shown in part and will be completed by the hydrographic party.

Respectfully submitted:
29 July 1947


Photogrammetric Aid

Approved and forwarded
August 1947


Thos. B. Reed,
Officer in Charge,
Baltimore Photogrammetric Office

LIST OF DESCRIPTIONS OF
HYDROGRAPHIC SIGNAL SITES

Station No.	Description	Pricked on Photo. No.
2401	South face of rock ledge outcrop in grass bank.	10945
2402	Triangular shaped grass spot on gravel spit. Base 2 ft., altitude 4 ft. pointing offshore. A narrow grass strip extending west on gravel spit.	11060
2403	Center of top of small slide on storm water line.	11061
2404	Lowest of 3 small alder clumps in line at end of gravel beach.	11060
2405	Tip of V indentation in storm water line	11060
2406	Lower edge of detached alder spot	11060
2407	Light boulder on storm water line	11060
2408	Flat topped boulder on storm water line	11059
2409	Large sloping boulder at mouth of small stream in center of V in shore line	11060
2410	Large square cut boulder at grass line.	11061
2411	Flat slab on large square boulder	11060
2412	Upright white topped boulder in grass below boulder slide	11060
2413	Lone boulder in grassy slope	11061
2414	Sloping flat face of boulder at east side of bottom of gravel slide	11061
2415	Waterfall. Point at which water drops vertically between black rock points.	11061
2416	Sharp projection at base of cliff and center of prominent grass strip.	11062
2417	Vertical face of sharp projection extending out front end of gravel beach.	11062
2418	Lower north toe of slide.	11062
2419	Sharp rock projection	11062
2420	Outermost high point on projecting ledge	10936
2421	Black boulder above high water.	10936
2422	Bottom of waterfall	10936
2423	High sharp pointed boulder slab - at foot of knife edged point on rubble beach.	10936

Station No.	Description	Pricked on Photo. No.
2424	Large detached boulder	10936
2425	Foot of vertical grass topped ledge pointing south.	10936
2426	North end and highest point on long detached ledges. Elevation about 25'.	10936
2427	White topped high point of detached ledge near south end.	10936.
2428	Highest point detached ledge. Elevation about 9'.	10936
2429	Highest point of detached rock. Elevation about 15'.	10936
2430	Detached rock with thin double pinnacle tips very close together. Top elevation about 40 ft. This rock shows clear of point from "SWEATER". Very large grass topped pinnacle to the south and slightly inshore.	10936.
2431	Detached rock. Elevation about 12'.	10936.
2432	Light colored pinnacle. Elevation about 40'.	10936.
2433	White topped (bird lime covered) pinnacle (southerly and attached to long grass topped point).	10936.
2434	Very sharp detached pinnacle about 30' high.	10937.
2435	Center of top part of scar.	10937
2436	Highest point on sloping ledge	10937
2437	Grass topped pinnacle point - very small water-fall directly inshore.	10937
2438	Highest point of sloping rock detached at high water. Elevation 20 ft.	10937
2439	Large detached rock sloping seaward. Elevation 18 ft.	10937
2440	Light and black detached rock. Elevation 18 ft.	10937.
2441	Light colored pyramid 18 feet high.	10937
2442	Lone high boulder on gravel beach.	11060
2443	Small cascade	10937
2444	Sloping face (north half) of prominent white point.	11060
2445	Outer one of large boulders at high water line.	11060
2446	End of rock wall.	10937

Station No.	Description	Pricked on Photo. No.
2447	End of rock bluff	10936
2448	End of vertical ledge	10936
2449	End of ledge	10936
2450	End of rock ledge	10936
2451	Offlying rock - bares five feet at M.H.W.	10936
2452	Vertical ledge	10936
2453	Vertical ledge	10936
2454	Rock ledge	10936
2455	Large loose rock lying on end of ledge inshore from offlying rock. Elevation 3 ft.	10936
2456	Rectangular ledge in north end of sloping layers.	10936
2457	Sharp vertical wall	10937
2458	Rock ledge to east of slide which reaches to H.W.	10937
2459	Sloping end of rock ledge	10937
2460	Long detached ledge pinnacle tip - north end elevation about 8 ft.	10936
2461	Highest part of north end of long detached rock. Elevation 8 ft. at H.W.	10936
2462	Small detached rock. Elevation about 5' at H.W.	10936
2463	Westerly white tip of large white topped detached rock.	06305 (1:5000)
2464	Detached rock. Elevation about 7' at H.W.	06305
2465	Highest pinnacle tip of rocky point.	06305
2466	Small pinnacle rock in front of larger grass topped wedge shaped pinnacle.	10937
2467	Southerly pinnacle tip on grass covered rocky islet.	10937
2468	Highest pinnacle point of narrow detached rock between points on either side extending from fan shaped, sheer rock cliff.	10937
2469	Pinnacle	10937
2470	Highest pinnacle tip of rocky point.	06305 (1:5000)
2471	Natural object. Highest point of dark narrow cave, just south of slide and dry stream bed. There is a larger cave just south of it.	10937
2472	Southerly one of two pinnacles on shore, north of prominent cave.	10937

Station No.	Description	Pricked on Photo. No.
2473	Face of first sharp point north of gravel slide	10937
2474	Highest point of pinnacle - base extends off-shore	10937
2475	Large dark boulder just inside H.W. line. Elevation about 10 ft.	10937
2476	Outer face of jutting point.	10937
2477) 2478)	Double tips of easterly spires on ridge. Good for offshore hydrography to southward.	11060
2479	Pointed southerly end of large light colored rock slab leaning against foot of cliff.	11060
2480	End of first sharp vertical point south of waterfall.	11060
2481	Waterfall	11060
2482	Top of sharp cut in cliff	11060
2483	Largest boulder at bottom (east side) of slide.	11060
2484	Top center of narrow light colored cut in rock slope. Good for offshore hydrography.	11060
2485	Boulder bare about 5 ft. at H.W. (outer point of ledge)	11060
2486	End of sharp ledge	11059
2487	Large boulder at bottom	11059
2488	Large boulder	11059
2489	Sharp edge at bottom of crevice	11059
2490	Center of base of light colored slide.	11059
2491	Two large boulders in middle of slide.	11059
2492	Sharp corner of rock ledge.	11059
2493	Build signal in center of grass spot.	11059
2494	Small scar of light colored rock and brown soil.	11060
2495	Top of black rock cliff at foot of crooked drainage bed not visible until abeam of it.	11060
2496	Lone gray rock at edge of alderclump, foot of curving drainage bed. There is a small detached alder bush just south and light colored grass patch just north.	11060

Station No.	Description	Pricked on Photo. No.
2497	Lower northwesterly tip of northwesterly one of two rock slides.	11060
2498	Top of light colored narrow strip of rock outcrop.	11060
2499	Large white boulder on shale beach - elevation 6 ft. Other slightly smaller boulders just west.	10946
24100	Grass topped boulder just outside grass line.	10946
24101	Large lone boulder on low shale beach. Elevation of boulder 6 ft. above shale.	10946
24102	Center of high point of rock pile at foot of slide.	11059
24103	Log wedged on end in large boulder bed at foot of bare rock slide.	11059
24104	Bare rock spot east side of small wash.	11059
24105	Lower west corner of large slide.	11059
24106	Alder spot center of grass area. Board 8 ft. high driven in center.	11059
24107	Large boulder on sharp pointed edge of grass.	11059
24108	Center of upper part of slide.	11060
24109	Stake driven in small alder clump	11060
24109A	Low end of slide	11060
24110	Low point of detached rock slide	11060
24111	Bottom of slide	11060
24112	One rock slab on top of another, both lying flat on rubble in square cut in bank.	11060
24113	Boulder in rubble at foot of dark cliff, boulder is at HW line. Shapes of alder bushes aid in identification.	11060
24114	White rock slab (top of gray rock slabs) at grass line in opening in black rock cliff.	11060

Station No.	Description	Pricked on Photo. No.
24115	Pinnacle of laminated rock. Base attached to cliff.	11059
24116	Point of rock on high water line	11059
24117	Point of rock	11059
24118	Large flat boulder; dark on lower side.	11059
24119	Large smooth boulder, extends into water.	11059
24120	Large boulder on L.W. line. Rubble beach each side.	11059
24121	End of bare rock ledge	11059
24122	Large white rectangular rock at foot of slide	11059
24123	Large boulders at center of base of slide.	11048
24124	Pile or rocks at base of slide.	11048
24125	Pile of rocks at lower east tip of diamond shaped gravel slide.	11048
24126	Highest point of sloping white smooth bedrock. Narrow strip of grass down west side. All between two crevices.	11058
24127	Highest and largest of two white boulders at toe of horse-shoe shaped gravel ring.	11058
24128	End of rectangular rock ledge.	11048
24129	Rock ledge at foot of grass streak.	11048
24130	Sharp vertical ledge extends to L.W. line.	11048
24131	Ledge at south side of stream	11048
24132	Boulder	11048
24133	Southern tip of grass area	11048
24134	Top of waterfall	11048
24135	Lone boulder	11048
24136	Long rock ledge in slide	11048

Station No.	Description	Pricked on Photo. No.
24137	Northerly and nearest to H.W.L. of group of boulders	11048
24138	Large flat white rock at foot of V slide	11048
24139	Sharp rock ledge	11048
24140	Build signal at edge of alders	11048
24141	Top of bare spot	11048
24142	Rock pile at foot of wash.	11048
24143	Rock at edge of grass	11048
24144	Large boulder on beach	11048
24145	End of rock ledge	11048
24146	Build signal over large log on grass line	11048
24147	Large boulder in group	11048
24148	cut in grass line	11048
24149	Large boulder	11048
24150	Large boulder at grass edge	11048
24151	End of solid rock ledge	11048
24152	Large boulder on grass line	11048
24153	Sharp rock projection	11048
24154	End of rock slide	11048
24154A	Large boulder	11048
24155	End of sharp ledge	11059
24156	End of sharp sloping ledge	11059
24157	Edge of sloping ledge	11059
24158	Sharp point of rock with cove in back	11059
24159	Detached rock 12 feet high	11059
24160	Large rock in slide	11059

Station No.	Description	Pricked on Photo. No.
24161	Vertical ledge on shale beach	11059
24162	Low black rock ledge	11059
24163	Sharp knife edge of white rock ledge	11059
24164	Build signal at foot of narrow wash.	11059
24165	Large detached rock close to HW leaning south.	11060
24166	Large loose boulder	11059
24167	Attached pinnacle with beach in back.	11059
24168	High pointed detached rock with grass on top.	11059
24169	Rock awash at H W	11060
24170	Pinnacle tip on jutting point	11060
24171	Detached pinnacle about 20 ft. high	11059 and 11060
24172	Pinnacle on chisel edged point. Elevation about 50 ft.	11060
24173	Highest point of rock. Elevation about 8 ft. <i>Note: New field inspection indicates better identification of rock - New position indicated by red circle</i>	11060
24174	Top of vertical faced, triangular shaped cliff. (White, Conspicuous)	11058
24175	Largest boulder near north end of bottom of slide.	11058
24176	Large detached rock. Elevation 14 ft.	11058
24177	Pinnacle rock.	11058
24178	Breaker awash at HW	11058
24179	Large detached rock with green moss on top. Bares 3 ft. at MHW	11058
24180	Rock ledge	11058
24181	Double pointed detached rock. Elevation 4 ft.	11058
24182	Large rock bare 6 ft. at MHW	11058
24183	White boulder at base of crevice.	11049
24184	Center of base of large bare surface on bluff	11049

Station No.	Description	Pricked on Photo. No.
24185	South corner of sloping ledge	11049
24186	Rock bare 6 ft. at MHW	11049
24187	Small beach lumber signal at point of grass spot.	11049
24188	High grass patch at toe of old slide.	11049
24189	Large rock surrounded by grass on east side of rubble slide	11049
24190	Top of jutting rocky point.	11049
24191	End of laminated vertical ledge.	11049
24192	Outside detached beak topped boulder at foot of jutting cliff.	11048 and 11049
24193	Top of partially detached ledge	11049
24194	Top of detached rock	11050
24195	Detached pinnacle, larger pinnacle with diagonal light streak inshore. <i>Appears to be mislocated. probably intended to be 37 of 1950 f. insp. 21279</i>	11049
24196	Face of sharp jutting point. Northerly and larger of two points.	11049
24197	Large detached rock	11050
24198	Pinnacle.	11050

Listed by: Lutz E. Rudolph
Photogrammetric Aid

Checked by: Joseph W. Wasek
Photogrammetric Engineer

Review Report T-8824
Topographic Map
March 27, 1953

62. Comparison with Registered Topographic Surveys.- None

63. Comparison with Maps of other Agencies.-

U.S.G.S. Topographic Map, Chignik, Alaska, 1:250,000 - 1951
U.S.G.S. Topographic Map, Stepovak Bay, Alaska, 1:250,000 -
1951

These maps are of too small a scale for satisfactory comparison.

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

8710 1:77,477 Oct. 1950

There are no significant differences between this map and the chart in the controlled portion of the chart. In the uncontrolled sketched portion of the chart the shoreline differs considerably.

8502	1:969,761	Sept. 1950
8802	1:1,023,188	Dec. 1952
9302	1:1,534,076	Dec. 1952

These charts are of too small a scale to make a satisfactory comparison of shoreline details.


66. Adequacy of Results and Future Surveys.-This map complies with project instructions and is adequate as a base for hydrographic surveys and the construction of nautical charts.

Reviewed by:

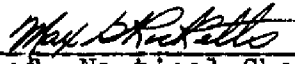

E. J. Colner

APPROVED BY:


Chief, Review Section
Div. of Photogrammetry


Chief, Div. of Photogrammetry

18 Dec 1957


Chief, Nautical Chart Branch
Division of Charts


Chief, Div. of Coastal Surveys

The following photo-hydro stations were field inspected in the fall of 1950 from the E. Lester Jones and are intended to supplement those chosen in 1945 on T-8824.

21268 Field Inspection photo no. 21268 10/30/47 12:16
 Inspected by R. A. Gilmore 9/8/50

1. Prom. undercut rock point at HWL.
2. Prom. large bldr. rock at HWL.
3. Hwl at point of small bldr. beach.
4. Extreme outer point of black rock point. There is a small indent in rock headland to E.
5. Intersection of HWL and mouth of streams.
 (2415 appears to be located on ms. in same position)
6. E'ly of two rocky points about 8 m. apart. (sta. at MHW of point)
7. Large granite bldr. about 12 ' above HW and about 4 meters back of HWL in a grassy open spot on point.
- 8a. Most outer pt. and bldrs. at HWL of sloping grassy point below alders.
8. Lowest pt. of prom. granite bldr. slide area. There is a very large bare slide area immed. above sta. slide area. (Sta. appears to be the same as 2412)
9. Slab rock laying on top of other rocks about 10' above and just back of HWL at point SL just E of slide area.
 Probably same as 2412
10. HWL at small int. str. with dark alder patch above and gully. (There is a small indent in SL to W and one immed. at str. to E.)
11. HWL and mouth of str. (alder fringed)
12. HWL at white bldr. pt. (stream 15 m. to W)
 (use 2409 which was previously selected)
- 13.a Prom. HW rock on point.
 Use 2408
15. HWL at low grassy point about 12 m. E of small stream.
 (Sta. is E'ly and smallest of two points but a little higher in elevation)
16. HWL and mouth of small str. (sta. has about 8' fall)

17. Large black bldr, rock on HWL and 7 m. out from extreme point of grass. There is a stream and huge black bldr. about 29 m. W of sta.
18. Center of prom. bare gray spot on side of mtn. at beginning of gravel beach.
19. HWL and mouth of stream at deepest of 2 prom. gulleys. (sta. gully has waterfall and is W'n of 2)

21269 Field inspection photo 21269 12:17 10/30/47
 Inspected by R. A. Gilmore 9/12/50

250. Black rock pt. at high water line. (deep gully behind. Rock immed. around sta. area is copper-colored.)
251. HW end of pt. that is white colored at end portion. The rock then becomes very dark colored.
 Possibly 2417
252. HW end of prom. light col., sloping rock groin. There are several rust colored patches on the offshore face of formation and the rock in the bight just back of point is very dark colored.
 Probably same * as 2419

21266 Field inspection photo no, 21266 10/30/47... 12:15
 Inspected by J. O. Boyer Sept. '50

513. Top of pinnacle rock.
 Probably same as 24115
514. Pt. of small bluff on first pt. N of Sole 1945.
 Probably same as 24116
515. Pt. of most N'ly of 5 small pts. where hogback 12' above high water joins main bare rock bluff.
516. Offshore rock of group of large rocks near SE end of small bldr. beach.
 Close to 24120
517. Grassline on point.
 Close to 24121
518. N'ly tip of small point 4' above HW and about 90 m. N of bare rock scar on slope.
519. Center of 10 x 18 ' rock projecting 4' above HW. At HW rock is detached from NW edge of slide at bottom of bare rock gully.
 Probably same as 24123

520. Grassline on rock point.
Probably same as 24154
521. Center of bottom of grass and moss patch in large rock slide area. About 10' above HW.
522. Point of sharp point extending SE. A rock is awash at HW about 20' offshore.
Probably same as 24155
523. Rock point. A tiny waterfall flows over the S side of the point. A slightly larger waterfall is about 30 m. SE and a still larger waterfall is about 50 m. N.
524. HWL of Sharp point that parallels the shore. The point is undercut on the side facing the shore.
Probably same as 24158
525. Intersection of prom. rock slide(3) and rock beach.
Probably same as 24160
526. Rock outcropping just S of cascades.
Probably same as 24161
527. White rock point. Bluff to NE is red rock.
Probably same as 24163.
21267. Field Inspection Photo 21267 10/30/47 12:15
Field Inspected by J. O. Boyer & R. A. Gilmore 9/13/50
507. Driftwood dam at mouth of creek.
508. Lowest point of a group of stunted alder in bare rock spot about 1/6 the way up the slope. Spot is below prominent shale scar 1/2 way up the slope.
Hydro's from 1945 inspection nearby.
509. Small log ruins between rock beach and alder below bare rock spots on slope.
510. Grass line on small rock point. There is a small rock point about 150 m. SE and another 90 m. NW.
511. Southwesterly of three (3) small white points. About 75 m. SW of small waterfall.
512. Most northerly sharp shale point.
21276. Field inspected photo no. 21276 10/30/47 12:27
Inspected by J. O. Boyer 9/13/50
501. Lone large rock on large flat rocky point. Flat awash at HWL.
Probably same as 24101

- 502. Face of second point SW of two small waterfalls.
- 503. Edge of scrub alder and grass on small hump at base of prom. rock streak.
Probably same as 24102
- 504. Top of shoe shaped rock. Base three feet below HW.
Top three feet above high water.
- 505. Tuft of grass at base of bldr. streak about 8' above HW.
Probably same as 24103
- 506. Center of small black shale bluff about 8' high and 30' long.

21277. Field inspection photo no. 21277 10/30/47 12:27
Inspected by R. A. Gilmore 9/13/50

- 53. Huge bldr. in rubble pile at slide; E face is very light color. Close to 24175 (3mm).
Not located;
- 54. Round nose like point of gray colored rock at HWL. Sta. is at N end of large area of pronounced gray rock interspersed in dark rock. Immed. sta. has dark patches of rock above and a little patch of grass above.
Not located; within 1mm. of 24174
- 55. Extreme top edge of point where it comes to V edge at HWL.
- 56. Top of approx. 75' pinnacle rock. (grass topped)
Same as Δ pinnacle at entrance to Devils Bay, 1920.
- 57. HWL at copper colored end of huge semi-detached, wedge like segment of shoreline. Sta. is base back from HW ledge in front.
- 58. Top (about 100') of huge, semi-detached, wedge like segment of shoreline.
- 59. HWL end of 40' wall-like jutting point. (slightly undercut at base)
- 60. Center of cone like rock about 12' high.
Probably same as 24171 (other hydro stas. in area)
- 61. End of abutment shaped formation abt. 10' high just in from extreme end has small grass tuft on top.
Probably same as 24167
- 62. High point of detached conical rock abt. 40' high.
- 63. Top of 18' bldr. rock.
Not located; very close to or identical to 24166

64. Stream at HW line.
Probably same as 24164

21278 Field inspection photo no. 21278 10/30/47 12:28
Inspected by R. A. Gilmore 9/13/50

44. 15' high black rock in front of distinctive dark vein of rock running up mountainside.
Close to 24181
45. Black rock nose point at HWL with light colored rock face above.
Close to 24180
46. End of prom. light colored rock vein abt. 50' above HWL.
(vein is seen to continue after a break down to water edge)
47. Rock bears 3' at 1000 9/13/50
Probably same as 24180
48. Small black cave at HWL at base of N'ly of 3 gulleys.
49. Extreme outer end at HWL of wedge-like point. (Black rock just above HW then red colored rock abt. 40' up.)
Very close to Δ Fall, 1945
50. Outer point (undercut) with prom. white spots on it.
51. 25' high detached rock.
Probably same as 24177
52. HWL at prom. rock core (dark reddish) remaining between slide area at deep ravine--Top is grassed over abt. 50' up.

21279 Field inspection photo 21279 10/30/47 12:29
Inspected by R. A. Gilmore 9/13/50

- 31a. 12' high pinnacle rock.
Probably same as 24198
32. 8' high detached rock.
Probably same as 24197
33. Center of large, flat, 30' high rock. (bird lime spattered)
Same as Δ sta. Jill, 1945
34. 35' high shaft-like rock at pile of bldrs. (grass topped)
35. Large white spotted bldr. rock at HWL just E of rainbow-like strata streak in cliff side.
36. HWL at point with two distinct horizontal veins of light col. rock. Pt. is grass topped above upper vein. There is a longer, blunter pt. immed. to W.

- 36a. Foot of waterfall back about 15 m. from HWL.
37. Pinnacle rock about 40' high.
Appears same as 24195--possible compilation error.
38. Top (abt. 80' above HW) of streak of predominately white colored rock.
- 38a. Prom. exposed black rock nob.
39. HWL of sloping high grass topped point. There is a LW ledge running out from point.
Probably same as 24185
40. Prom. waterfall at base.
Not located
41. Upper end of prom. eroded streak.
Not located
42. Prom. wall-like eroded vein of reddish brown. Sta. is at base of vein about 3 m. back of HWL.
Close to 24182
43. Large light colored boulder back of HWL.
Close to 24132

Partially Applied to Chart 8710
6/6/51 ~~Reckman~~.