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Michigan land and Iron County's land, Northern Michigan: [specimens] 16896-17049. No. 88 1889

Merriam, W. N.
[s.l.]: [s.n.], 1889

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U. S. GEOLOGICAL SURVEY
FIELD SECTION BOOK

No. 88

1889

Michigan Land & Iron Co's. Land.
Northern Michigan.

H. H. Merriam,

16846-17014

Aug 24 89

SURVEY OF THE PRE-CAMBRIAN ROCKS OF THE N. W. STATES.

INSTRUCTIONS.

1. Ordinarily at least two pages of this book will be devoted to one section. On the left hand page place a map of as much of the section as has *actually been seen*. Denote rivers, lakes, marshes, etc., by the usual topographical signs. Denote the ledges of rock, when no structure is made out, by cross-hatching, making the cross-hatching cover as nearly as possible the areas occupied by the exposures. If the rock is a massive one, but still more or less plainly bedded, use the same sign with a dip arrow and figure attached, showing the amount and inclination of the dip. Denote slaty or other very plainly bedded rocks by lines running in the direction of the strike, with figures and a dip arrow attached as before. In all cases where there is the least doubt about the true bedding directions, indicate it by a query. To each exposure on the face of the map attach the number of the specimen representing it. In mapping the section count each of the spaces between the blue lines as 100 paces, and twenty of these spaces as one mile, or 2,000 paces. Usually the southeast corner will be placed at the bottom of the page, or at the first black line above the bottom of the page, and at the right hand side. If, however, for any reason, it is desirable to show portions of an adjoining section, the southeast corner may be shifted up, or the map may be turned around and the north placed at the left hand side of the page.

2. On the right hand page place the notes descriptive of the exposures. Begin in each case with the number of the specimen, placing the number on the left hand side of the red line, after which give in order on the right of the same red line the position of the ledges as reckoned in paces from the southeast corner of the section, and the dip and strike when observable, for instance: 4025 250 N., 300 W., *Strike, N. 6° E., Dip, 50° E.* Then follow with as full a description of the ledge as possible.

3. The ruling of the left hand page is also arranged so that a smaller scale can be used. Each one of the black lines may represent a section line and the red lines quarter sections and "forties." The scale of the maps may thus be reduced, if desirable, to two inches to the mile (the ordinary town plat scale.)

4. Collect a specimen from each separate ledge of rock, or wherever there is a change of rock on any one ledge. In case of trips made on foot or in canoes, for long distances, neighboring ledges, unquestionably of one kind of rock, need not be sampled, the position and extent of the ledge being marked on the map, with a note that it is of a rock identical with specimen so-and-so. Under the same conditions small sized samples, trimmed to a uniform size of $2 \times 2\frac{1}{2} \times \frac{1}{4}$ inches will be allowed, but in all other cases *large sized specimens*, trimmed to a size of $3 \times 4 \times 1$ inches, must be selected, in accordance with § 3, chapter IV, p. 44, Regulations of the U. S. Geological Survey. In all cases collect chips for slicing. All specimens are to have numbers painted on them, in white on a black background, in the field.

5. On the last twenty-five pages of the book give, as may seem desirable, a general account of the examination of the region mapped in the previous pages, correlation of observations, sketches, cross sections, etc., etc.

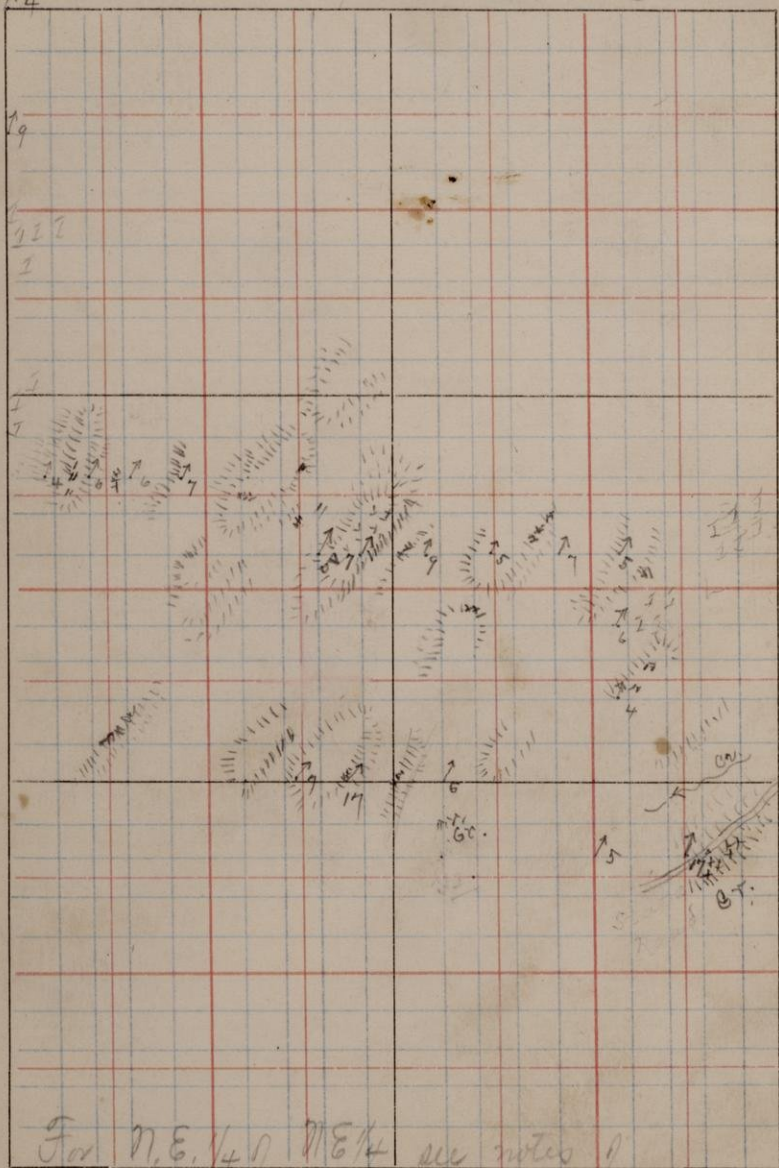
NE 1/4 3

T.

47

R.

30



For N.E. 1/4 of NE 1/4 see notes of
 W. H. Merriam

16896 1400 N 920 W SE 3-47-30

From a ridge at swamp's edge
Dip about 45° (N 70° W). Str N 20 E

16897 1400 N 890 W SE - 3-47-30

From low land just below ridge
to west.

16898 1400 N 690 W SE - 3-47-30

From south end of ridge

Same rock, 75 paces to NE also
at 75 paces to SE.

Str. at last place about N 20 E

Dip 45° (N 40° W)

16899 1300 N 600 W SE - 3-47-30

This bluff as marked in plat
is all rock like specimen.

16900 1250 N 300 W SE 3-47-30

E. side of ridge.

Dip 45° (N 40° W) Str S 20° W

N 1/4 3

T.

47

R.

30

LAKE MICHIGAN

16 17 16 17 11 4 4 5 2 10 11 12 6 2 1

20 photo
Lake

9 5 4 3 5 4 5 4 6

5 4 5 4 5 4 5 4 6

16901 1100 N 250 W SE - 3-47-30

16902 900 N 75 W SE - 3-47-30

16903 } 875 N 125 W SE 3-47-30

16904 }

These two specimens are from same mass and seem much mixed in the outcrop.

16905 1020 N 586 W SE 3-47-30

16906 1020 N 600 W SE 3-47-30

Dip about 45° N. W. Str. S 30 W

also at 1000 N 800 W. mixed with granite.

16907 1100 N 1430 W S.E. 3-47-30

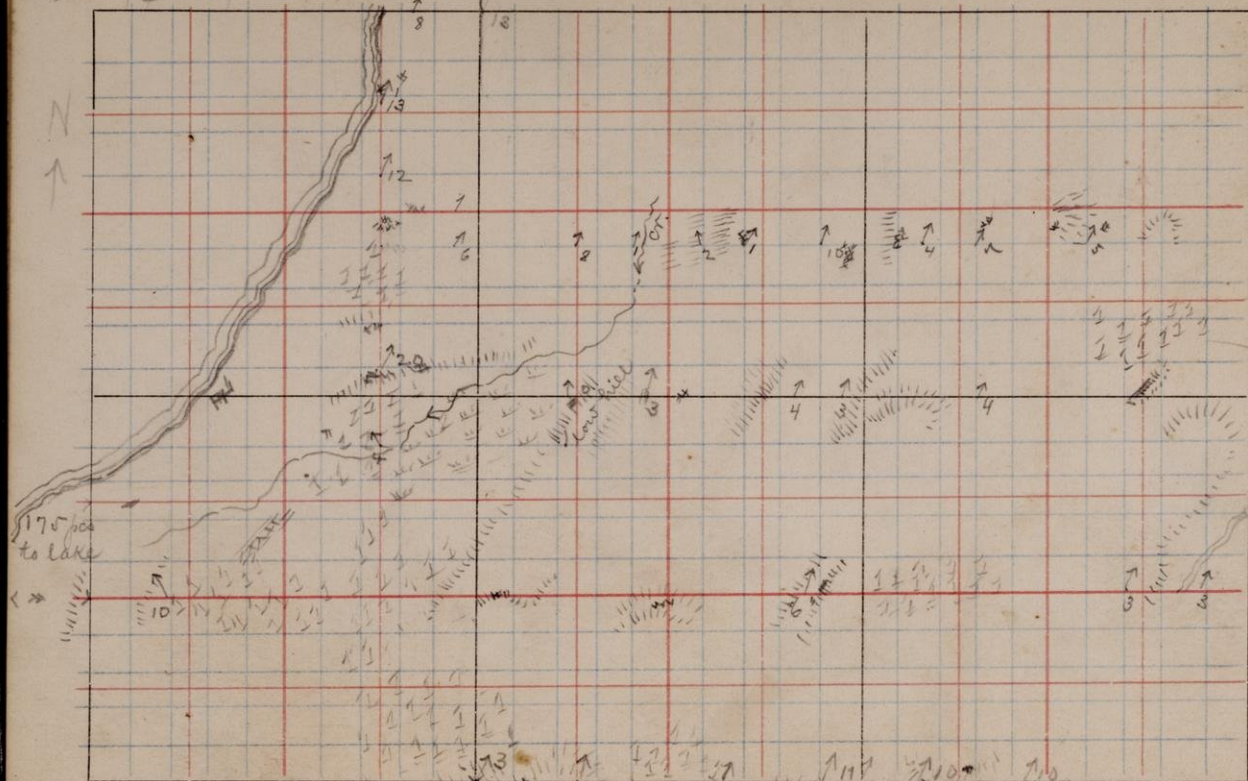
From n. side of ridge

16908 about 900 N 125 W SE - 4-47-30

At waters edge Lake Michigan me

S.E. 1/4 4-47.30

N
↑



175 paces
to lake

S.E. 1/4 3 T.

47

R.

30

5 1/4 paces

16909 900 N 8080 N SE 4-47-30
 Just E of 16908 Exposed
 in small cut of old Ry.

16910 680 N 125 N, SE-4-47-30
 Low exposure of green stone
 on low ground about 100
 from Lake shore. also at
 50 pcs to N.W.

11

16911 700 N 1650 N SE 3-47-30
 Exposed on low hill top.

16912 700 N 1525 N SE 3-47-30
 Rock looks to be in place

16913 700 N 1450 N SE 3-47-30

16914 720 N 1350 N SE 3-47-30

16915 700 N 1250 N SE-3-47-30
 At end of ridge
 also at 700 N 1175 N

SE

1/4

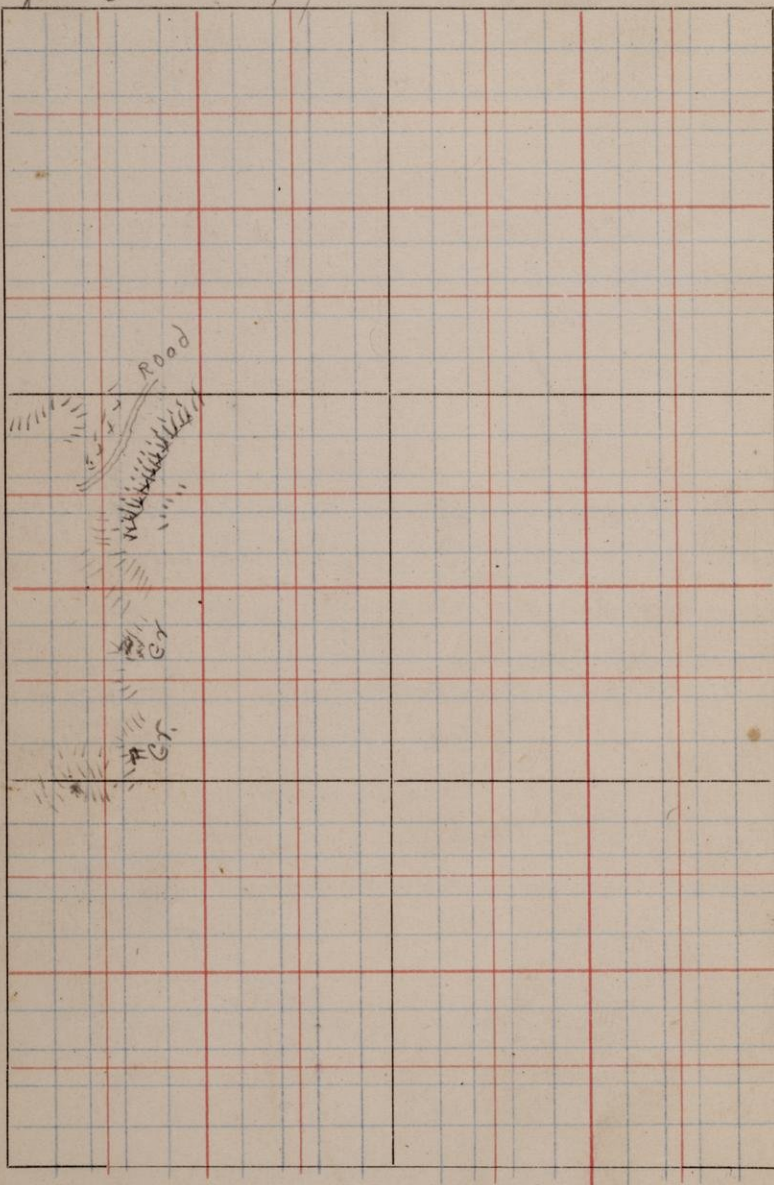
3

T.

47

R.

30



- 16916 700 N 855 N SE-3-47-30
From N.W. side of ridge which
strikes N 30 W
- 16917 700 N 855 N SE 3-47-30
Just below 16916 and on N.W.
side and dips about 45° N.W.
Same 225 pcs north at
south end of big ridge.
- 16918 600 N 180 N SE 4-47-30
Exposed on edge of swampy
land
- 16919 550 N 140 N SE 4-47-30
From south slope to swamp
Same rock about 100 pcs S.W.
also 50 pcs east
At last place dip & str was
observed to be about
 45° N & 57° N respectively.
- 16920 1883 N 500 N SE 3-47-30
From west slope to swamp.
- 16921 500 N 1750 N SE 3-47-30
also at 500 N 1730 N

16922 520 N 1120 N SE 3-47-80
Dip about 50° N.W. str N.E.

16923 400 N 800 N SE 3-47-30
From granite bluff exposing
rock 45 feet high

16924 250 N 1545 N SE - 3-47-30

at 500 N 1730 N and
500 N 1968 N are ledges
of rocks like 16921

16925 225 N 640 N SE. 4-47-30
Str nearly N. Dip 45° N.

16926 about 250 pcs. n. of south sec.
line of 4, on old R.R. near
lake.

16927 About 500 N. of 5 sec line of 4
on old R.R.

16928 About
325 pss N. of south sec line of 4
Long ledge at edge of swamp
within 50 pss of old R.R.
Dip about 30° N.W.
Str S $\frac{1}{2}$ (?)

16929 0 N 1950 N SE 3-47-30
From N $\frac{1}{2}$ slope of high
bluff south east of S.N. cor 3

16930 1950 N 1600 N SE 10-47-30
Exposed for 100 ft of NE side
of hill. Dip high to S $\frac{1}{2}$

16931 2000 N 1435 N SE 10-47-30
High & large exposure
Most of rock made of
gunstone than the specimen

16932 2000 N 1370 N SE 10-47-30

Rock like 16930 at 0 N 1200 N
SE. 3-47-30.

16932 1800 N 900 N SE 10 - 47 - 30

Dip about 45 N. N.

This rock appears on granite bluff,
mixed right in with coarse
granite - in some places appear-
ing to be distinct from each
other in some place in close
contact

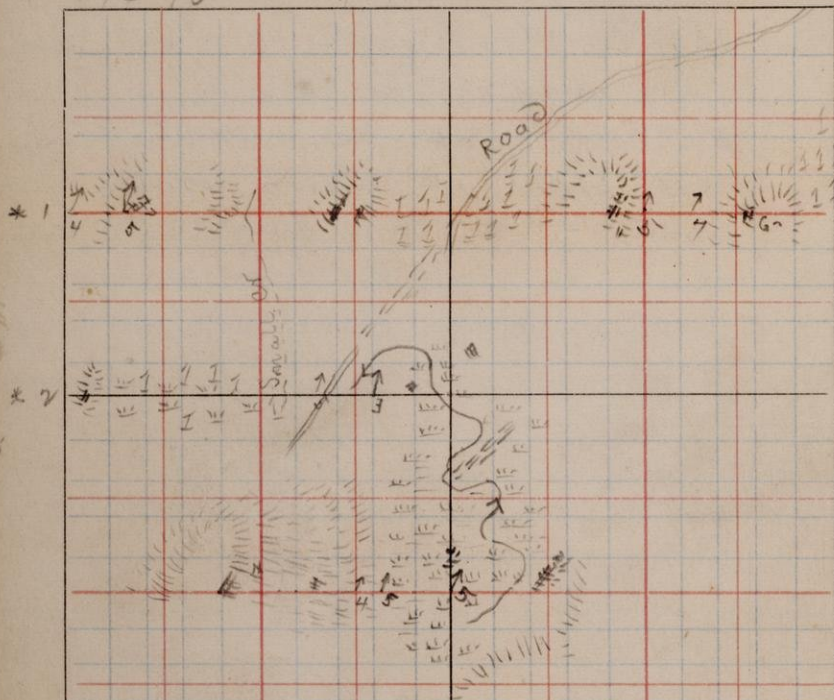
01712.10

T.

47

R.

30



*1 Locations on course 1450 N should
be on 1850

x2 Locations on course 1570 N should be on 1600.

N.B.: Locations in notes are corrected.

On east side of bluff at
 1850 N 1260 N are numerous
 ledges like 16932 dipping
 about 45° N striking SW.

16933 1850 N 1613 N SE 10-47-30

16934 1865 N 1647 N SE 10-47-30
 Dip about 45° N N side of hill at top

16935 1860 N 1922 N SE 10-47-30
 on the top of hill

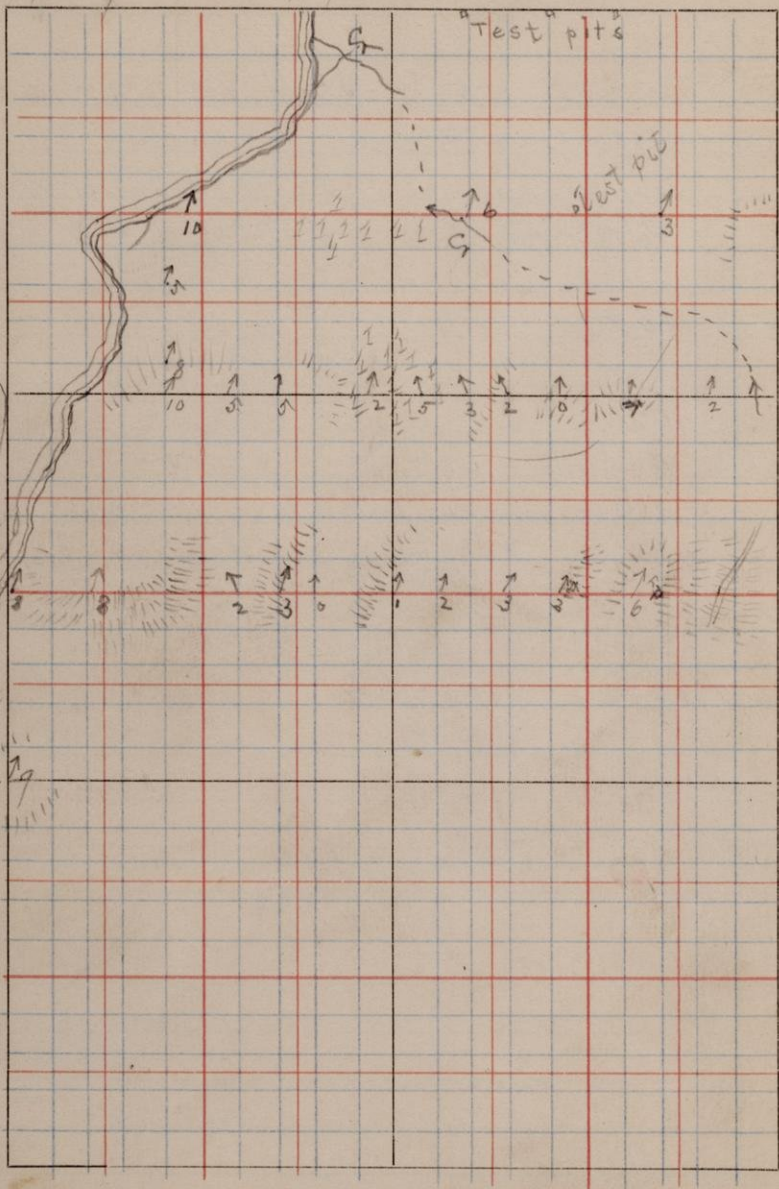
N.E. 1/4 9

T.

47

R.

30



16936 1600 N 178 N SE 9-47-30

16937 1600 N 1980 N SE 10-47-30

Just at edge of low marsh
land

16938 1500 N 1500 N SE 10-47-30

Dip 45° N N Str S N

at west side of marsh near
creek. Ledge 250 ft. long just
SE 100 pcs.
Dip 45° N N Str S N

16939 1250 N 1400 N SE 10-47-30

Granite exposure at east
end of marsh

also at 100 pcs west

16940 1250 N 1783 N SE 10-47-30

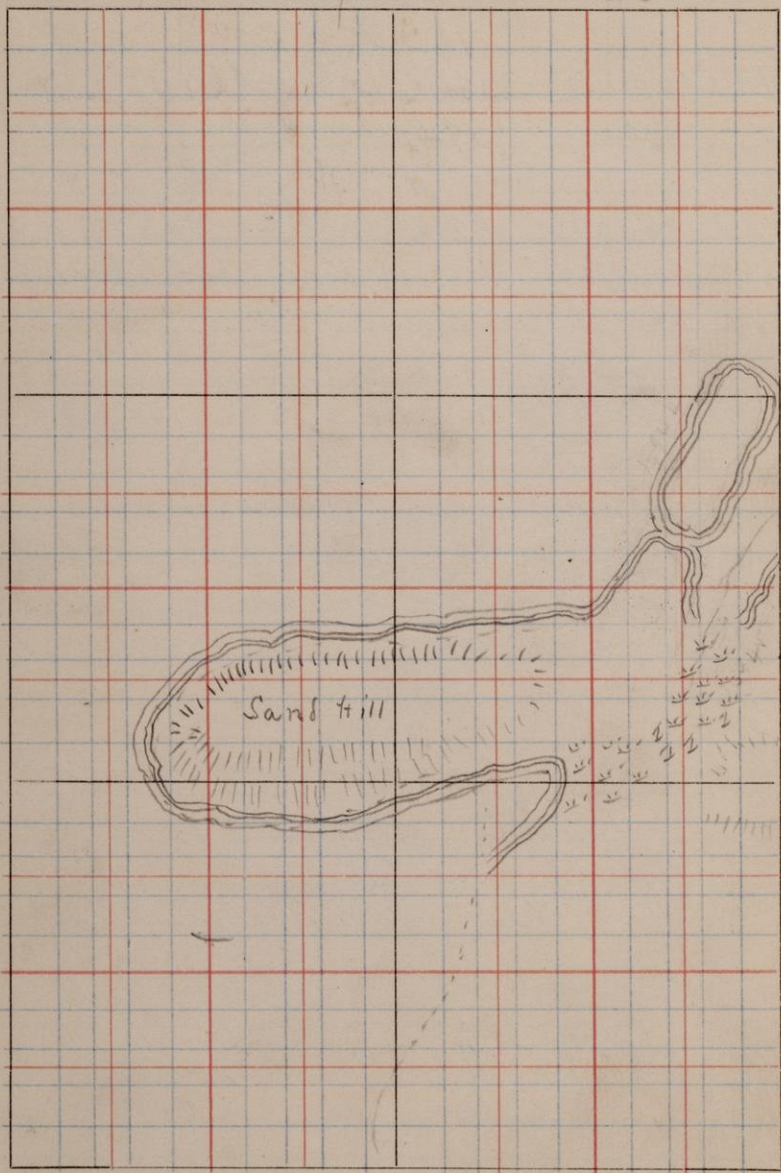
on east side hill

NY 149 T.

47

R.

30



16941 1250 N. 1800 ft. SE 10-47-30
 From east top of hill just
 above 16940.
 Dip about 45° N. St. N + S.

16942 1250 N. 170 ft. SE 9-47-30
 From top of bluff
 Same observed on bluff just
 to west.

16943 1250 N. 1000 ft. SE 9-47-30

16944 About 1400 N. 1200 ft. SE 9-47-30
 From west side of point at
 water's edge. Dip about 45° N.

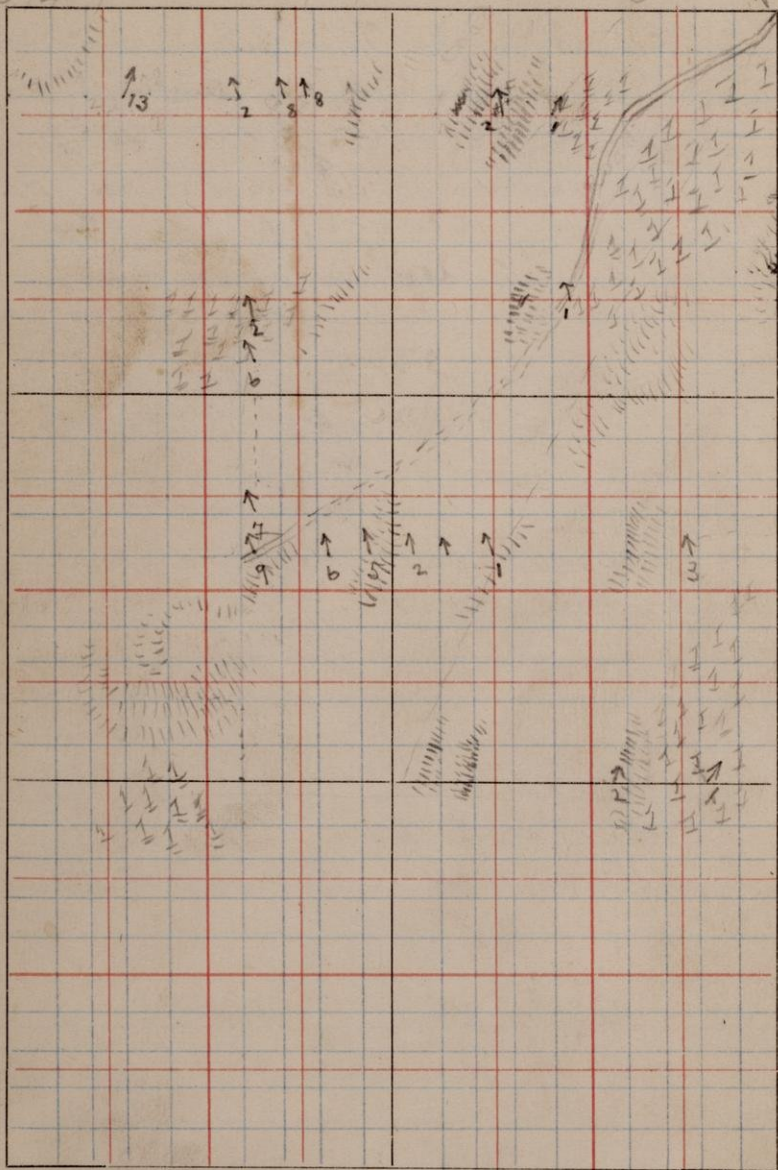
16945 About 1200 N. 1050 ft. SE 9-47-30
 Dip 45° N. St. N + S nearly

T.

R.

36

Good



16946 850 N. 420 W. S.E. 9-47-30
 Granite hill - observed to be
 about 450 ft. long and 30 feet
 of bare rock. This ledge is
 near the foot of the hill
 at the top appears

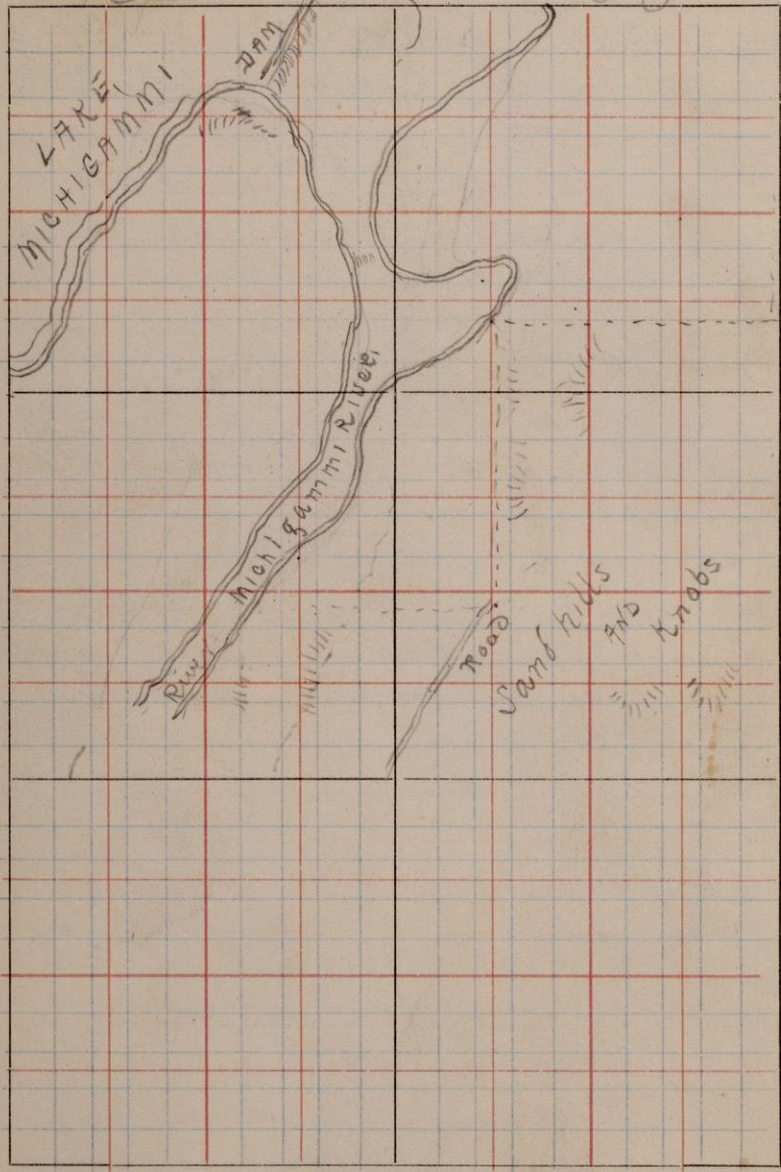
16947 900 N. 350 W. S.E. 9-47-30
 This is from top of the hill
 below which is granite like
 16946

16948 935 N. 350 W. S.E. 9-47-30
 Just north of 16947 & appears
 to be in contact with it

16949 670 N. 0 W. S.E. 9-47-30
 From top of hill
 at 620 N/1950. W. S.E. 10-47-30
 on top of hill is rock
 like 16947

S. 1149 T. 47

R. 30



16950 625N 350 W. SE 9-47-30
From hill ~~running~~ near top on
east side. Rock like
16947 is found on the top

16951 Near south end of dam as
marked on opposite page

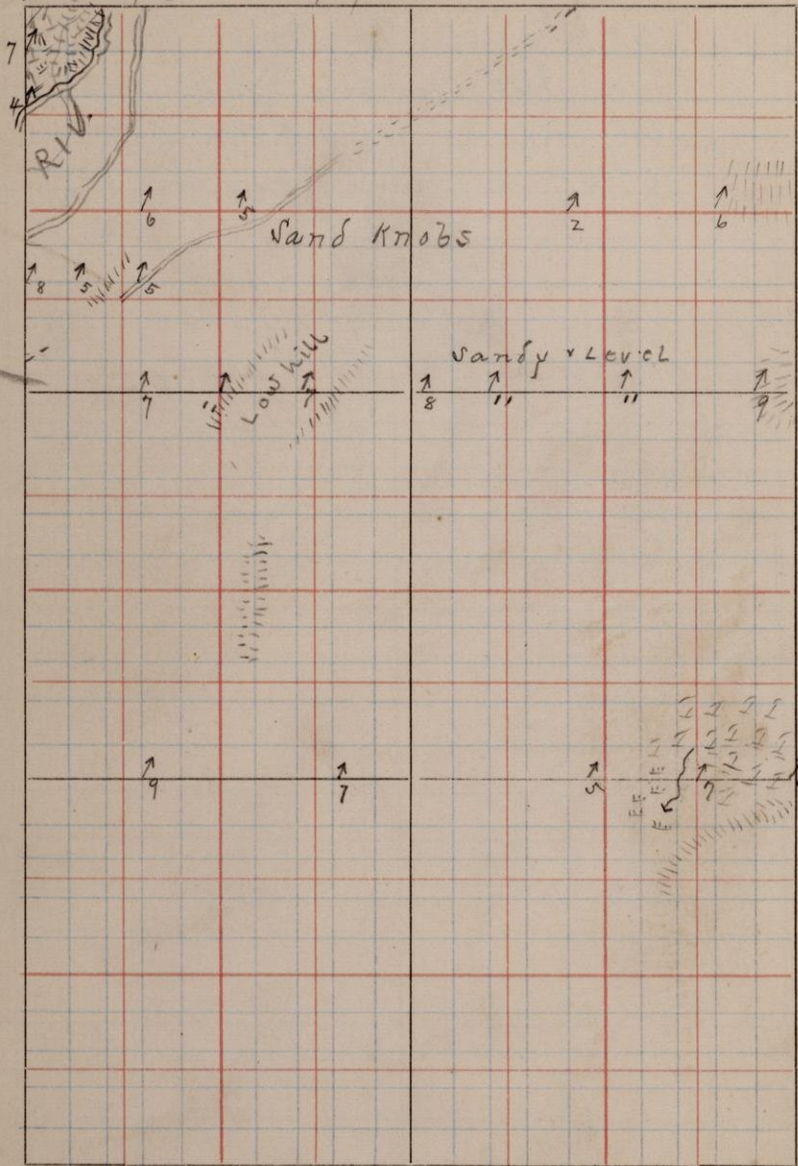
77

4 1/4 16 T.

47

R.

30



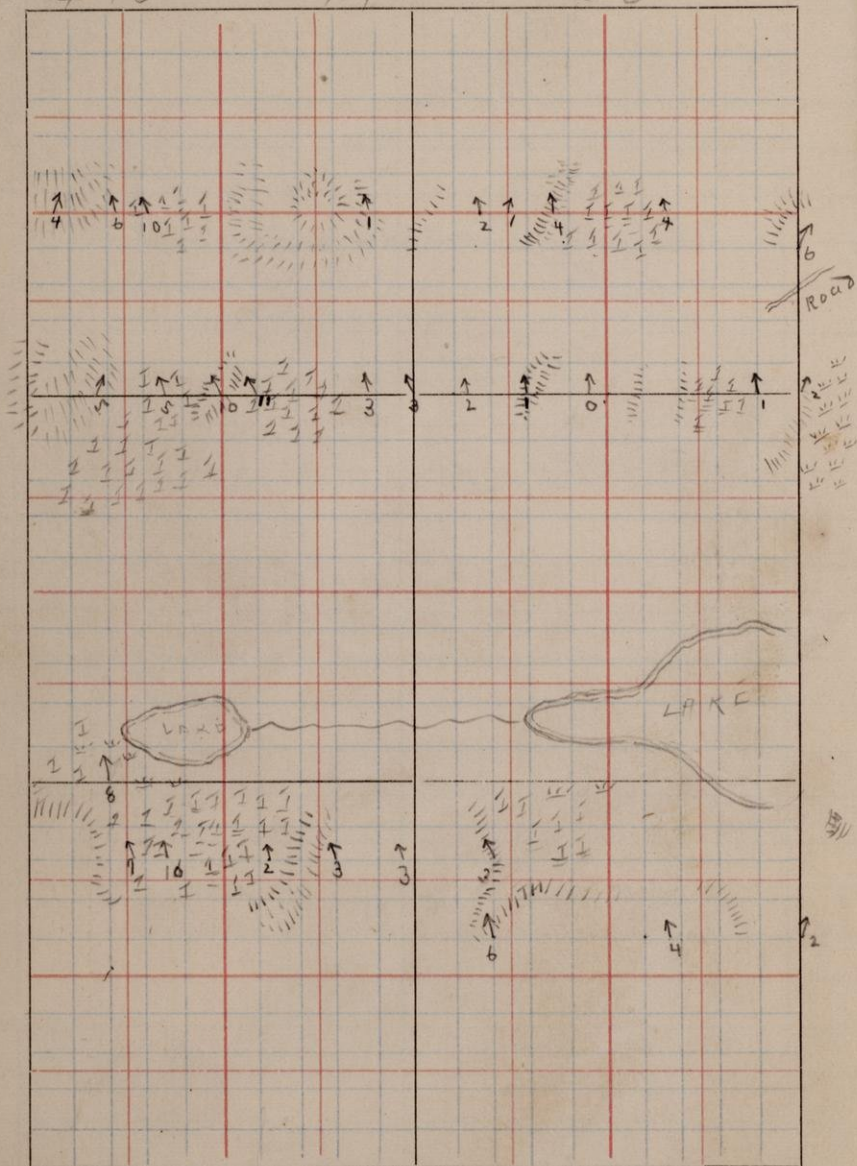
N.E. 1/4 16

T.

47

R.

30



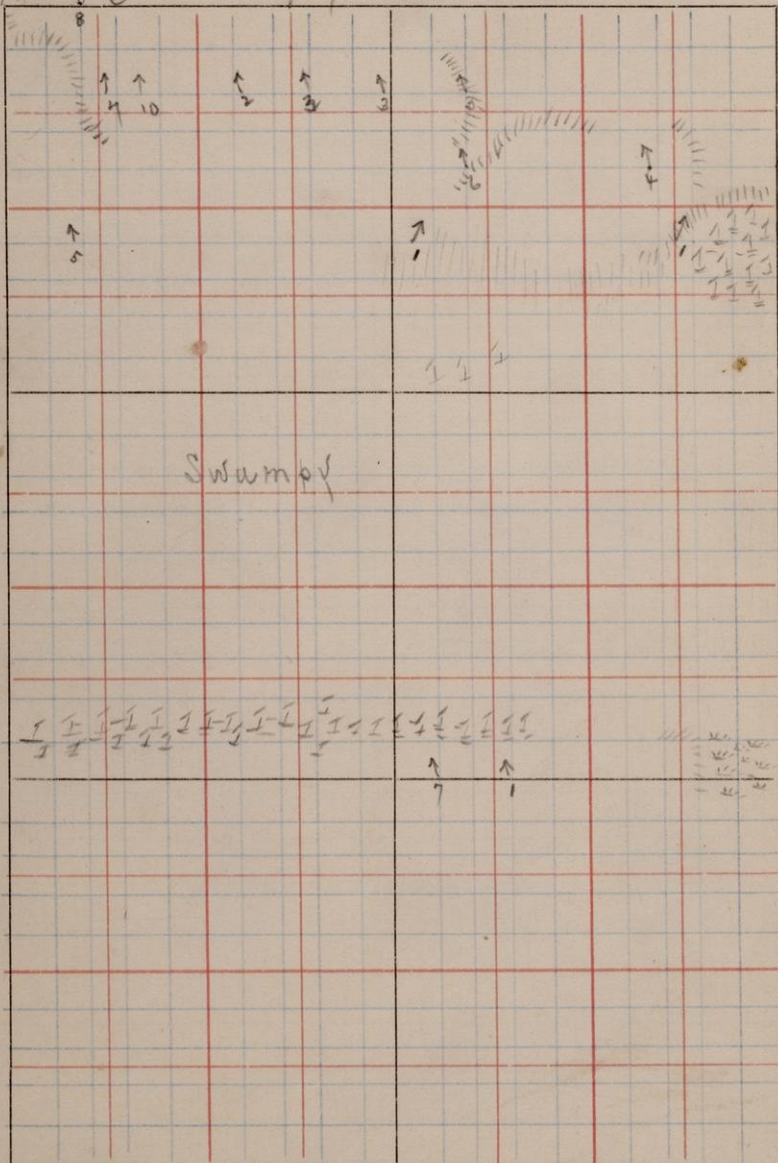
SE 1/4 16

T.

47

R.

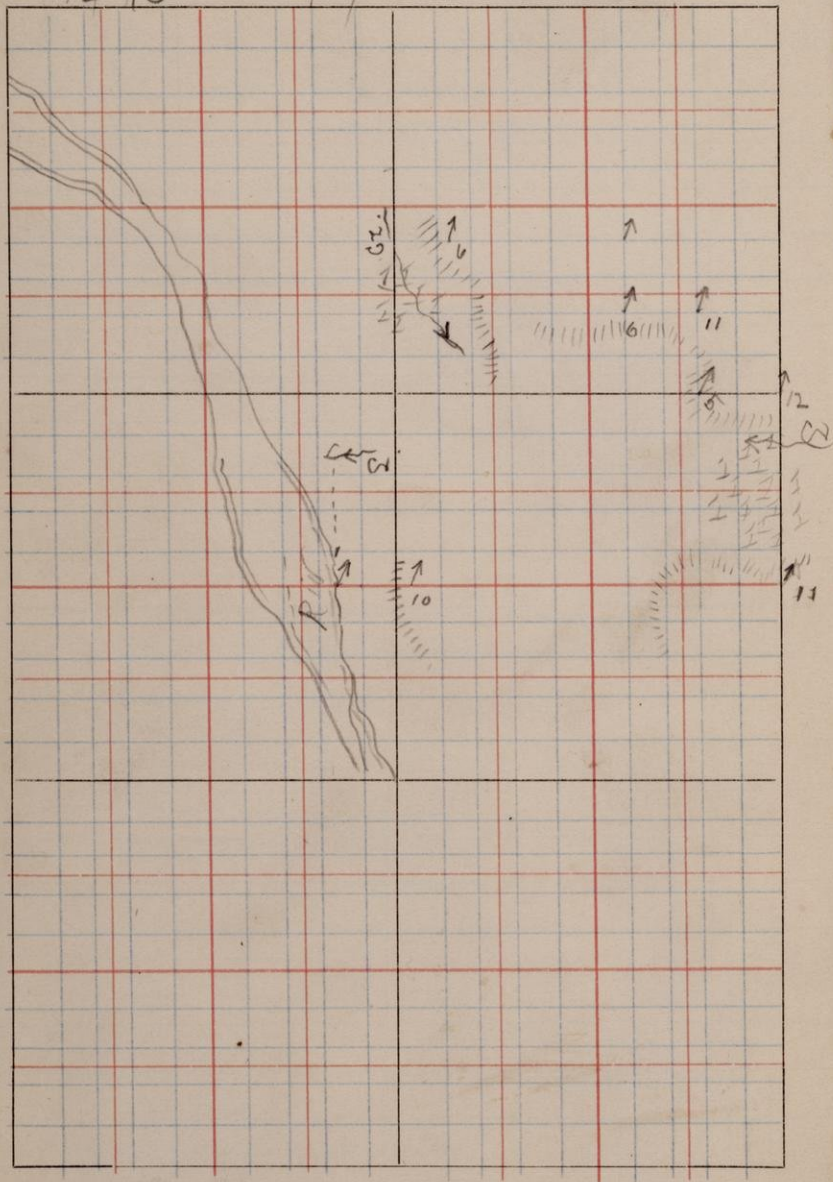
30



16952 About 1000 N. 0 N. SE 16-47-30
Near quarter post and small
lake as marked on plat of
NE $\frac{1}{4}$ 16

S 21 1/4 16 T. 47

R. 30



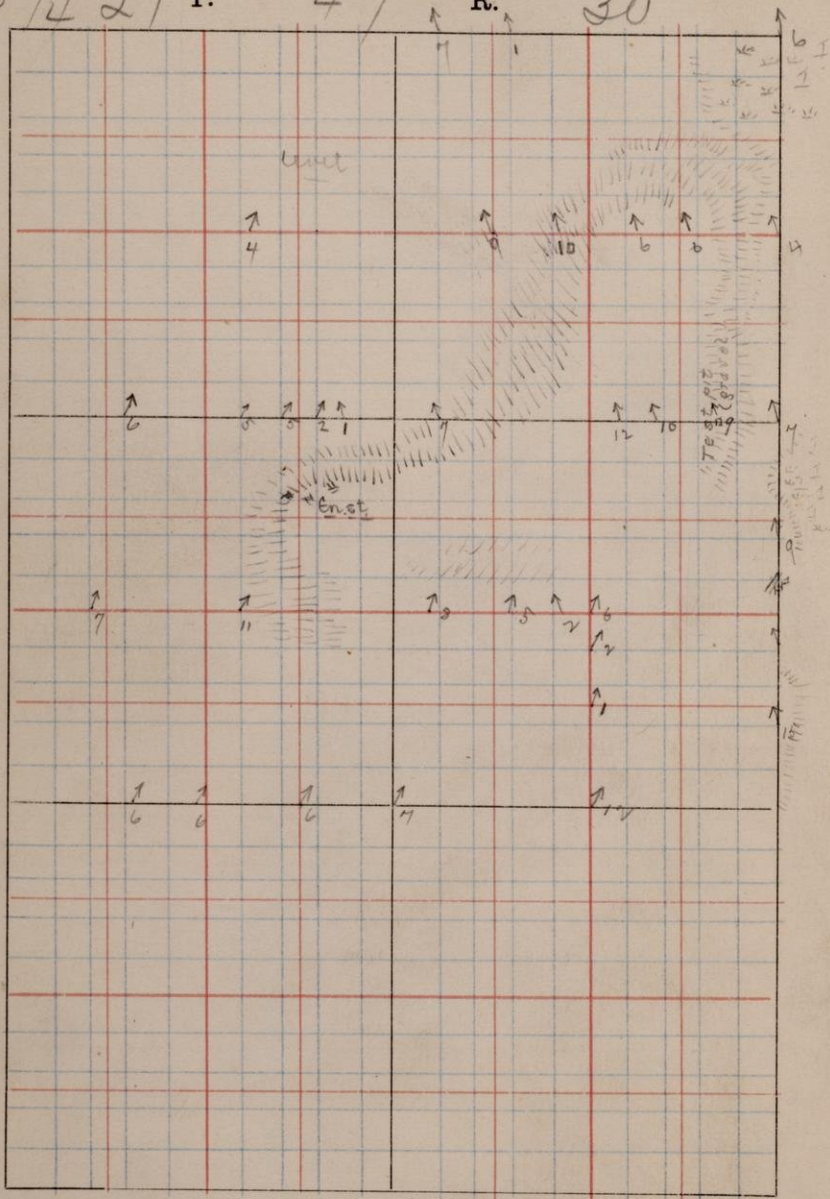
NE 1/4 21 T.

47

R.

30

1485



16953 950 ft. 0 ft. S.E. - 21-47-30

From a low exposure
which has been worked in
a small way. Pit is
water filled & depth could
not be observed but refuse
pile shows same rock all
through

Dip 67° (560° N) - S.E. N 30° W

Variation just at pit is
 43° W.

16954 1292 ft. 0 ft. S.E. 21-47-30

Dip about 40° N.W. Str S.W.

Rock like 16955 lies right
under this to the S.E.

16955 1292 ft. 0 ft.; S.E. 21-47-30

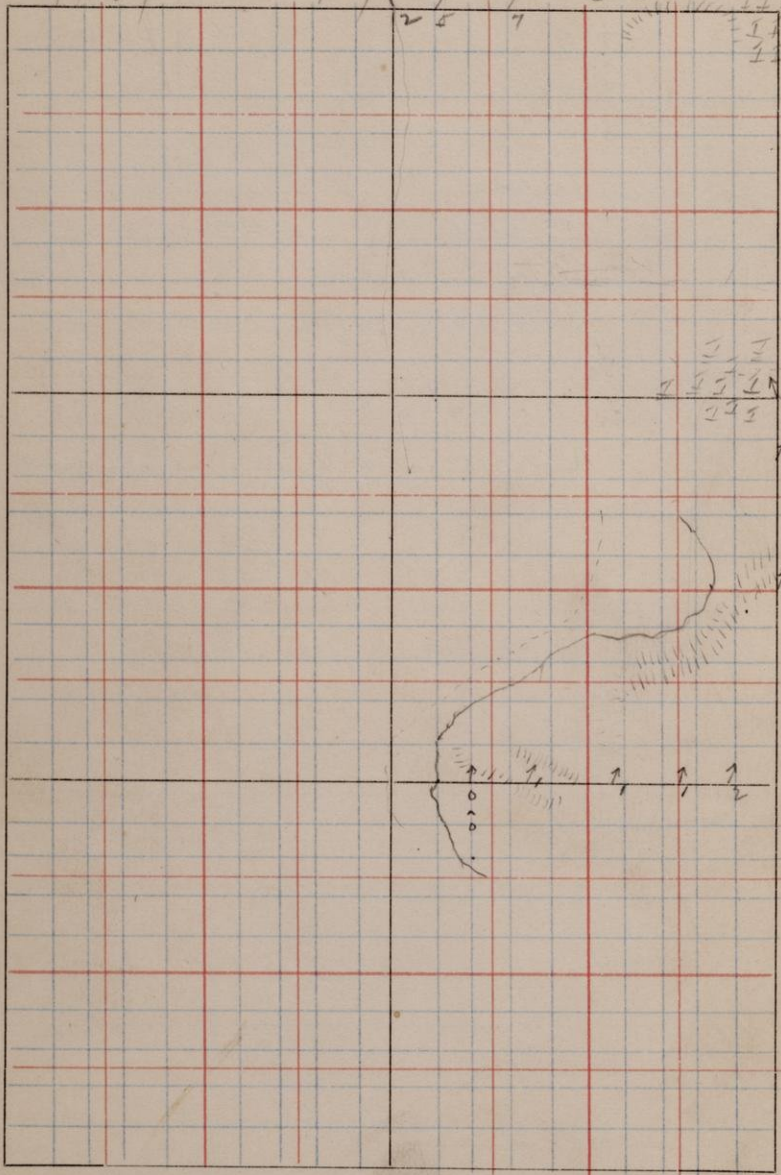
16956 1400 ft. 700 ft. S.E. 21-47-30

From north side of bluff
at top.

77 1/4 21 T.

47 R.

30



16957 915 N 250 W SE-21-47-30

From knoll on top of bluff
Also at

858 N 275 W

16958 712 N 300 W SE 21-47-30

From a ledge on SW side
of bluff near top.

Also at

500 N 200 W on knoll

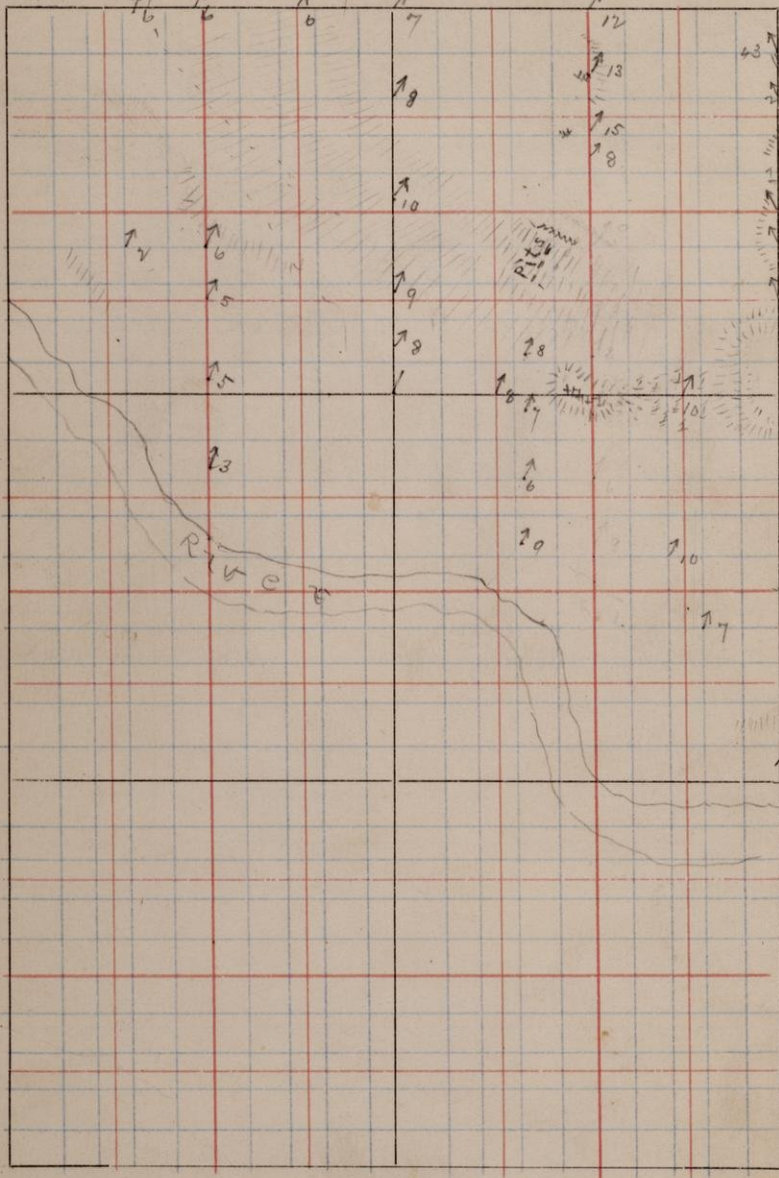
SE 1/4 21

T.

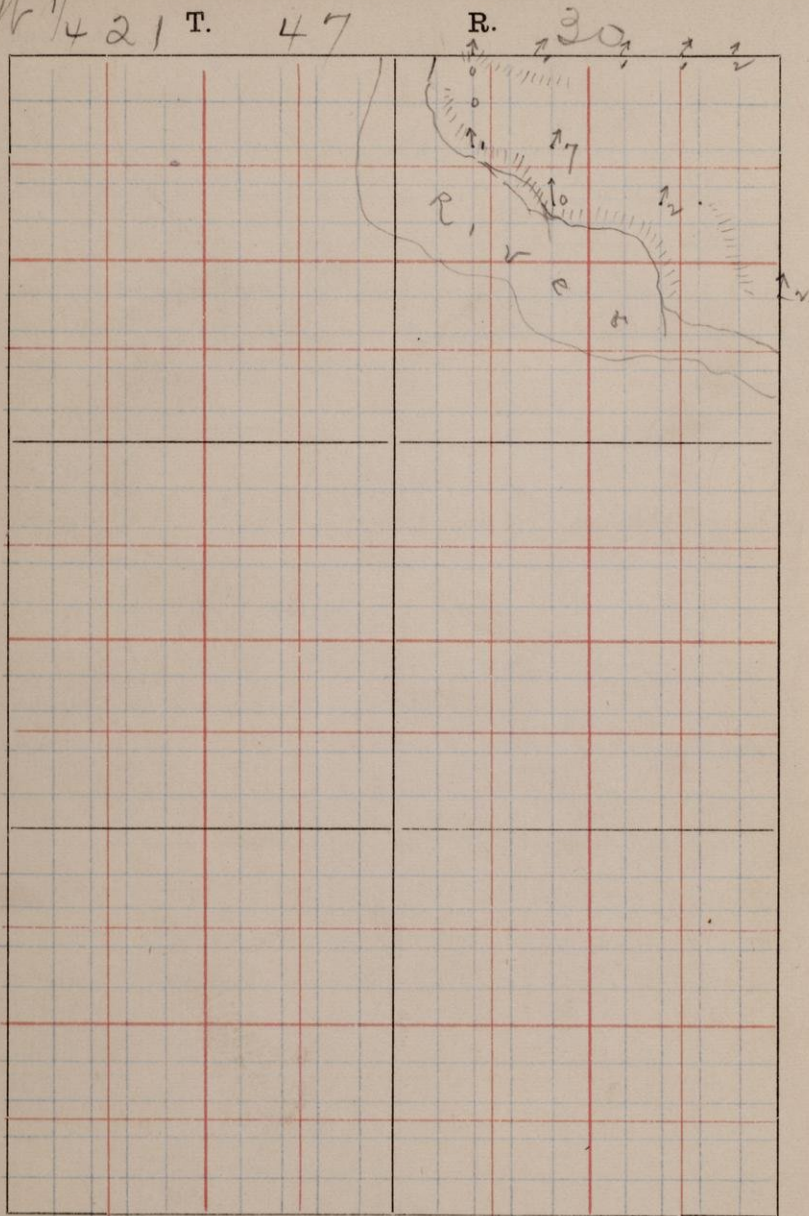
47

R.

30



SN 1/4 21 T. 47



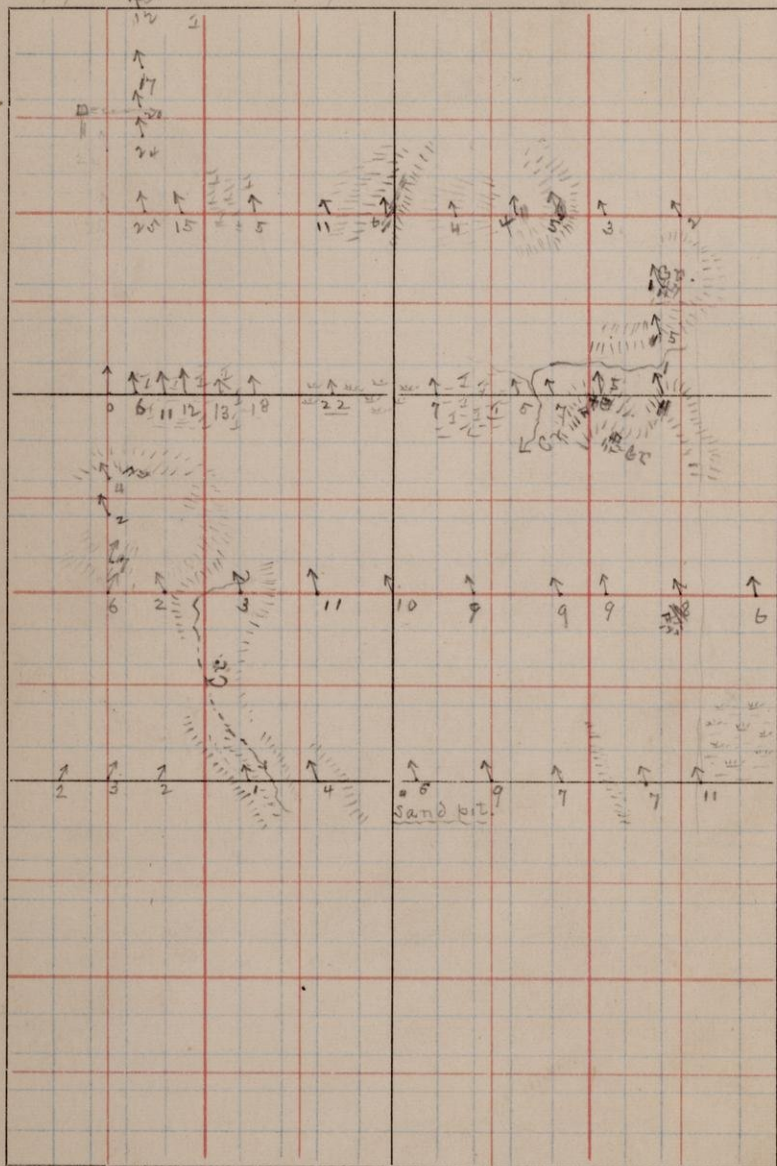
S. 7. 1/4 22

T.

47

R.

30



16959 75 N. 825 N. S.E. 22-47-30
 Dip (N 80° W) Str S 10° W

also at 840 N 100 N
 Dip & Str same as 16959

16960 25 N 775 N SE 22-47-30
 Granite on low ground

16961 75 N 825 N SE - 22-47-30
 Just under 16959 on SE side &
 seems to merge into it.

16962 225 N 1125 N, SE 22-47-30
 Dip 60° (S 50° W) Str (S 40° E)
 Between this and 16963
 is granite. The three rocks
 are in one mass

16963 200 N 1125 N SE 22-47-30

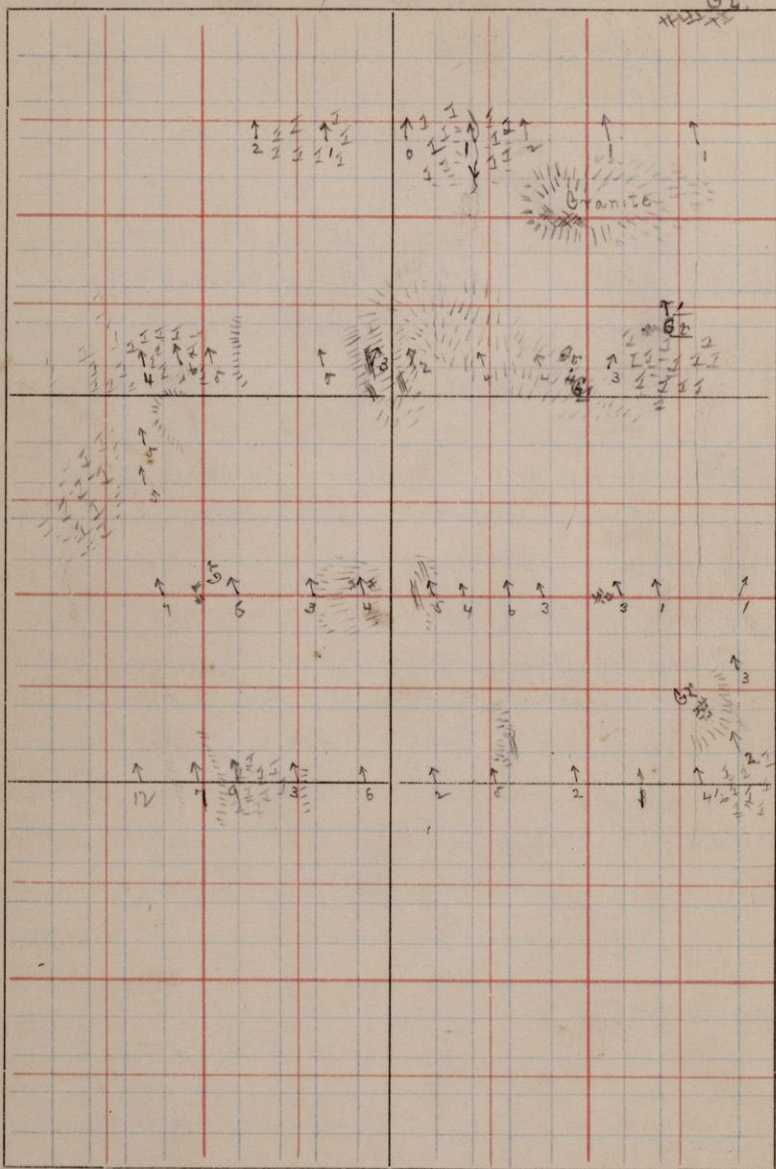
N.W. 1/4 22 T.

47. -

R.

30. -

Gr.



16964 420N 1870N SE 22-47-30
From N side of hill

16965 500N 1350N SE-22-47-30
From n. side of hill
Coarse gr. stone on S.W. side
of this exposure

16966 440N 1375N SE-22-47-30
From same mass with 16965
also 75 pcs east.

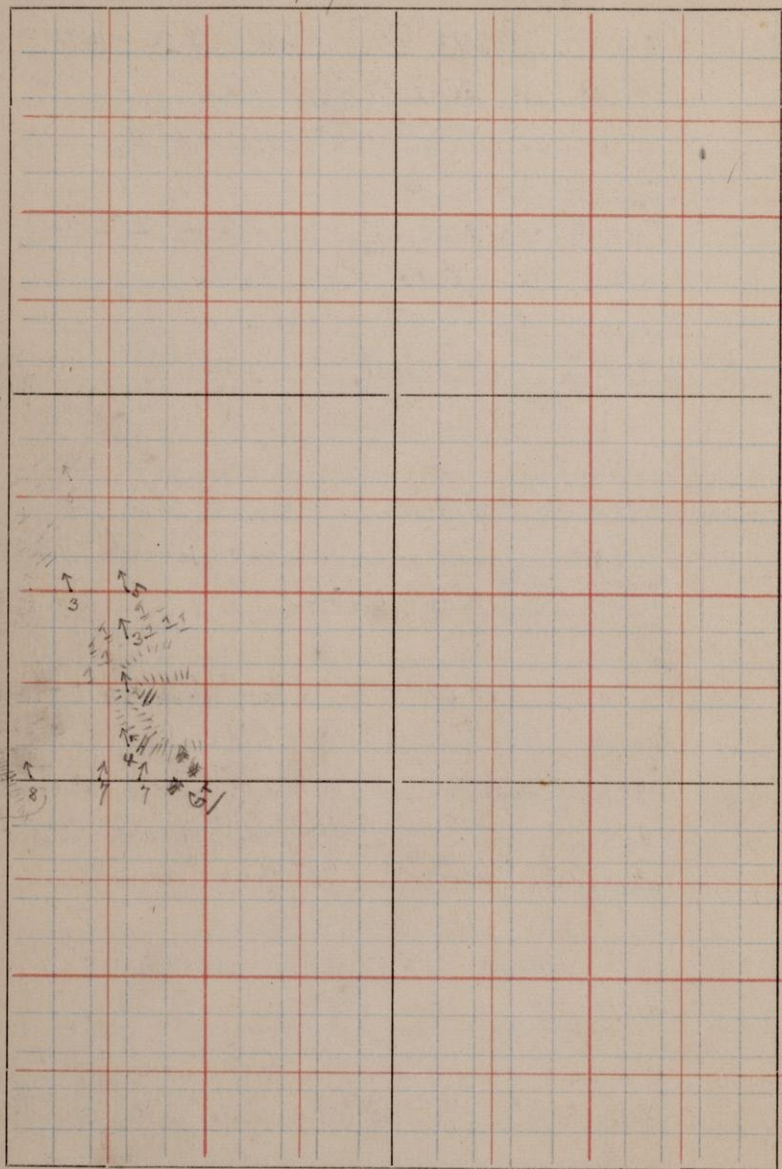
16967 500N 1140N SE 22-47-30
From N. side of hill
Much granite is mixed up with
this rock. Coarser granite was
observed about 75 pcs south
on the top of hill.
also 85 pcs north

16968 750N 1275N SE 22-47-30
Dip 70° (N 75° E) Str. S 15° E
From small knoll on east
side

SE 1/4 22 T.

47

R. 30



Spring n.e. of 1/4 22 sec. 11.

- 16969 750 N 1345 N SE 22-47-30
 on top of hill.
 Rock is foliated and some granite
 appears in it
 Some dips at 65° (S 75° N)
 Str. (N 15° N)
- 16970 750 N 1500 N SE 22-47-30
 Dips 67° (N 75° N); Str. (N 15° E)
 From top of long narrow ridge
- 16971 900 N 1925 N SE 22-47-30
 From old workings
 Dips high to W. Str. about N.E.
 On same range that 16953 is taken
 from.
 Ledge - same as 16970 at
 1050 N 1360 N S.E. 22-47-30
 Dips 58° (S 75° N); Str (N 15° N)
- 16972 1100 N 1100 N SE 22-47-30
- 16973 1250 N. 1280 N, SE 22-47-30

16974 1270 N 1470 N SE 22-47-30
Dip 60 (S 72° N); Str (N 18° W)

16975 1200 N 1532 N SE 22-47-30

16976 1525 N 1515 N SE 22 47-30
Dip 50° N Str (N + S) about.

16977 1550 N 1510 N SE 22-47-30
Dip 48° N Str (N + S) about.
Same on top of hill 50 paces SE.

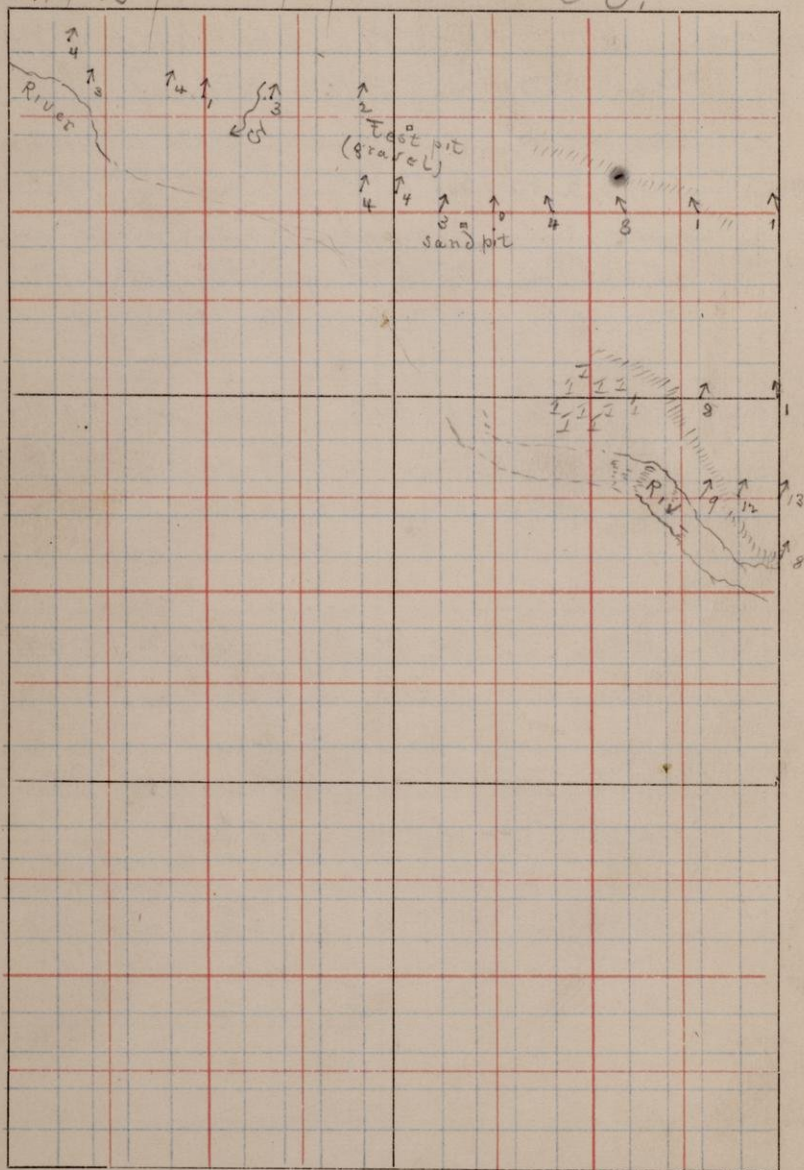
16978 1800 N 900 N SE 27-47-30
Dip about 50° (S 70° N)
Strike (N 20° W)
Much granite mixed with white
rock - like 16978

16979 1800 N 875 N SE 27-47-30
on same hill with 16978

N. W. 1/4 27 T. 47

R.

30.



About

16980 11.80 N 13.80 W-SE 27-47-30

From top of hill.

This rock where not folded dips
63 (S 80° W) ; Str (N 10° W)In places much folded and mixed
with granite - the two being
in close contact.

About

16981 11.50 N 18.5 W SE 27-47-30

From Top of hill east of 16980

16982 24.0 N 25.0 E S.E. 27-47-30From stack or refuse pile at
pits. Most of these piles are
gravel with this rock on top
indicating that it was struck
at the bottom of pits

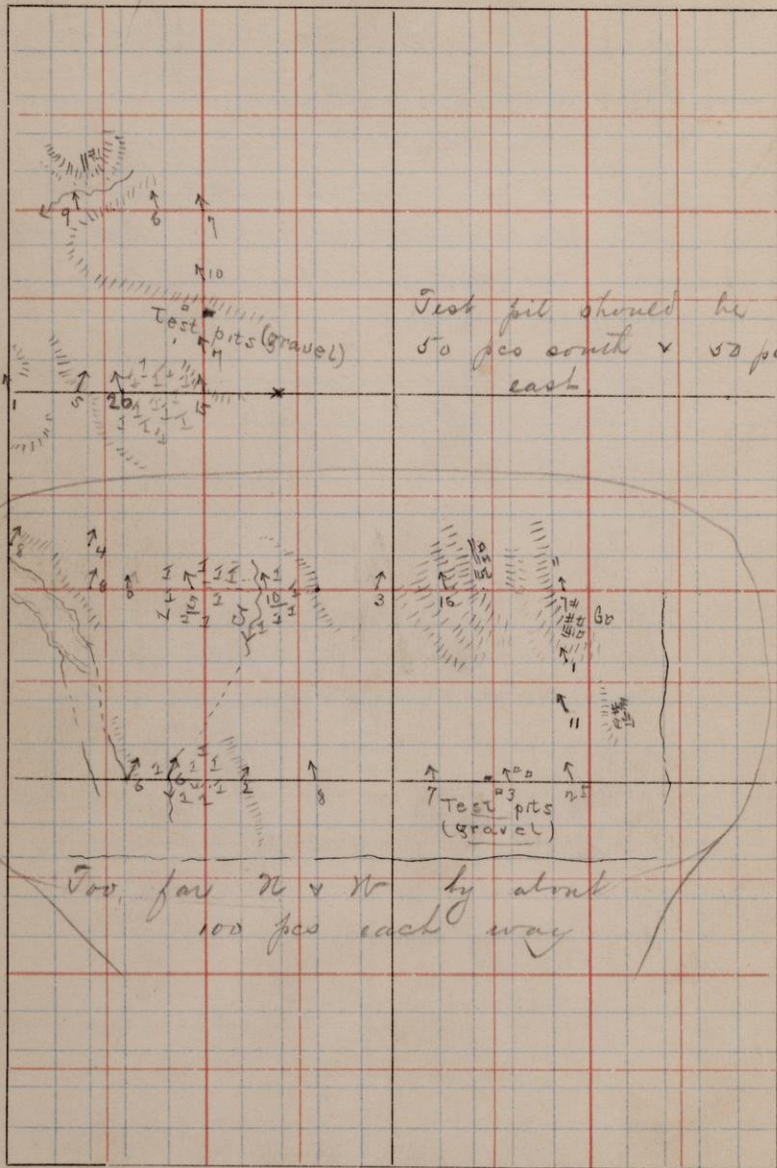
NE 1/4 27

T.

47

R.

30



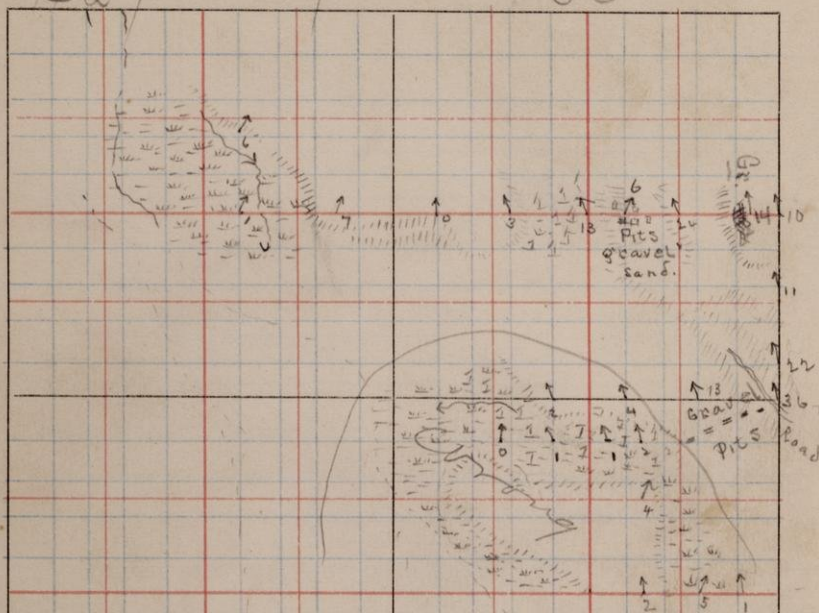
S.E. 1/4 27

T.

47

R.

30



These locations are too far
N. & W. Can not correct

maps of 27 as I do not know
where the error was made.

We started from the NW cor. 27
and worked the sec. from E to W.

When we got to the N 1/2 post of
Sec 27 we thought we were

250 N x 1350 W SE 26.47-30

For another survey of this sec. see
16 pp. ahead.

The locations in notes were
changed to be as near correct
as possible.

$NE \frac{1}{4}$

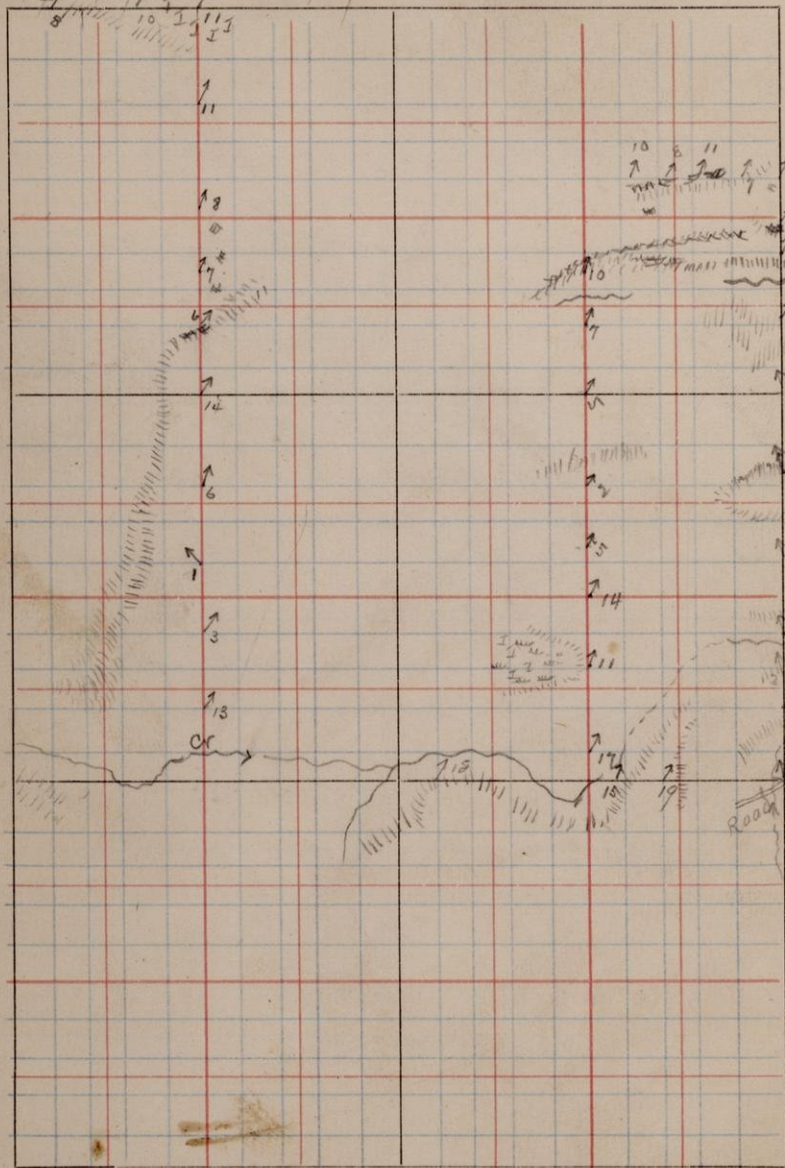
10

T.

117

R.

20



16983 1740 N 0 N SE 19-47-30
 Just From S. side of hill about
 80 paces n. of Snake river

16984 1770 N 0 N SE 19-47-30
 Just Low exposure just n. of 16983
 Same at 1800 N 75 N
 This same ledge extends westward
 about 200 paces. Dip here as far
 as ledge shows any dip is 45°
 (N 10° N) about

16985 1650 N 0350 N SE 19-47-30
 Just From a ledge which is almost
 unbroken from 16984 to
 this place

16986 0 N 390 N SE 19-47-30
 From east side of hill
 Dip 79° (N 70° N)
 Str. (N 20° E)
 This ledge is 50 paces wide.

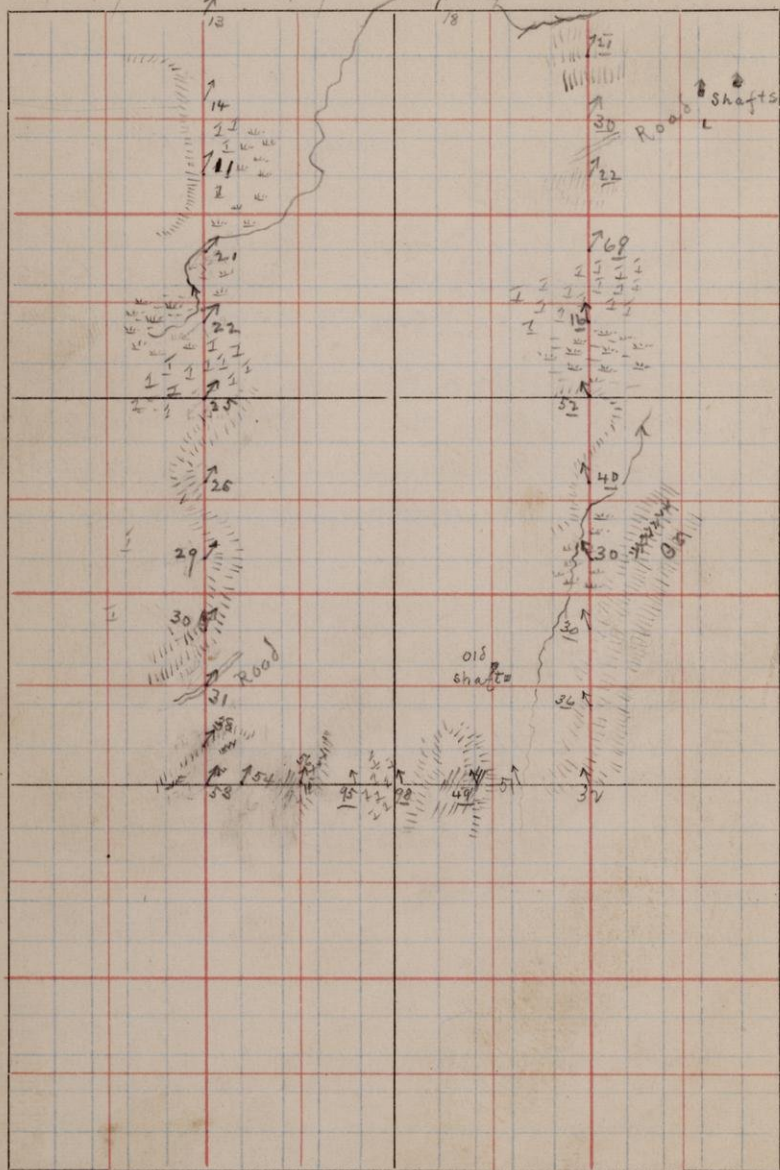
SE 1/4 19

T.

47

R.

30



16987 30 N 600 W SE 19-47-30
 From ledge on east hill side
 Flat exposure at 0 N 700 W

16988 0 N 660 W SE 19-47-30
 (2)
 From west face of ledge
 which appears to be the
 same as that from which
 16987 was taken. Running
 eastward across this ledge
 at this place the rock
 merges into green stone at
 first fine grained then into
 rock like 16987

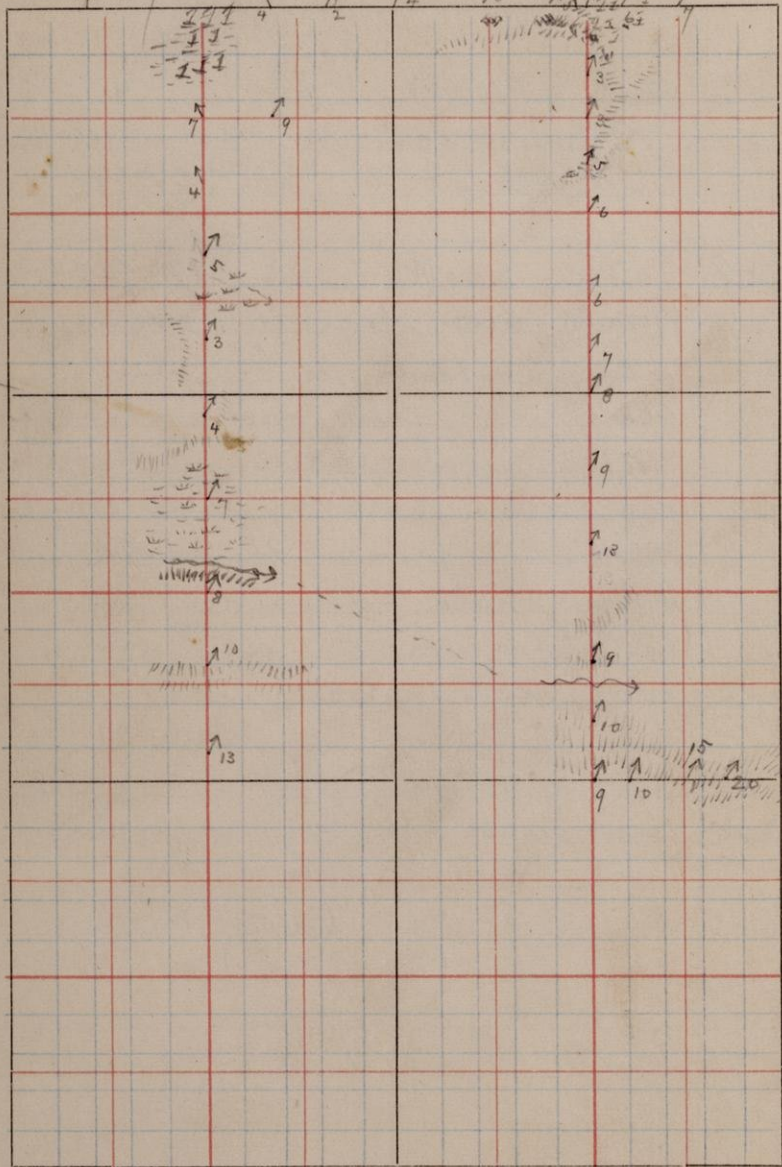
16989 About 10 feet west of 16988
 From and seem to be in contact
 with one another
 Dip about 45° (N 75° W)
 Str (N 15° E)

16990 20 N 720 W SE 19-47-30

7 N 11 4 19 T.

47

R.



16991 0 N 775 W } SE 19-47-30
 Grst- 50 N 725 W }
 not continuous but looks like
 same ledge

16992 1600 N 775 W SE 19-47-30
 Grst From south top of hill
 Same rock observed in various
 places for a distance of 150 paces
 N.

16993 about 900 N. 100 W SE 19-47-30
 Grt From piles near shaft of
 Magnetic mine shaft
 This is not a specimen of ore
 but selected to show quartzite

16994 1800 N 1250 W SE 19-47-30
 Grst Greenstone ledge on small
 ridge. Str nearly N. & S.
 Gr. stone also at
 1950 & 1975 N. as marked on plat.

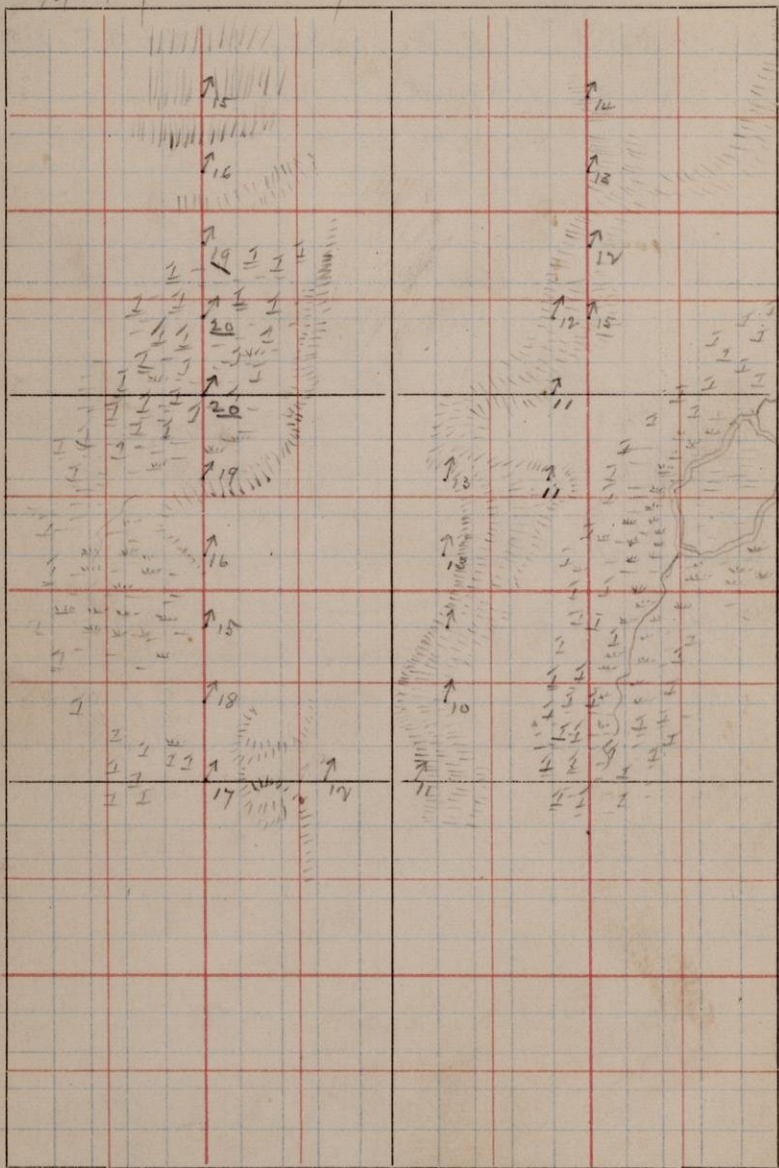
16995 2000 N 1300 W SE 19-47-30
 Grst

S. 76. 1/4 19 T.

47

R.

30



16995 500 N, 750 N - SE 19-47-30
From west side of hill near
summit

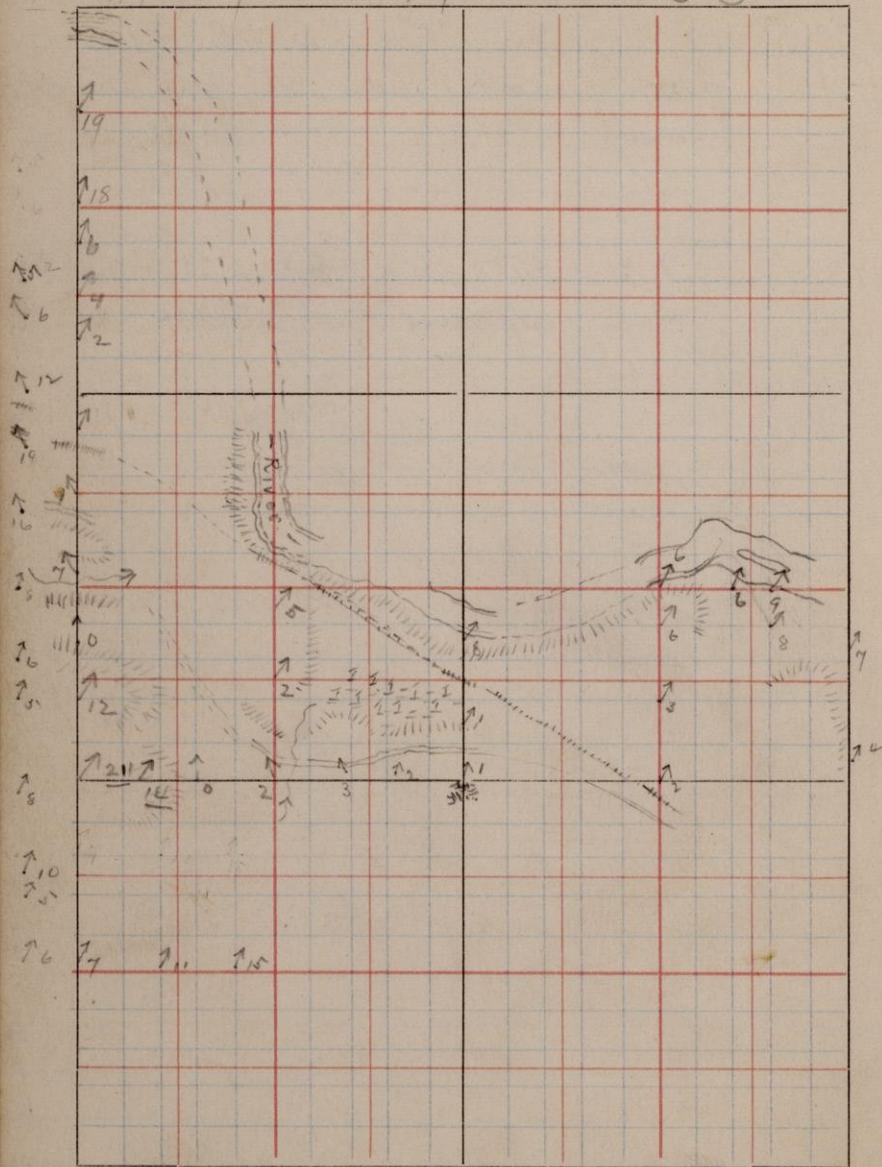
16996 ¹⁰⁰⁰ 100 N: 1500 N SE 27-47-30
Large exposure just south of
highway.

N. N. 1/4 27 T.

47

R.

30



* Course marked on margin is
200 west of west sec line 1, sec 27

16997 1900 N 1425 W SE 34-47-30
Granite exposure, on high land

16998 1900 N 1250 W SE 34-47-30
Granite in contact with granite
Tonalite at

16999 1500 N 1315 W SE -35-47-30
On low knob
Ledge strikes about SE

17000 1260 N 200 W SE 28-47-30
Dip about 50° NE
St N 50° W.

17001 1150 N 175 W SE 28-47-30
From deep pit
Most of rock here is quartzite
like specimen except not
being brecciated

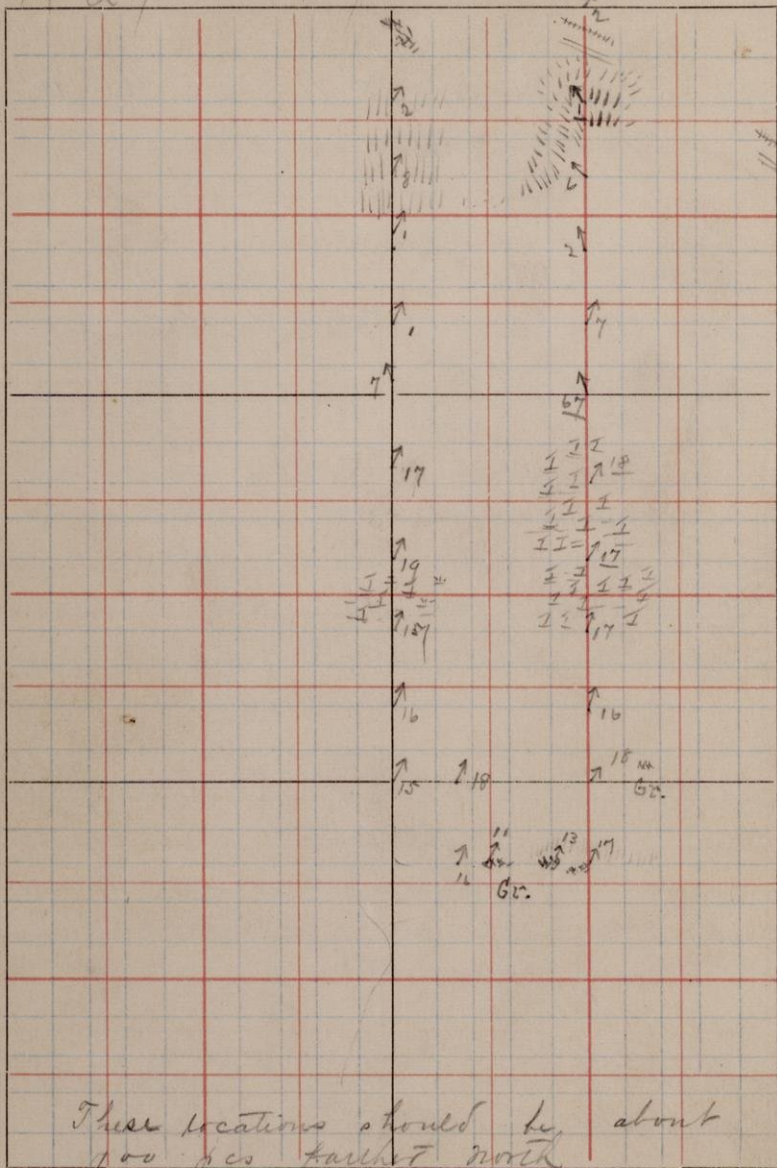
17002 1150 N 200 W SE 28-47-30
On N. side of creek

S. 27 1/4 27 T.

47.

R.

30



These locations should be about
100 yds farther north

17003 1100 N 170 W SE 28-47-30

From exposure which is much
disturbed. Large masses faulted
about prominently

17004 830 N 170 W SE 28-47-30

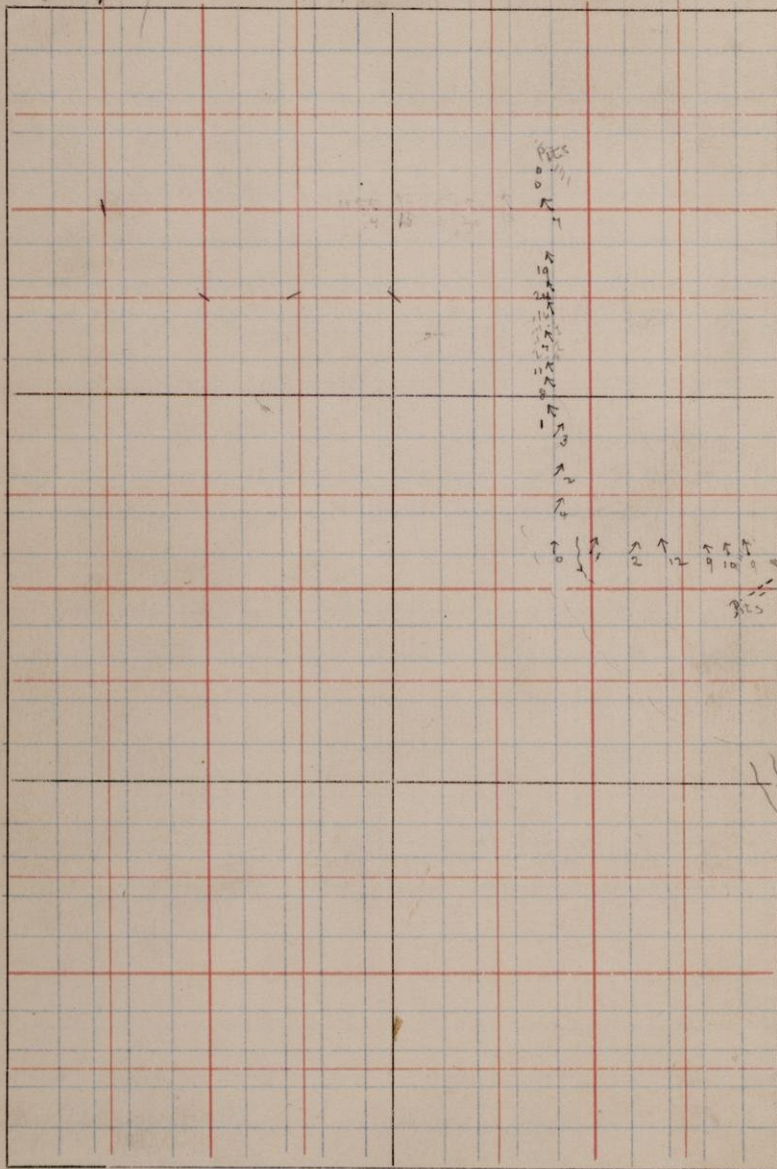
Sec 27

T.

47

R.

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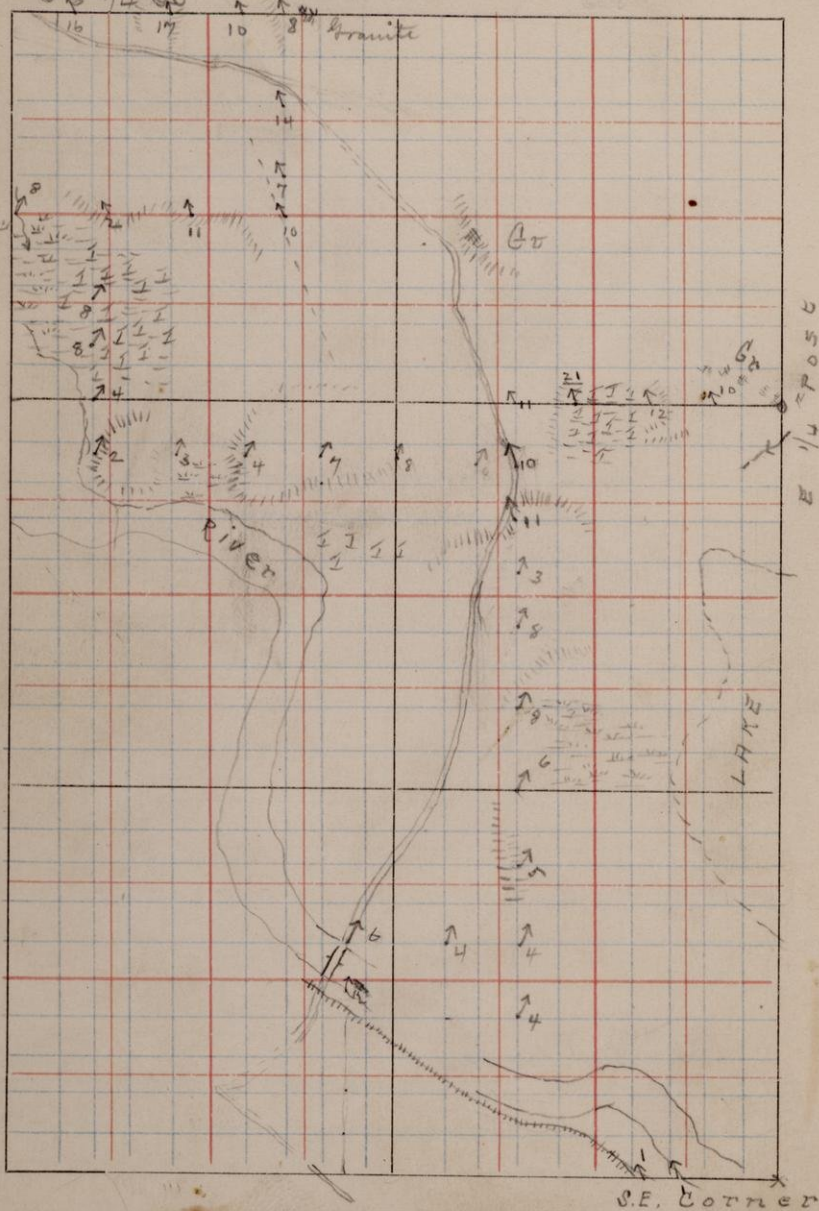
S 1/2 NE 1/4 35

T.

47

R.

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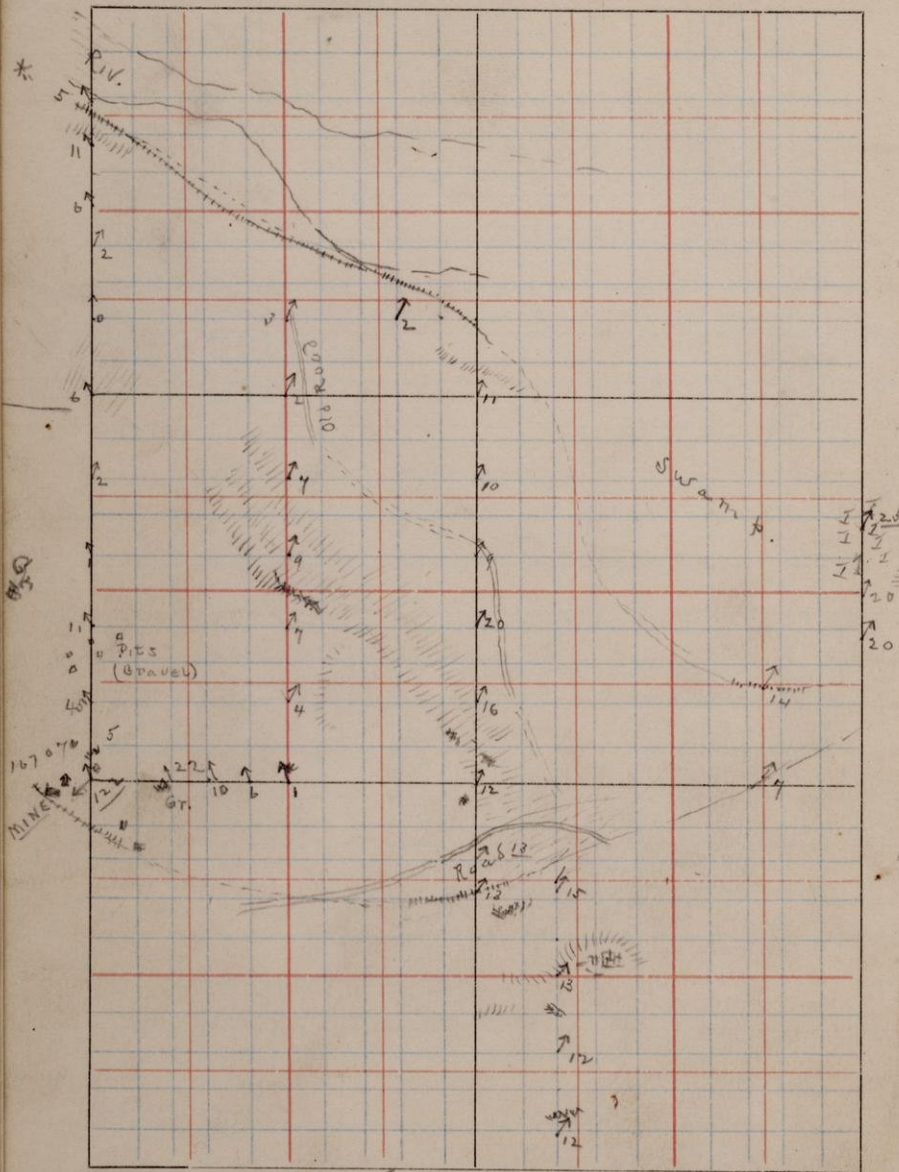
$2\frac{1}{4}$

T.

46

R.

30



attractions marked on west sec. line should
be 100 pcs west of the line.

17005 1050 N 2000 W SE 1-46-30
Just n. of shaft on Sec. line

17006 1045 N 2000 W SE 1-46-30
From same mass as 16705 and
in contact with it on S.W. side
of exposures. Dips high to SW or
nearly.

17007 1040 N 2015 W SE 1-46-30
Quartzite about 15 or 20 feet
from 16706 & 16705

17008 1000 N 1900 W SE 1-46-30

17009 1020 N 1750 W SE-1-46-30
Large masses of this rock
on knolls.

17010 1250 N 1750 W SE 1-46-30
Long ledge on N.E. top
of hill. Str about S.E.

17011 1050 N 1500 N SE 1-46-30

From top of hill. Most of
rock of this same mass is
like 16710.

Like 16710 at 940 N 1540 N

17012 800 N 1450 N SE 1-46-30

17013 About 30 steps S. of Ry.
Large mass 125' long 30' wide
with rounded top. -

Same as 16713 on hill
to SE.

17014 655 N 1450 N SE 1-46-30

17015 570 N 1410 N SE 1-46-30
Greenstone ledge Str. S about E & N.

17016 400 N 1300 N SE 1-46-30
From hill which uposes
much greenstone.

17017 100 N 1250 N SE 1-46-30
From bluff of granite

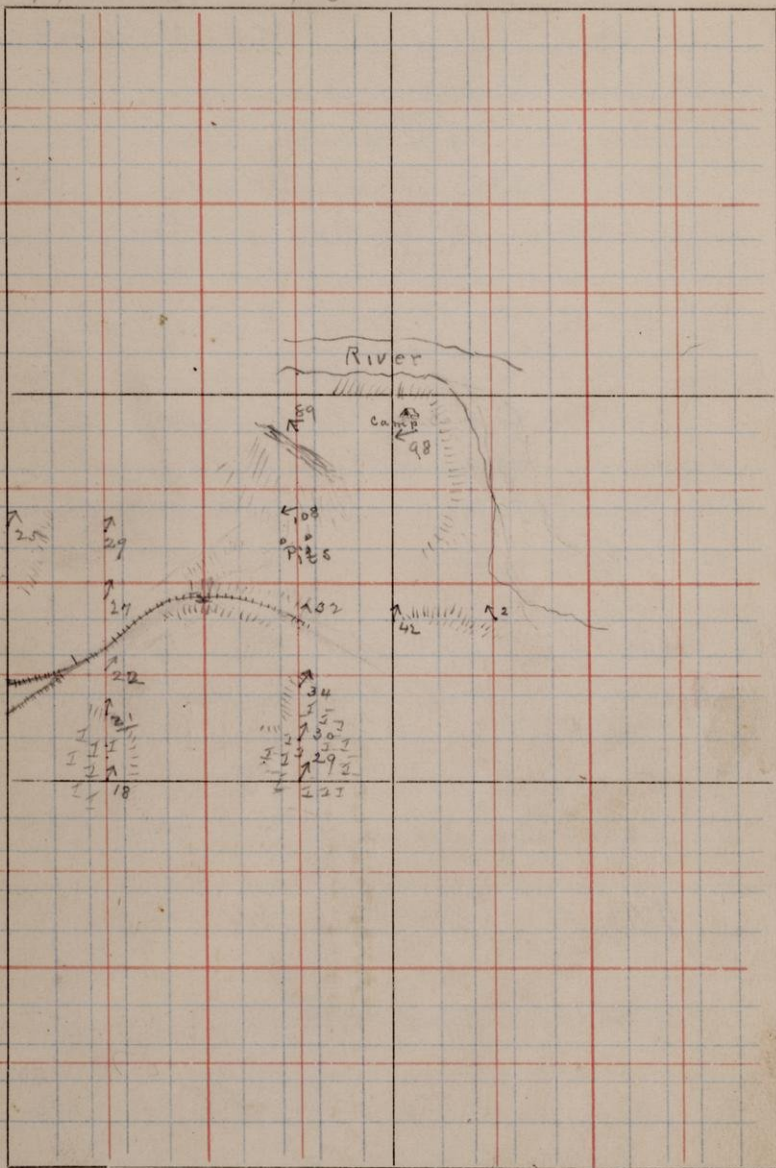
NE 1/4 1

T.

46

R.

30



17018 400 N 1125 W SE 1-46-30

17019 Granite by roadside at about
1250 N 300 W. SE, 2-47-30

17019 about 900 N. 100 W SE 2-46-30
on south side of highway
near mining location

17020 From Metropolis mining
location at west $\frac{1}{4}$ part of
1-46-30

17021 about 900 N 1950 W SE 1-46-30
From pits near Metropolis location

17022 about 1250 N 250 W SE 1-46-30
From Ry. cut.

17023 about 1250 N 250 W SE 1-46-30
From Ry cut. In contact with
17022 on east side. Dip
high or nearly perpendicular
Str. a little E of S.

17024 400 N 875 N, SE - 1-46-30

From foot of east slope of
high hill

17025 250 N 875 N SE 1-46-30

From top of hill sloping to E.

Dip high to NE

Str about SE

17026 140 N 725 N SE 1-46-30

Gneiss from top of knoll

17027 400 N 425 N SE 1-46-30

Ledge strikes about SE -

17028 600 N 400 N SE 1-46-30

17029 1200 N 400 N SE 1-46-30

From bottom of west pit.

17030 1425 N 0400 N SE 1-46-30

From NE side of ledge

Dip 87° SE Str SE

17031 1425 N 400 N SE 1-46-30

Dip & Str same as 17030

From SW side of ledge
Ledge 100' long 35' wide 20' high

17032 On S. side of highway near last house toward the west. Highest point on the ridge in this vicinity.

17033 On N side of road near place where turn is made. This ledge runs to west along roadside about 400'.

17034 On S. side of road about 500' S.E. of 17033. This ledge is exposed for a distance of 150'.

17035 From schist formation on top of high banks.

17036 Lns stone in contact with 17036 on S.W. side

17037 Schist found to S.W. of 17036

17038 } From ls stone formation
17039 }

17040 Quartzite found in Kroman mine

17041 Ferruginous Jasper from NE.
wall of mine.

17042 From refuse pile at mine

17043 Specimen of ore taken from
stock pile.

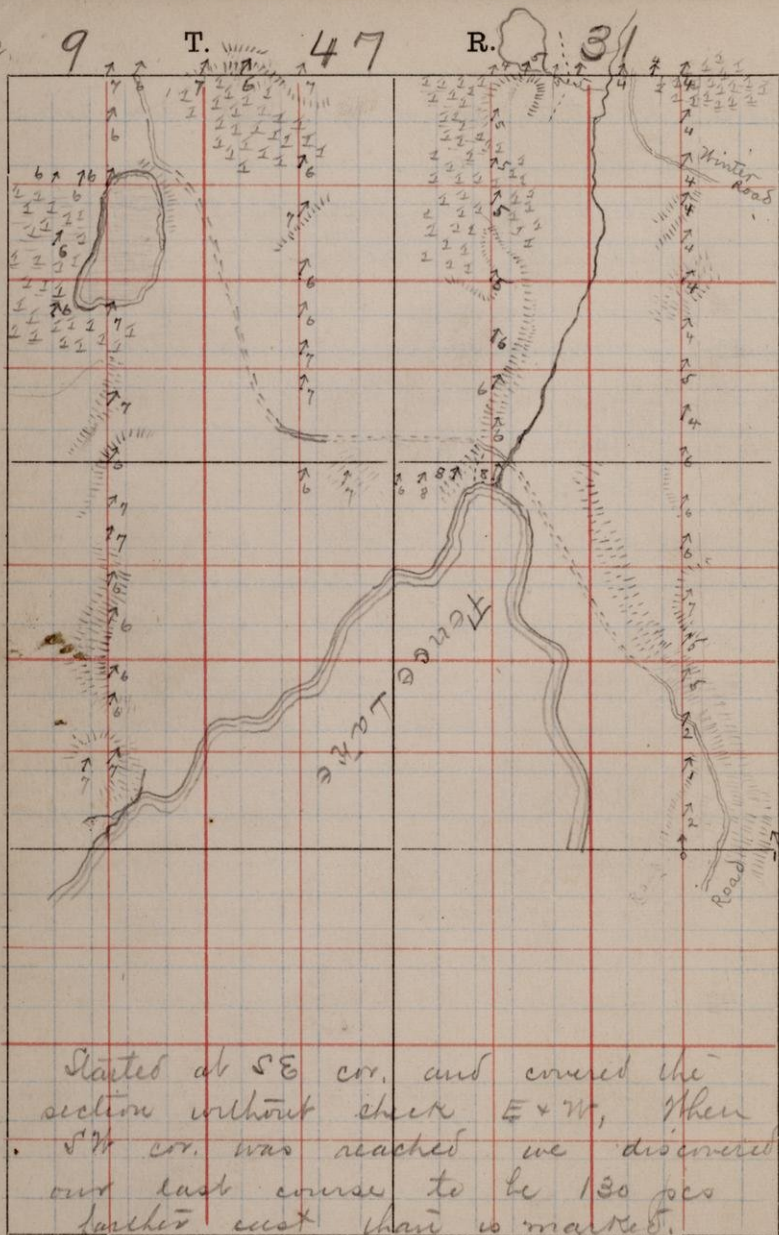
Sec. 9

T.

47

R.

31



Started at SE cor. and covered the section without check E & W, then S & W cor. was reached we discovered our last course to be 130 pcs farther east than is marked.

~~17044~~

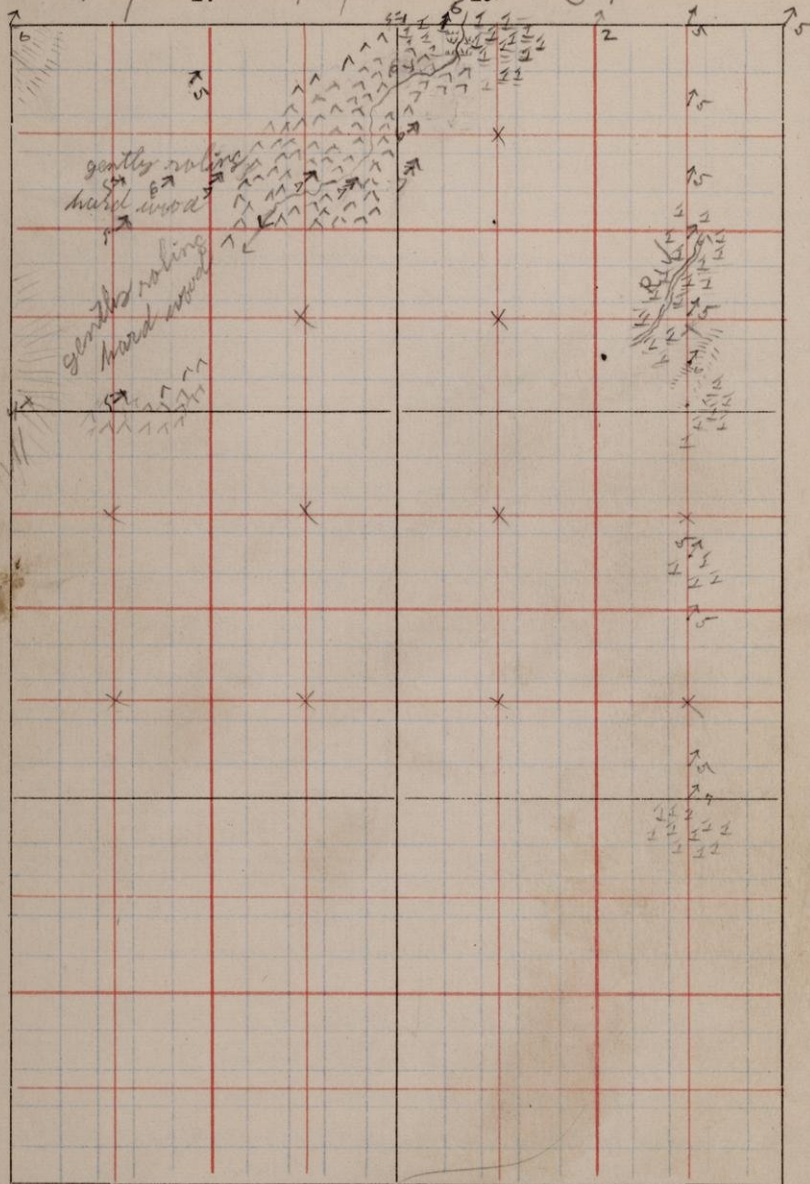
SEC. 17

T.

47

R.

31



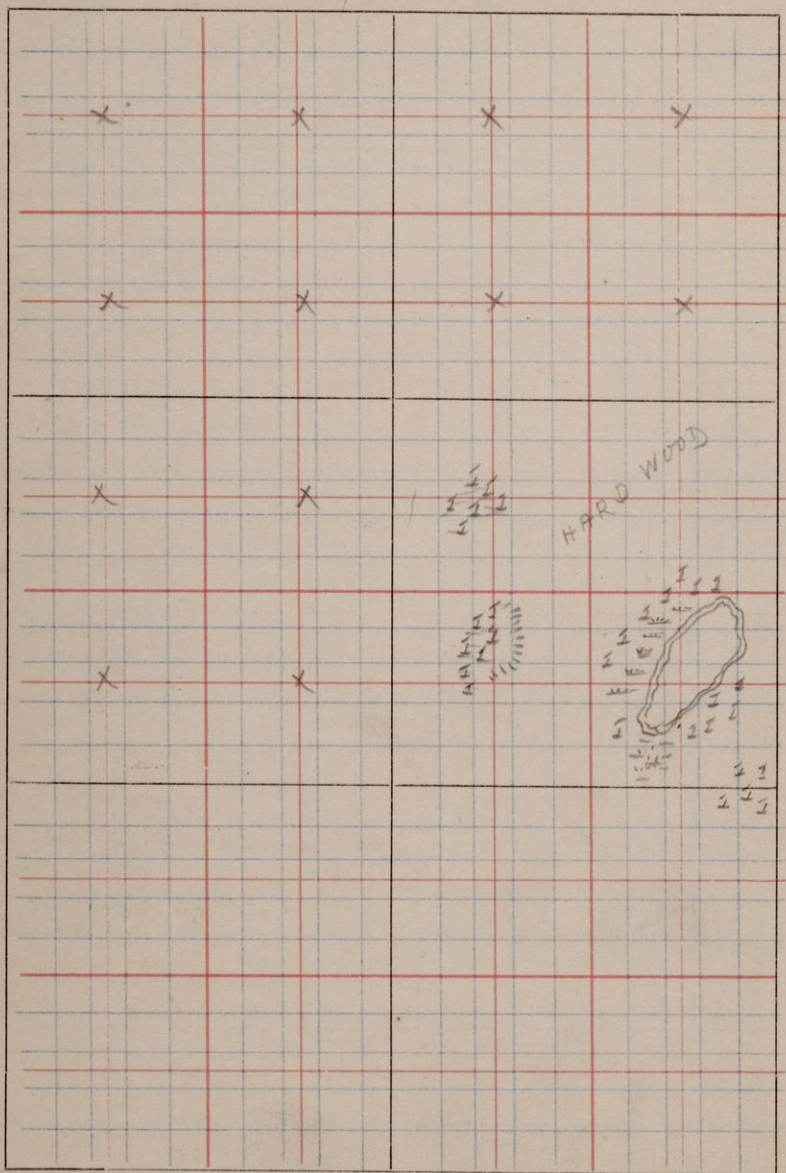
SEC 5

T.

47

R.

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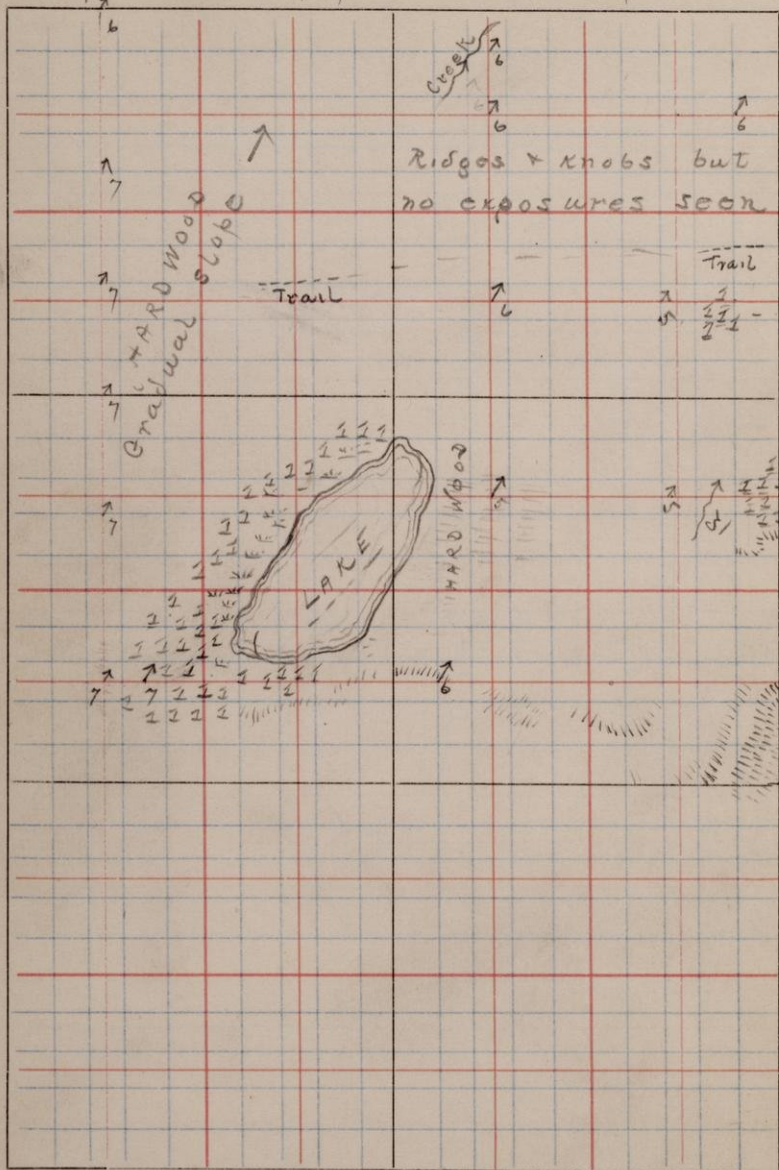
Sec 7

T.

47

R.

21



SEC 10

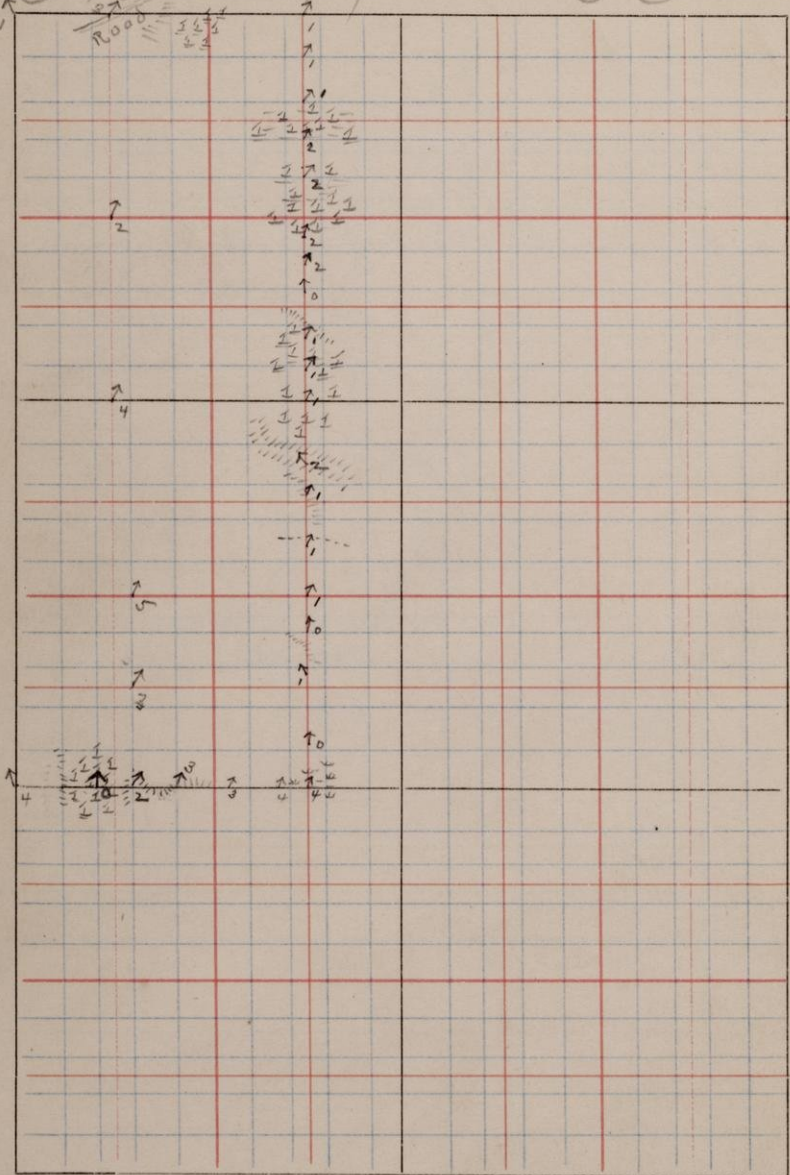
T.

47

R.

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219

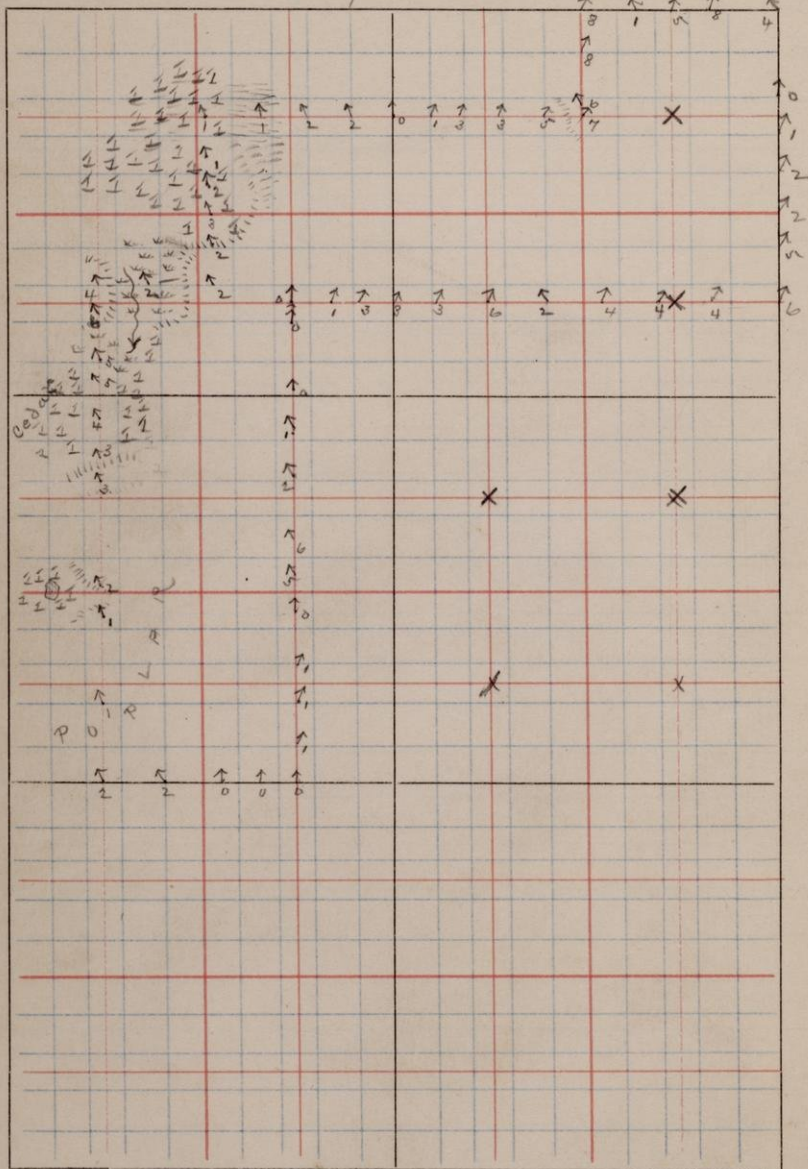


SEC. 21 T.

47

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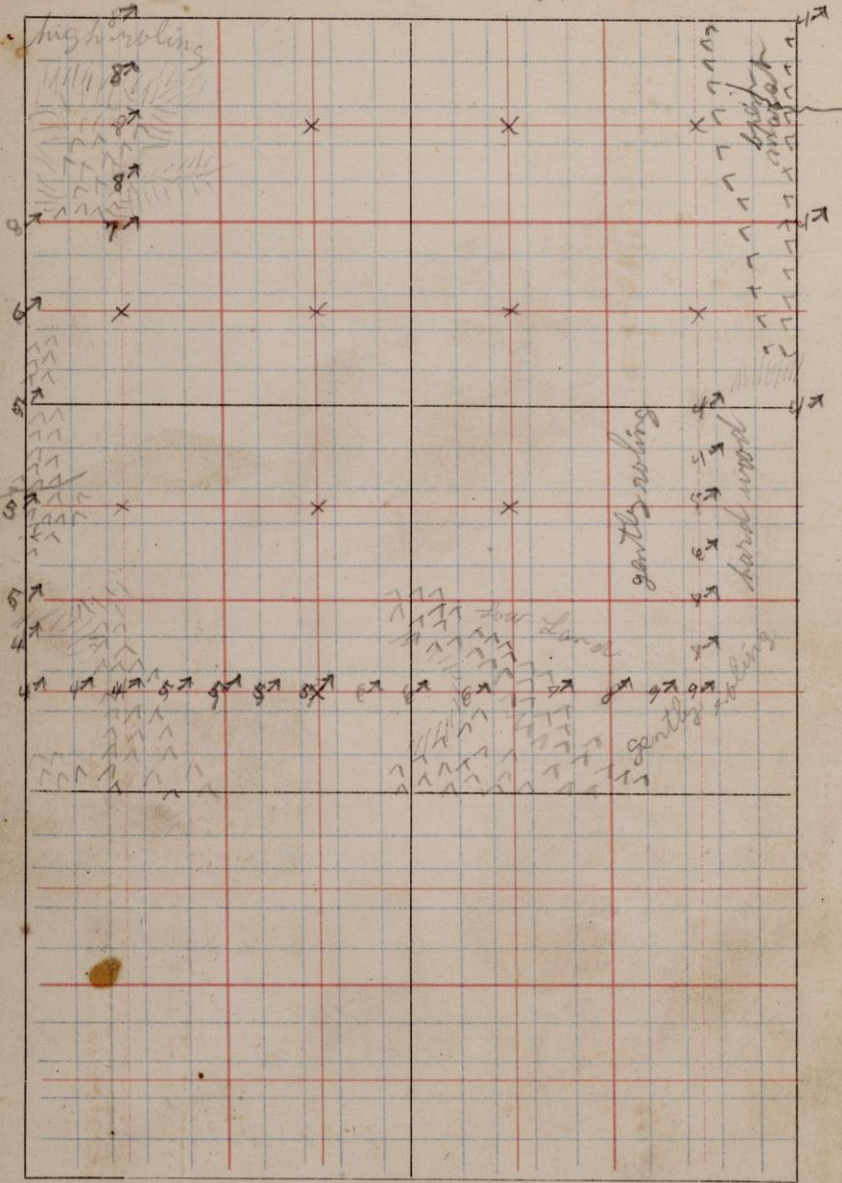
30



Dec 19

T. 47

R. 31



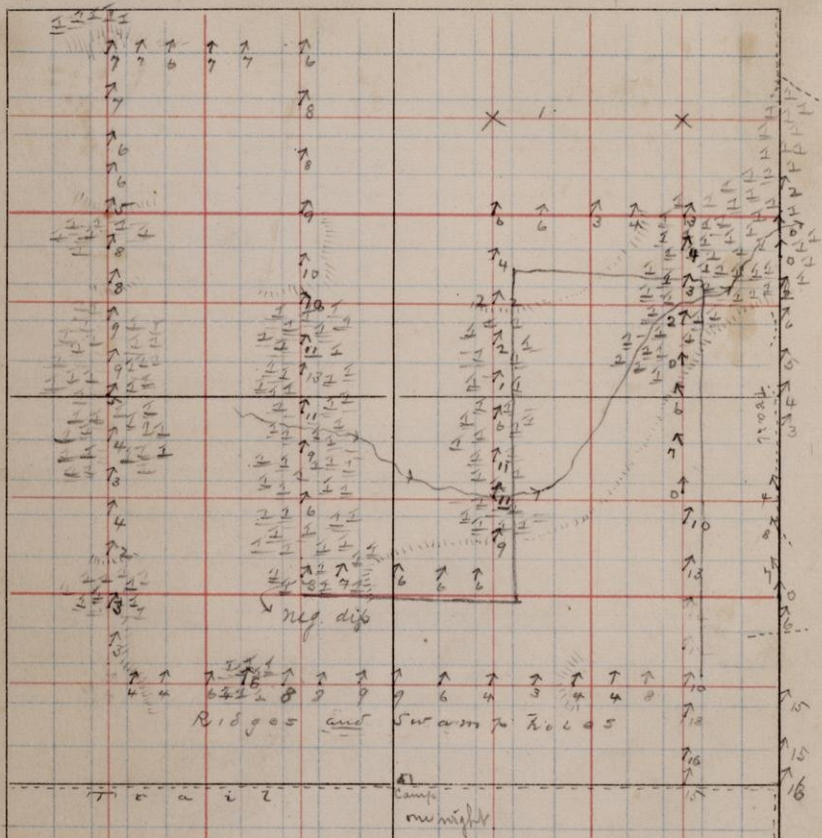
Sec. 23

T.

47

R.

31



attractions marked near pencil line above
should be on that line

camp

S 1/2 26 4

Sec 35

T.

47

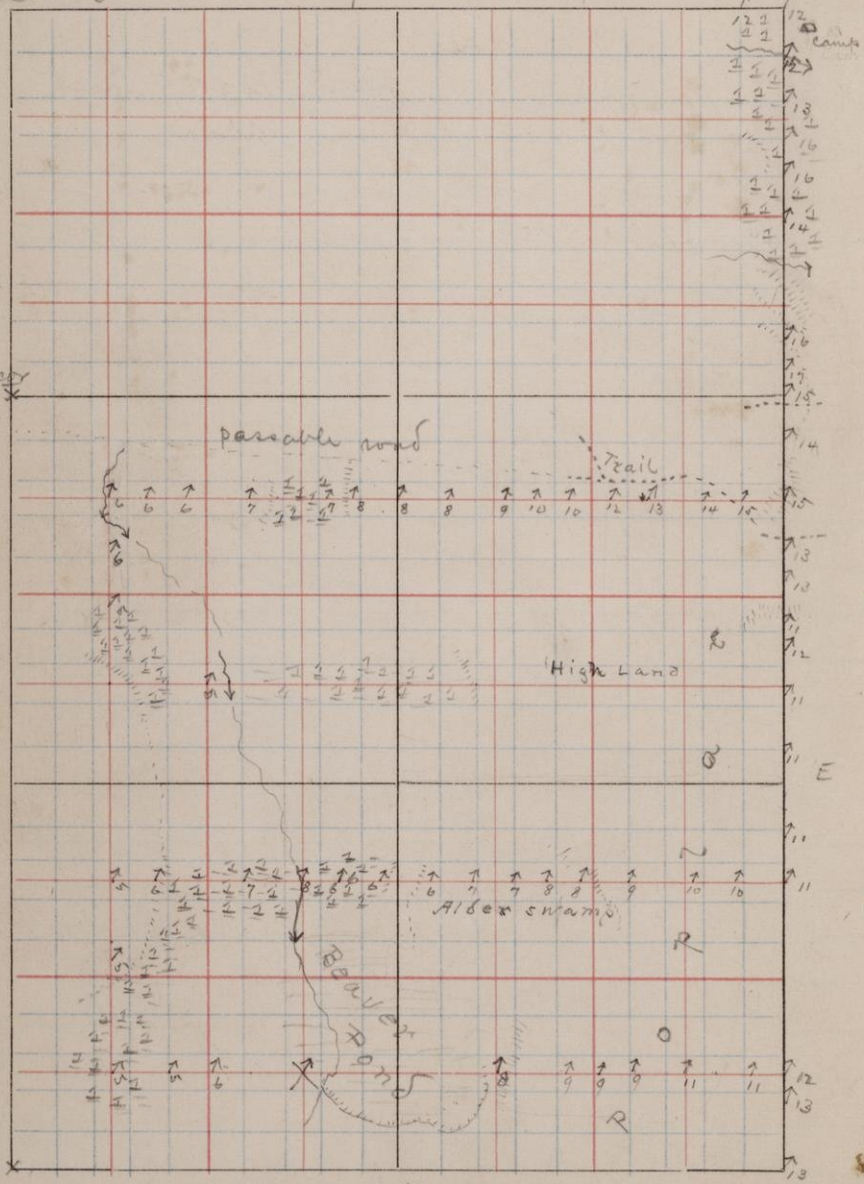
R.

31

777 057
31

Sec 35 47-31

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317 057



S

17044 1750 N 342 76 SE 35-47-31

Mica schist from rock which
may not be in place.

The exposure is about
12' x 6' top

SEC. 13 T.

47

R.

com X

Fine Hardwood

Low Ridge

Greenstone

com

com

17045 1700 N 225 W SE 18-47-30
 Greenstone which is undoubtedly
 in place. The mass seems
 to be about 60' square & earth
 covered mostly but exposed on
 sides covered with earth is
 10' or 12' high.

17046 1200 N 260 W SE 13-47-31
 Greenstone from west top of hill
 up from swamps.
 Also at 1100 N 240 W

17047 1300 N 200 W SE 19 47-30
 Str N & S Dip 70° E
 Creek flows over this ridge
 in a fall of about 30'
 This is in a ravine as shown
 in sketch on opposite page

17048 Just south of creek & 17047
 Strike of ridge about N & S

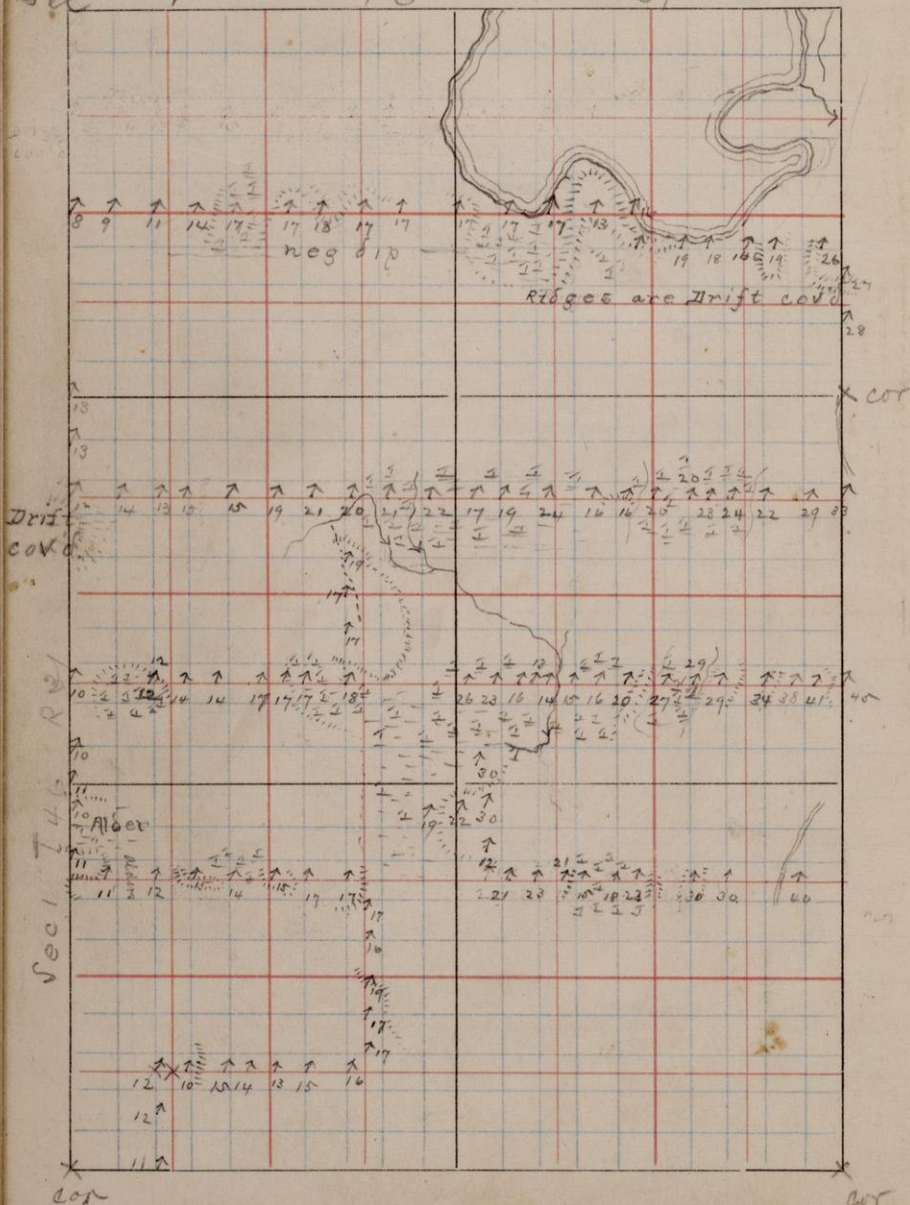
S 1/2 36
Sec 1

T.

47
46

R.

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31



17049 1175 N 250 W SE 24-47-31

Greenstone from east side of
low hill. Exp from 50' long
and 20' high.

also on top of hill as
shown in sketch.

SEC 31

T.

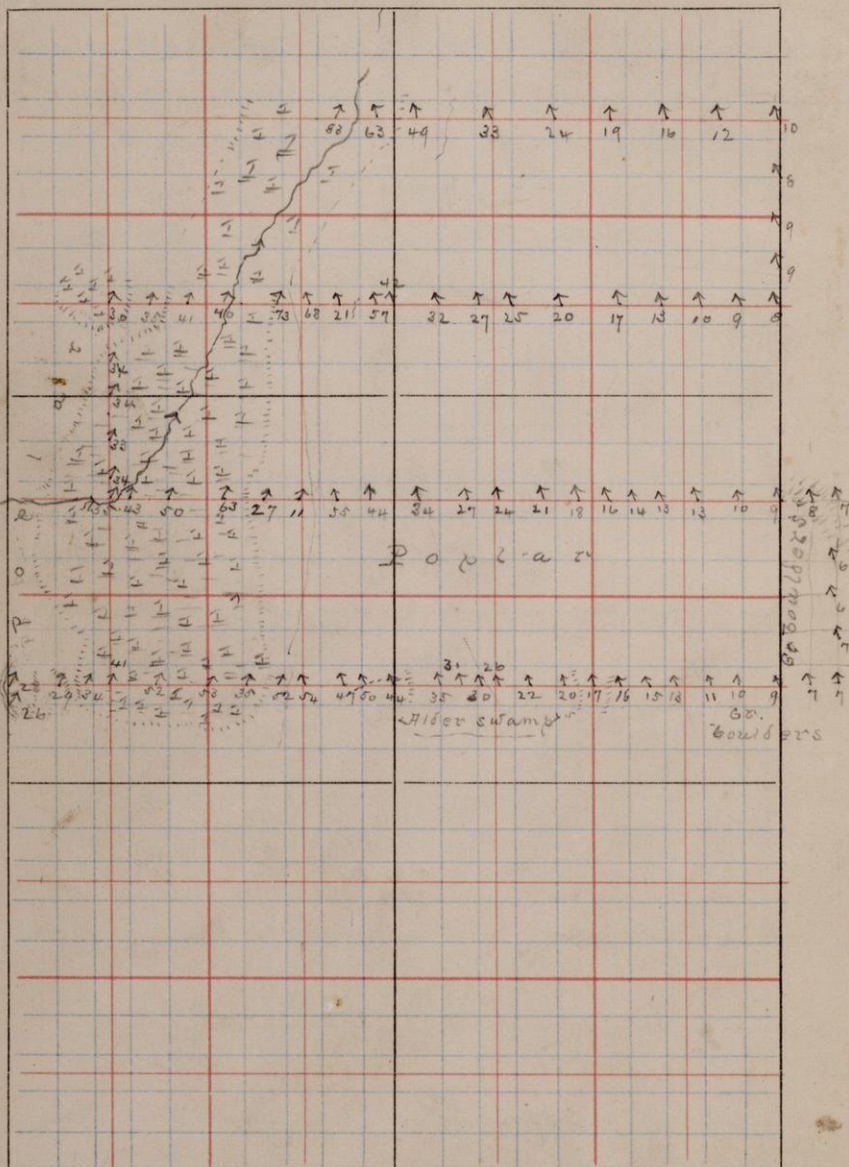
47

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Road.

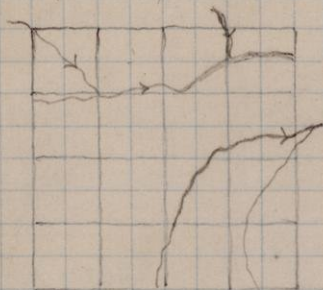
Road



1 2 3 4 5 6 7 8 9 10

2 7 1

19-47-30



27 24 14 27

4 5 6 7 8

19

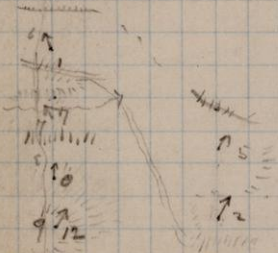
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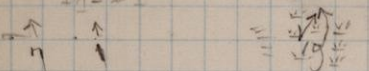
10



17 14

17000 250

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150 N & S
50 E & W

1. 1410 N 150 W
SE 28-47-36

Dip - about 80° NE
Str. N 50° W
~~Dip~~ SE

2. 1330 N 125 W
SE 28-47-36

From deep pit
shows bacciated
structure.
Most of rock here
is quartzose like
specimen except
not being bacciated

3. 1300 N 150 W
on S side of
creek.

4. 1250 N 120 W
From exposure
which is much
disturbed & large
masses are
jumbled around
prominently
The hills at
this place are
covered largely

with large granite boulders & many
of such as this specimen

5 98N 120 W SE 28-47-30

1 Line between 9 & 14 , 1685 west.
crosses road near tree fallen
across same ~~line~~ . Shaggyarked.
cedar on right ~~from~~ on side going N.

2.

T 47 R 31



L. D. Harvey

G. A. Buckstaff

at road 550 W on line

