



CONTACT INFORMATION  
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John Wood -  
Canada.

2/5/62

Bethlehem, Copper, Highland valley, B.C. #1 x 10<sup>6</sup>

Land Status at  
Itria Peak.

Jap.

Spud Hester pres of  
Bethlehem.

plate 18 U.S.S. 978(e) Bull.

WALLPAI - Cerbat Mts.  
by M.G. DING

Shows stoch work.

myriad of dikes and <sup>major</sup> lineament etc.

1/2 day or 1 day } to  
Office evaluation: } alb.

Howe Sound, Canada,

4/8/62  
ARIZ Duce  
inquiries.

Big Ba of Mine. 2/8/62  
Reports "general" interest & activity.

CHAPMAN, WOOD & GRISWOLD  
ALBUQUERQUE, N. M.

DETACH AND RETAIN THIS STATEMENT  
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.  
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

DATE	DESCRIPTION	AMOUNT
2-19-62	Statement 2-12-62	\$91.20



February 12, 1962

Chapman, Wood & Griswold  
P. O. Box 8302  
Albuquerque, New Mexico

Attn: Mr. John Wood

Letter Report: Wallapai District, Mojave County, Arizona  
Local Office Land Status Check

Dear John:

After researching all immediately available literature, reference files, and numerous phone calls, we come up with the following apparent general situation. Unfortunately, very few specific details regarding exact ownership were available here. Of course, these would be available from the Kingman court house and on the ground, etc.

Your general impression of tentative interest regarding the stock work development and myriads of dikes, etc., has apparently also been considered by others. However, the major effort has concentrated around the two strongest general shows of Cu and/or gossan, primarily Anaconda (?), Kennecott, others and now Duval at Mineral Park and secondarily Newmont and American Metals around Emerald Isle. Otherwise, somehow, there has been slightly more apparent interest in the northern 2/3 and western part of the district, than in the southern 1/3 and eastern part. Possibly this is due to a psychological leaning toward the greater past production from around Chloride.

Generally speaking, except for minor gaps (?) we understand Duval has about everything for at least a mile completely around Ithaca Peak and about 2 to 3 miles west and SW out to the old main road west of Emerald Isle, (a lot of this reportedly for tailing and dump space, etc.) or something like 12 to 15 sections. The consensus is about 50 - 50 whether they have the Emerald Isle group or not. This group at one time comprised some 20 - 40 +/- patented and unpatented claims controlled by a Mr. C. H. Weeks of Kingman from whom Newmont had their option. At the time, Fred Searls expressed some interest in the potential from the

Emerald Isle to the north, based on preponderant zinc at Chloride and an evident (?) increased mineral zoning temperature from there to the south. Considerable ground may be available in this area. Seven unpatented Pb-Zn-Ag-Cu unpatented claims in the Rico and its trend are owned by Nellie Clack, P. O. Box 907, Kingman, leased to W. E. Iseman of Calizona Mining Co., Tucson and are available. Supposedly they go NW almost to Duval ground with a small open gap between.

Other than this, the north 1/3 of the district around Chloride is apparently more or less available, but is held by and in numerous and various sized groups and individuals, thus presenting a fairly typical complex consolidation problem. The southern 1/3 of the district should be somewhat similar, but less past production should make it definitely easier and more open in the aggregate. We have little accurate dope along the north east side of the district (east of the Cerbat Mtns. divide) and north of Chloride, but these areas should be the most open of anything immediately adjacent.

Enclosed you will find three maps; Map One is the U.S.G.S. Chloride Quad with the sections identified as to ownership; Maps Two and Three are a sepia and film claim map of Wallapai Mining District. Although the maps are not quite at the same scale they are close enough to use one as an overlay in order to get an idea of claim distribution in the district as a whole as well as in each section. The claim map is from U.S.B.M., R.I. 4101 of August 1947. The Arizona state - land status is fairly accurate and is up to date as of July 28, 1961. The railroad land information is from a Soil Conservation Service map dated 1942 and the private land information is from the same source. If more work is planned in the area a court house check as well as a check of the State and Federal Offices in Phoenix should be made.

Other references are:

U.S.G.S. Bulletin 978 - E. "Wallapai Mining District Cerbat Mountains Mojave County, Arizona." by M. G. Dings.

U. S. Bureau of Mines 4101 - 1947 by P. S. Haury

U. S. G. S. Bulletin 397 "Mineral Deposits of the Cerbat Range, White Range Mtns. and Grand wash Cliffs" by F. C. Schrader.

Mr. John Wood

- 3 -

February 12, 1962

Arizona Bureau of Mines Bulletin 156, pg. 138-142  
Arizona Bureau of Mines Bulletin 145, pg. 110-117  
Economic Geology, Vol. 7, pg. 382-392  
" " Vol. 45, pg. 175-176  
" " Vol. 44, pg. 663-705

Respectfully submitted,

HEINRICHS GEOEXPLORATION CO.

E. Grover Heinrichs  
Vice President

EGH: jh

Encl: 3 & extra letter report

February 12, 1962

S T A T E M E N T

To: Chapman, Wood & Griswold  
P. O. Box 8302  
Albuquerque, New Mexico

-----  
Re: Land Status, office research, investigation Wallapai  
Mining District, Mojave County, Arizona, February 1962  
-----

Services:

February 9, 1962----Tucson Office Staff Day-----\$80.00

Expenses:

Reproductions, maps, etc.----- 11.20

TOTAL:           \$91.20

Sent 2 copies of  
1/2 letter report.

February, 1962

Air Mail

①

Statement

To: Chagman, Wood & Griswold, Albuquerque  
Att: Mr. John Wood  
office research N.M.

Re: Lavo Status, investigator  
WALLPAI Mining District, Mohave Co., Ariz.

Charges

February 9, 1962, Tucson office  
staff day — \$60.00

Expenses

Reproduction expenses: 10.53

Total 90.53

see over ↓

Just: (before close on last page) (page 4)

~~that you may be involved in the district below is~~  
~~a list of references you may find useful:~~  
Other are:

U.S.G.S. Bulletin 978-E

Wallaqui Mining Dist Cerbat Mountains  
Mohave County, Arizona.

by M.G. Diags

U.S. Bureau of Mines 4101 - 1947 by P.S. Haury

U.S.G.S. Bulletin 397

Mineral Deposits of the Cerbat Range,  
White Range Mtns. & Grandwash Cliffs,

by F.C. Schrader

Ariz. Bureau Mines Bulletin 156 pg. 138-142

" " " " 145 pg. 110-117

Economic Geology Vol. 7 pg. 382-392

" " " " Vol. 45 " 175-176

" " " " Vol. 44 " 663-705  
" " " " Vol. 44 " 712-725

1 1/2 20,000 - Mil 2  
file 2 CW & G, file

(2)

Re: CW & G; Attn: Mr. John Wood: 2/10/62  
Letter Report:

Walla Walla Dist. Wapine County, ARIZ

Local Office land status ~~assessment~~ check.

Dear John: After researching all immediately available literature, reference files, and numerous phone calls, we come up with the following <sup>apparent</sup> general situation. Unfortunately, very little specific details regarding exact ownership were available here. Of course, these would be available from the Kingman court house and on the ground, etc.

Your general impression of tentative interest regarding the stock work development and systems of dikes etc., has <sup>also</sup> apparently been considered by others. However, the major effort has concentrated around the <sup>two</sup> strongest general shows of Cu & Fe <sup>around?</sup> <sup>gross</sup>, primarily Kennecott, others and now Davel at Mineral Park and secondarily Vermont & Am Metals around Emerald Lake.

Otherwise, somehow, there has been <sup>slightly</sup> more apparent interest in the northern 2/3 <sup>western</sup> part of the district, than in the southern 1/3 and eastern part. Possibly this is due to a psychological leaning toward the greater part

# Production from around Chloride.

Generally speaking, except for minor gaps <sup>we understand</sup> Dural <sup>completely</sup>

has about everything for at least a mile, around Itasca Peak and about 2 to 3 miles west ~~of~~

SW, out to the old main road west of Emerald Lake, <sup>(a lot of this <sup>repeatedly</sup> for tailing & dump space etc.)</sup> or something like 12 to 15 sections. The consensus is

about 50-50 whether they have the Emerald Lake group or not. This group at one time comprised some 20 ~~40~~+

patented & unpatented claims, ~~all~~ controlled by a MR C.H.

Weeks of Kingman from whom Newmont had this option. At

the time, Fred Seals <sup>expressed</sup> some interest in the potential from

~~to the~~ Emerald Lake, north, based on <sup>prevalent</sup> zinc at Chloride and <sup>an</sup> evident (?)

<sup>mineral zoning from there</sup> increased temperature, to the south. Considerable ground ~~is~~ may

be ~~available~~ <sup>Seven</sup> available in this area ~~of~~ <sup>Pb-Zn-Ag-Cu</sup> unpatented claims

on the Rio and its bend are owned by Nellie Clark Box 907 Kingman, leased to W.E. Iseman <sup>Arizona Mining Co & Tucson</sup> available. Supposedly they go NW almost to Dural ground with a small open gap between.

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production should make it definitely easier, <sup>is more open</sup> in the aggregate.

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(East of the Cerbat Mts divide)  
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Enclosed you will find three maps; <sup>map</sup> one  
is the U.S.G.S. Chloride Quad. with the sections  
identified as to ownership; maps two & 3 <sup>are</sup> ~~are~~ <sup>sepia & film</sup> ~~are~~ <sup>claim map</sup>  
of Wallapai Mining Dist. Although the maps are not  
quite at the same scale they are close enough to  
use areas an overlay in order to get an idea of claim  
distribution in the district as a whole as well as in each  
section. ~~The~~ The claim map is from U.S. B. M. R. I. 4101  
of Aug. 1947. The Arizona State-land, <sup>status</sup> is fairly  
accurate and is up to date as of July 28, 1961. The  
Railroad land ~~the~~ information is from a Soil Conservation  
Service map dated 1942 and the private land info.  
is from the same source. ~~all~~ If more work is  
planned in the area a court house check as well  
as a check of the State & Federal offices in  
Phoenix should be made.

~~For your information on any further research~~

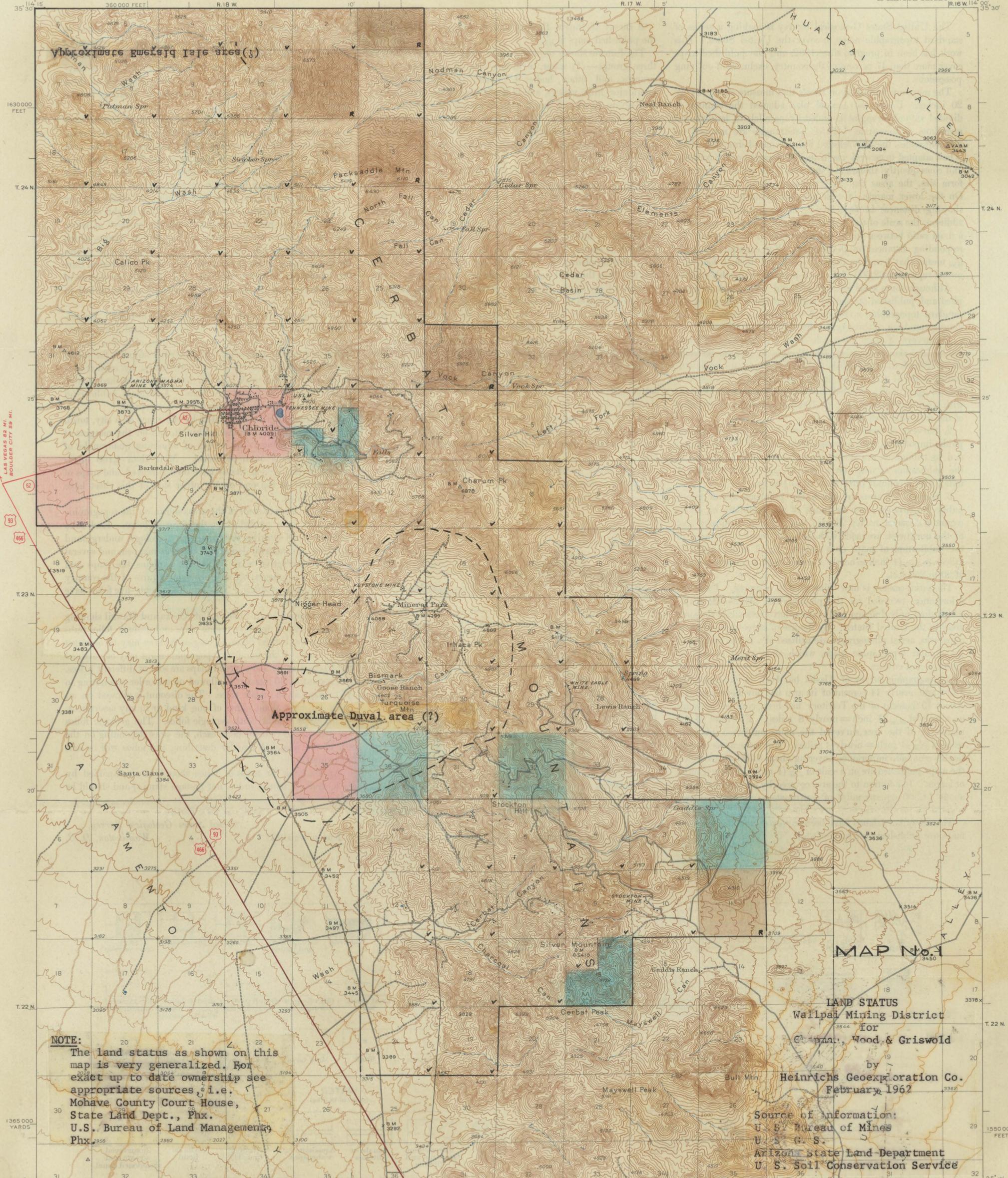
#

Insert  
see back of  
page 1 (copy)

Respectfully submitted:  
G. Everett EGH.

Encl: 3 & ext'd letter pt  
cc: " " " " encl





**NOTE:**  
The land status as shown on this map is very generalized. For exact up to date ownership see appropriate sources, i.e. Mohave County Court House, State Land Dept., Phx. U.S. Bureau of Land Management, Phx.

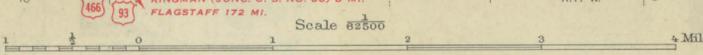
**MAP No. 1**  
**LAND STATUS**  
Wallpai Mining District  
for  
C. J. Wood & Griswold  
by  
Heinrichs Geoexploration Co.  
February 1962

Source of Information:  
U.S. Bureau of Mines  
U.S.G.S.  
Arizona State Land Department  
U.S. Soil Conservation Service

Topography by Lawrence Hankins, J.M. Holmes, Chester Lloyd, and William Knox  
Surveyed in 1939

**INFORMATION**

- Arizona State Land
- Private Land
- Railroad Land
- Vacant Land except patented mining claims (see overlay)



Contour interval 50 feet  
Datum is mean sea level

ROUTES USUALLY TRAVELED  
HARD IMPROVED SURFACES  
OTHER SURFACE IMPROVEMENTS  
U.S. ROUTE 1944 STATE ROUTE

Polyconic projection, 1927 North American datum  
5000 yard grid based on U.S. zone system, F  
10000 foot grid based on Arizona (West)  
rectangular coordinate system

# THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a series of standard topographic maps to cover the United States. This work has been in progress since 1882, and the published maps cover more than 47 percent of the country, exclusive of outlying possessions.

The maps are published on sheets that measure about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, the areas that they represent are of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, miles, and kilometers. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale  $\frac{1}{62,500}$  means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 of the same units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys and the resulting maps have for many years been of three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient detail to be used in the publication of maps on a scale of  $\frac{1}{31,250}$  (1 inch = one-half mile) or  $\frac{1}{24,000}$  (1 inch = 2,000 feet), with a contour interval of 1 to 100 feet, according to the relief of the particular area mapped.

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient detail to be used in the publication of maps on a scale of  $\frac{1}{62,500}$  (1 inch = nearly 1 mile), with a contour interval of 10 to 100 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, and the high mountain area of the northwest, are made with sufficient detail to be used in the publication of maps on a scale of  $\frac{1}{125,000}$  (1 inch = nearly 2 miles) or  $\frac{1}{250,000}$  (1 inch = nearly 4 miles), with a contour interval of 20 to 250 feet.

The aerial camera is now being used in mapping. From the information recorded on the photographs, planimetric maps, which show only drainage and culture, have been made for some areas in the United States. By the use of stereoscopic plotting apparatus, aerial photographs are utilized also in the making of the regular topographic maps, which show relief as well as drainage and culture.

A topographic survey of Alaska has been in progress since 1898, and nearly 44 percent of its area has now been mapped. About 15 percent of the Territory has been covered by maps on a scale of  $\frac{1}{500,000}$  (1 inch = nearly 8 miles). For most of the remainder of the area surveyed the maps published are on a scale of  $\frac{1}{250,000}$  (1 inch = nearly 4 miles). For some areas of particular economic importance, covering about 4,300 square miles, the maps published are on a scale of  $\frac{1}{62,500}$  (1 inch = nearly 1 mile) or larger. In addition to the area covered by topographic maps, about 11,300 square miles of southeastern Alaska has been covered by planimetric maps on scales of  $\frac{1}{125,000}$  and  $\frac{1}{300,000}$ .

The Hawaiian Islands have been surveyed, and the resulting maps are published on a scale of  $\frac{1}{62,500}$ .

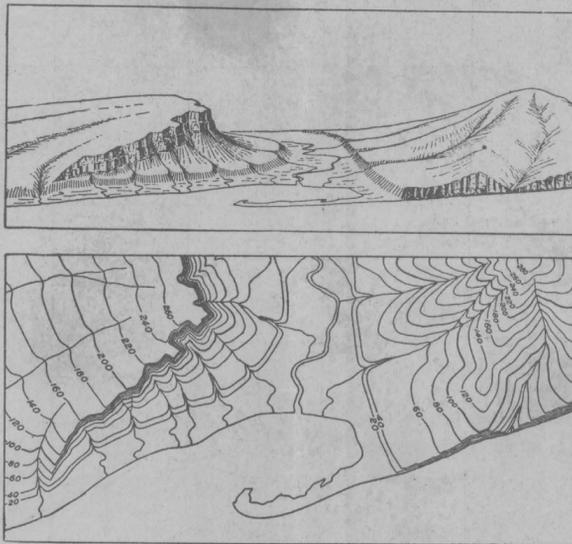
A survey of Puerto Rico is now in progress. The scale of the published maps is  $\frac{1}{60,000}$ .

The features shown on topographic maps may be arranged in three groups—(1) water, including seas, lakes, rivers, canals, swamps, and other bodies of water; (2) relief, including mountains, hills, valleys, and other features of the land surface; (3) culture (works of man), such as towns, cities, roads, railroads, and boundaries. The symbols used to represent these features are shown and explained below. Variations appear on some earlier maps, and additional features are represented on some special maps.

All the water features are represented in blue, the smaller streams and canals by single blue lines and the larger streams by double lines. The larger streams, lakes, and the sea are accentuated by blue water lining or blue tint. Intermittent streams—those whose beds are dry for a large part of the year—are shown by lines of blue dots and dashes.

Relief is shown by contour lines in brown, which on a few maps are supplemented by shading showing the effect of light thrown from the northwest across the area represented, for the purpose of giving the appearance of relief and thus aiding in the interpretation of the contour lines. A contour line represents an imaginary line on the ground (a contour) every part of which is at the same altitude above sea level. Such a line could be drawn at any altitude, but in practice only the contours at certain regular intervals of altitude are shown. The datum or zero of altitude of the Geological Survey maps is mean sea level. The 20-foot contour would be the shore line if the sea should rise 20 feet above mean sea level. Contour lines show the shape of the hills, mountains, and valleys, as well as their altitude. Successive contour lines that are far apart on the map indicate a gentle slope, lines that are close together indicate a steep slope, and lines that run together indicate a cliff.

The manner in which contour lines express altitude, form, and grade is shown in the figure below.



The sketch represents a river valley that lies between two hills. In the foreground is the sea, with a bay that is partly enclosed by a hooked sand bar. On each side of the valley is a terrace into which small streams have cut narrow gullies. The hill on the right has a rounded summit and gently sloping

spurs separated by ravines. The spurs are truncated at their lower ends by a sea cliff. The hill at the left terminates abruptly at the valley in a steep scarp, from which it slopes gradually away and forms an inclined tableland that is traversed by a few shallow gullies. On the map each of these features is represented, directly beneath its position in the sketch, by contour lines.

The contour interval, or the vertical distance in feet between one contour and the next, is stated at the bottom of each map. This interval differs according to the topography of the area mapped: in a flat country it may be as small as 1 foot; in a mountainous region it may be as great as 250 feet. In order that the contours may be read more easily certain contour lines, every fourth or fifth, are made heavier than the others and are accompanied by figures showing altitude. The heights of many points—such as road intersections, summits, surfaces of lakes, and benchmarks—are also given on the map in figures, which show altitudes to the nearest foot only. More precise figures for the altitudes of benchmarks are given in the Geological Survey's bulletins on spirit leveling. The geodetic coordinates of triangulation and transit-traverse stations are also published in bulletins.

Lettering and the works of man are shown in black. Boundaries, such as those of a State, county, city, land grant, township, or reservation, are shown by continuous or broken lines of different kinds and weights. Public roads suitable for motor travel the greater part of the year are shown by solid double lines; poor public roads and private roads by dashed double lines; trails by dashed single lines. Additional public road classification if available is shown by red overprint.

Each quadrangle is designated by the name of a city, town, or prominent natural feature within it, and on the margins of the map are printed the names of adjoining quadrangles of which maps have been published. More than 4,100 quadrangles in the United States have been surveyed, and maps of them similar to the one on the other side of this sheet have been published.

Geologic maps of some of the areas shown on the topographic maps have been published in the form of folios. Each folio includes maps showing the topography, geology, underground structure, and mineral deposits of the area mapped, and several pages of descriptive text. The text explains the maps and describes the topographic and geologic features of the country and its mineral products. Two hundred twenty-five folios have been published.

Index maps of each State and of Alaska and Hawaii showing the areas covered by topographic maps and geologic folios published by the United States Geological Survey may be obtained free. Copies of the standard topographic maps may be obtained for 10 cents each; some special maps are sold at different prices. A discount of 40 percent is allowed on an order amounting to \$5 or more at the retail price. The discount is allowed on an order for maps alone, either of one kind or in any assortment, or for maps together with geologic folios. The geologic folios are sold for 25 cents or more each, the price depending on the size of the folio. A circular describing the folios will be sent on request.

Applications for maps or folios should be accompanied by cash, draft, or money order (not postage stamps) and should be addressed to

THE DIRECTOR,

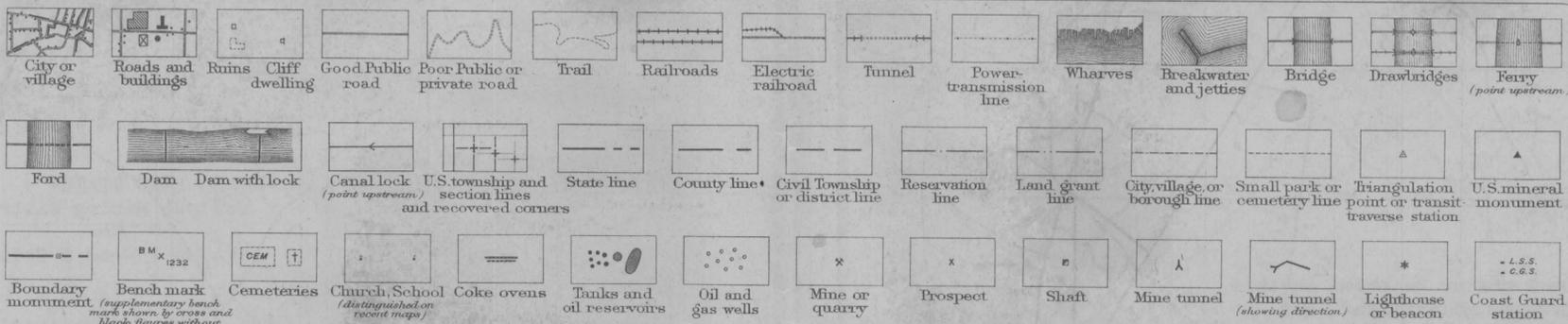
United States Geological Survey,

Washington, D. C.

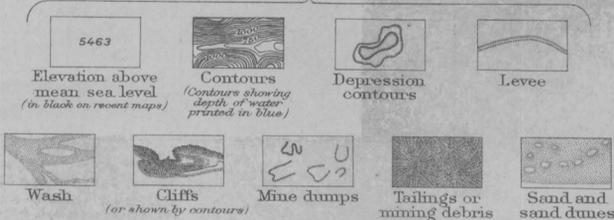
November 1937.

## STANDARD SYMBOLS

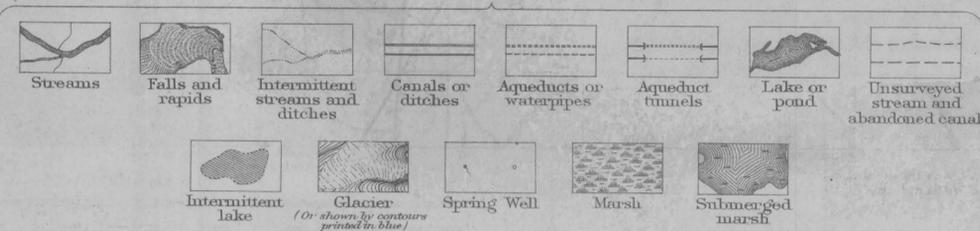
### CULTURE (printed in black)



### RELIEF (printed in brown)



### WATER (printed in blue)



### WOODS (when shown, printed in green)

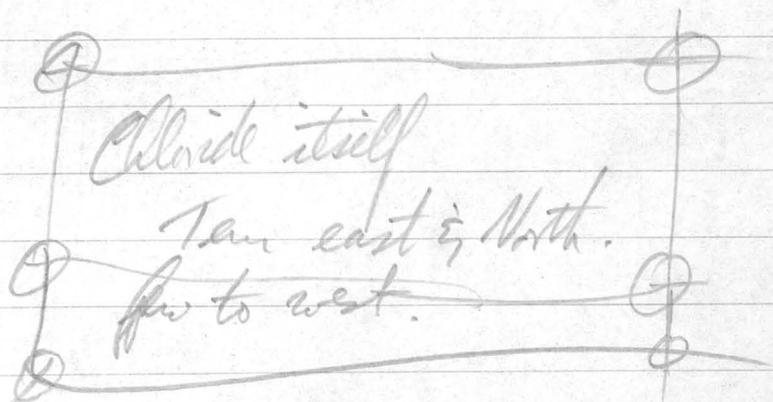
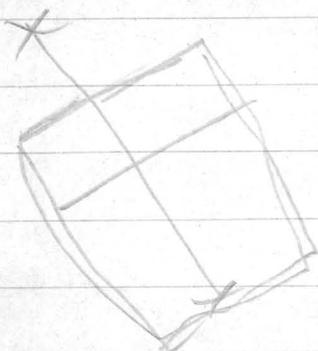
Bear Creek.

Dredal 98% tied up.

To west 250 miles <sup>on flat</sup> located at one time

1/2 - 3/4 mile N of Emerald Isle. Dredal.

Chloride new group.



~~Chloride~~ Keith Martin -  
1959 -