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Country south of Negaunee, Michigan: [specimens] 21521-21612. No. 117 1891

King, F. P.

[s.l.]: [s.n.], 1891

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U. S. GEOLOGICAL SURVEY
FIELD SECTION BOOK

9-891

Book 117

Country south of
Saginaw, Michigan.

J. P. King, 1891

21521-21612

LAKE SUPERIOR DIVISION.

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 number attached, showing the direction and amount of the dip. Denote a shaly or other very plainly bedded ledge by right parallel lines, and a ledge having a secondary structure by wavy parallel lines running in the direction of the strike, with dip arrow and number attached as before. The greatest care must be taken to avoid confusing slaty or schistose structure with bedding, and in all cases where there is the least doubt about the true bedding direction, 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 to 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. The ruling of the left-hand page is also arranged so that, if desirable, a smaller scale can be used, two inches, one inch, or even one-half inch to the mile. With the two-inch scale, the squares outlined in black represent sections, and those in red, quarter sections and "forties," while the space between the blue lines is 200 paces.

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. When topographical maps are used for locations this paragraph applies only in part.

3. Collect a specimen from every ledge, or wherever there is a change of rock on any one ledge, taking care to get fresh material, unless for a special purpose the weathered surface is desired. In case of trips made on foot or in canoes, for long distances, neighboring ledges, unquestionably of one kind of rock, need not be specimened, but chips of them must be taken. The position and extent of the ledges not specimened should be marked on the map, with notes that each is of a rock identical with specimen so-and-so. Under the same conditions small sized specimens, trimmed to a uniform size of $2 \times 2\frac{1}{2} \times \frac{3}{4}$ 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 section 3, chapter IV, p. 44, Regulations of the U. S. Geological Survey. In all cases collect chips for slicing. Specimens should not be placed together without protection in the collecting bag as the fresh surfaces, important in determining the character of rocks, are thus destroyed. They should be damaged by no temporary mark, but the numbers should be at once marked in at least two places upon the inclosing paper or cloth bags. It is desirable that specimens be permanently marked in camp by painting the numbers upon them in white upon a black background, using Silver White and Ivory Black oil tubes for color, with turpentine as a diluent.

4. 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.

5. Forward this note book as soon as filled as registered mail matter to C. R. Van Hise, U. S. Geologist, Madison, Wis.

21521-21612

Book III-# 117

all 18

In running from South $\frac{1}{4}$ Post, to centre of
section 7 an error of 22 too far north and 40 paces
too far east accumulated in distance = 1500 paces

Field Notes

Season of 1891

Marquette Range

F. P. King.

NW 1/4 12

T. 47
250E

R. 27

100 paces short

X 21522

County Road

X 21521

Road

X 21524

Iron
Cliff Road

X 21513

Gun Powder
Lake

1
Sept 4 1891

Started from camp at Gun Powder
Lake 11 25 N of SW cor Sec 12
T 47-27

1500 x out of swamp and in center
of road running to powder mill

1540 N top of first level of hill

1655 N ledge of greenstone running
west of us for 40 paces

1665 N slope of western spur of hill

1675 N ^{SW cor Sec 12-47-27} top of spur. large greenstone

✓ 21521 ledge took Spec 21521

1680 N foot of 12 ft bluff of greenstone

1760 x have passed over a level which

at 1760 x becomes a slope and
angles off to the east

1765 N small ledge of greenstone

1765 x swamp

1800 N swamp ends

1815 N County Road

1900 N ^{SW cor 12-47-27} Came to new cor Sec 12-47-27

This is on hill showing large
exposure of actinolite schist

✓ 21522 Took Spec 21522

Ledge dips to the north. Exposure
begins about 25 paces south. 20 paces

west of corner there is another of same
Returned to camp and fixed
up the dial compass

Run north: after repairs, on the
250 E line

1125 N foot of slope of big ridge

1210 N Small green slm. ledge

1215 N ^{250 E SW cor 12-47-27} Face of bluff is rather a

✓ 21523 very precipitous slope. Took
Spec 21523

1250 N foot of slope

1275 N beginning of spur of long
ridge east.

1300 N Iron Cliff Road

1325 N tip of spur 300 E beginning
of exposure of greenstone of main
ridge

1350 N 250 E Small greenstone ledge

1375 N Iron Cliff Road

1400 N Small creek ship tanks

1415 N 260 E ledge of greenstone

1425 N small ledge of "

1425 N 260 E "

^{250 E SW cor 12-47-27}
1620 N Face of bluff greenstone: about
30 ft higher and, ordinary. Took

✓ 21524 Spec 21524

1630 N top of bluff

1630 N 200 E big knott bluff of
granite rising to the height
of 75 ft

1630 N 350 E Iron Cliff Road. Hill
slopes off to the east and falls
out before striking road

1655 N to north base of precipice
on this side

1675 N small ledge granite

1830 N swamp

1930 N " ends

1990 N County Road. 30 paces
East of us the Iron Cliff Road
meets County Road.

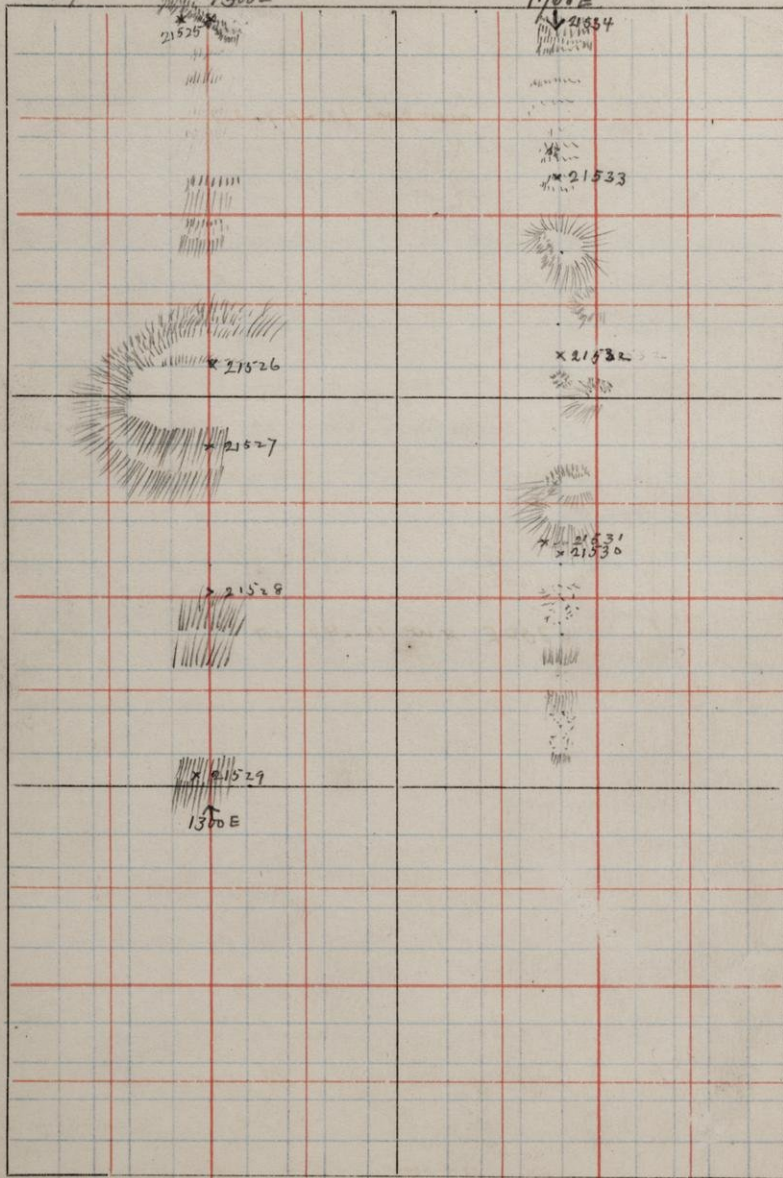
NE 1/4 12

T. 47

R. 27

1300 E

1700 E



Started 1300 E of NW cor Sec 12-47-27
 Run south.

10 S 1335 E ^{NW cor 12-47-27} large greenstone knot on hill

✓ 21525 look Spec 21525

55 S little ledge running east greenstone
 Big hill has marks a levee

100 S 1350 E greenstone ledge

105 S 1340 E "

160 S Slope - downward. Exposure
 of greenstone east and west of
 us

255 S Foot of slope ^{360 S based valley} NW - begin
 exposure of another hill

✓ 21526 440 S 1300 E ^{NW 12-47-27} look Spec. 2526. Large
 greenstone ledge running east and
 west.

465 S exposure to here of same ledge

465 S top of hill

490 S greenstone ledge

545 S small ledge greenstone

585 S greenstone ledge and a 5 ft
 precipice facing north.

590 S to a ridge of greenstone

10 ft high - bare - running
 east about 100 paces and

sloping off to the west with
main hill which enters large
valley in ridge from very
steep to the south.

✓ 21527 Spec 21527 taken at 600 S ^{1300 E} of
nw cor Sec 12-47-27. on

slope but from same greenstone
ledge

665 S valley

700 S beginning slope of hill

710 S Small ledge of greenstone

730 S

745 S ^{1300 E} "nw cor 12-47-27" look
large " " "

✓ 21528 Spec 21528 1 wall facing
South and running east and
west

765 S Similar to last ledge of greenstone

780 S large ledge of greenstone

815 S top of hill - small greenstone
ledge

906 S surface & form of greenstone

910 S ^{1310 E} none of same ledge

920 S and west a shallow valley
with gradual slope to ^{west} it.

945 S Swamp

980 S out of swamp - ledge of
green stone precipitous west

nw cor 12-47-27

980 S 1275 E, wall of greenstone
25 high runy west and east

21529 Took Spec 21529

Older side of this ridge actualite
schist which has been examined
by Dr Bayley

Run east to 1700 E (See 12)
turned north.

45 N ledge greenstone - top of
shut slope

60 N swamp begins

100 N swamp ends

125 N top of slope

195 N foot of slope

205 N swamp

270 N ends

315 N 1700 E sw cor 12-47-27
ledge (?) actualite schist

21530 Spec 21530 Dip 30° N Strike 21° N of N

320 N 1725 E greenstone ledge

21531 " 1710 E - sw cor - 12-47-27 " Spec 21531

380 N 1710 E

345 N small ledge on top of slope

350 N 1725 E small ledge of greenstone

400 N top of large knot of greenstone.

Top of knot 50 ft in diameter

425 x bluff 25 ft high. This is about
50 paces long.

515 x end of a slope coming in
from the east

1515 N 1725 E large greenstone ledge

1530 x knot of greenstone 25 paces
in diameter at base

1570 N ^{1700 E Sw cor 12-47-27} little knot of greenstone &

✓ 21532 paces in diameter Spec 21532

1610 N 1720 E top of a large greenstone
knot forming the Sw cor or slope of a hill

1630 x small greenstone ledge

Corrected 1675 x top of slope - whole west of
& former

1710 N ledge of greenstone running west

1720 N " " " "

1740 N small " ledge

1760 N out of mud hole

1765 N ledge of greenstone just east of

1800 N 1705 E ^{Sw cor 12-47-27} large greenstone & p. 0 m

✓ 21533 50 ft in diameter. top spec
21533

1840 N 1680 E large greenstone ledge

1840 N 1705 E " " "

1888 N small ground sp. "

1890 N " " " "

1900 N 1710 E " "

1910K small ground of greenstone
 1930K large of greenstone running
 East and west 5 ft wall facing
 north.

connected

1995K slope fine i p. lous and
 rocky.

1700 E sec cor 12-47-27

1995K A Shute survey line. North.
 line of Sec 12-47-27

21534

Took Spec 21534 greenstone.

This line about 1/5 way down slope

Sw 1/4 7

T. 47

R. 2 '6

500 E



21535



21536



21537



Sept 9 1891

Started 1000 S 500 E of NW
Cor. Sec 7-47-26

Running over a high broad hill

1274 S Swamp

21535 1380 S ^{500 E NW cor Sec 7-47-26} out of Swamp. Base of hill

Ledge of greenstone Spec 21535

1425 S top of a steep slope.

Outcrop continuous of ledge but
for the most part covered with
foliage.

1465 S Large knot of greenstone
150 x 50 ft in diameter 15 ft high

1500 S slope

1530 S 510 E small greenstone
ledge

1700 S marsh and swamp

21536 1720 S 470 E ^{SW cor sec 7-47-26} Spec 21536

Large greenstone ledge on north
eastern side of ~~low~~ ridge

1800 S small greenstone ledge - western
end of ridge

21537 1940 S 440 E ^{NW cor 7-47-26} Spec 21537

21538 1940 S " 21538

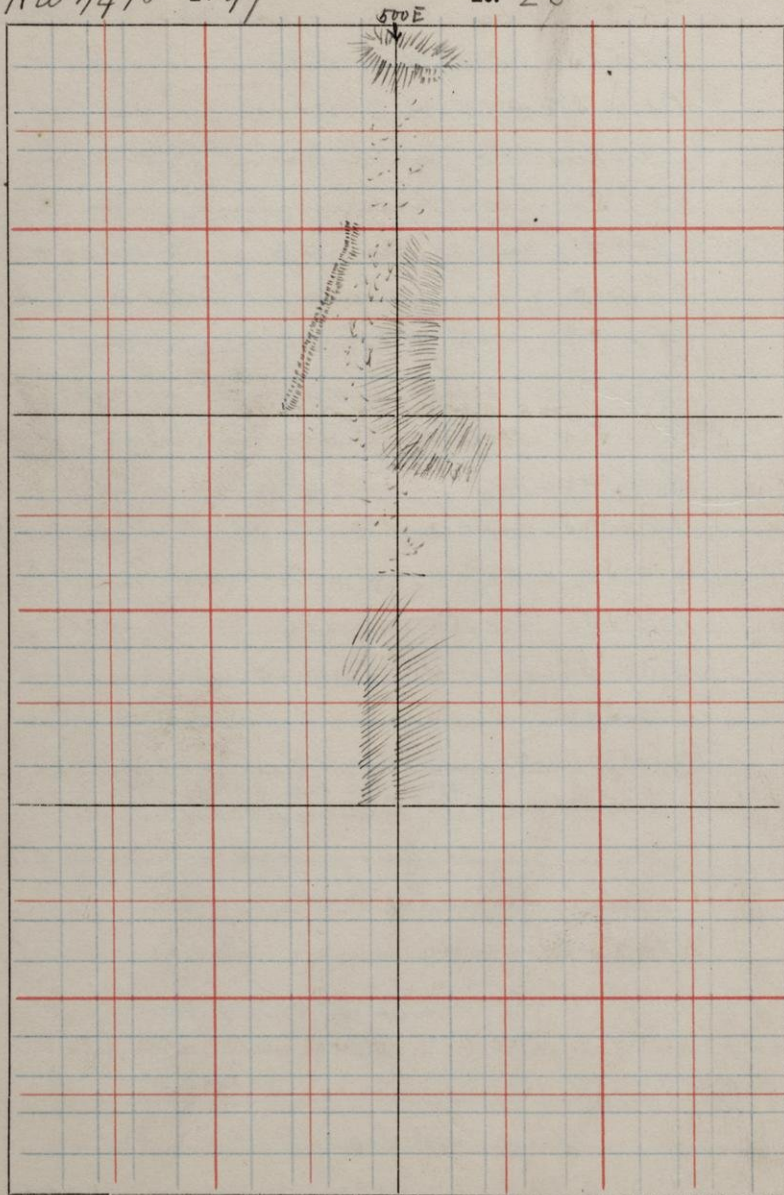
Run into Sec 18-47-26

35 S 530 E large greenstone ledge

75 S Swamp.

NW 1/4 18 T. 47

R. 26



75 S 570 E 15 ft precipice of greenstone

245 S Swamp ends

429 S 375 E large ledge of
greenstone west side of swamp.

340 S have been running along
western slope of hill since

575 S enter swamp again

700 S out of swamp

Gradual slope to large hill

1570 S ^{500 E NW cor. 18-47-26} Actinolite schist

21539

Dip 60° to 65° N Strike N 50° E

Took Spec 21539

1600 S foot of very steep slope

1625 S Greenstone hill tan rock for
50 paces east of us

1810 S to steep slope of hill

520 E middle of hill or highest part
From here it has a rocky precipitous
slope north and east - bluff 75 ft
high of greenstone.

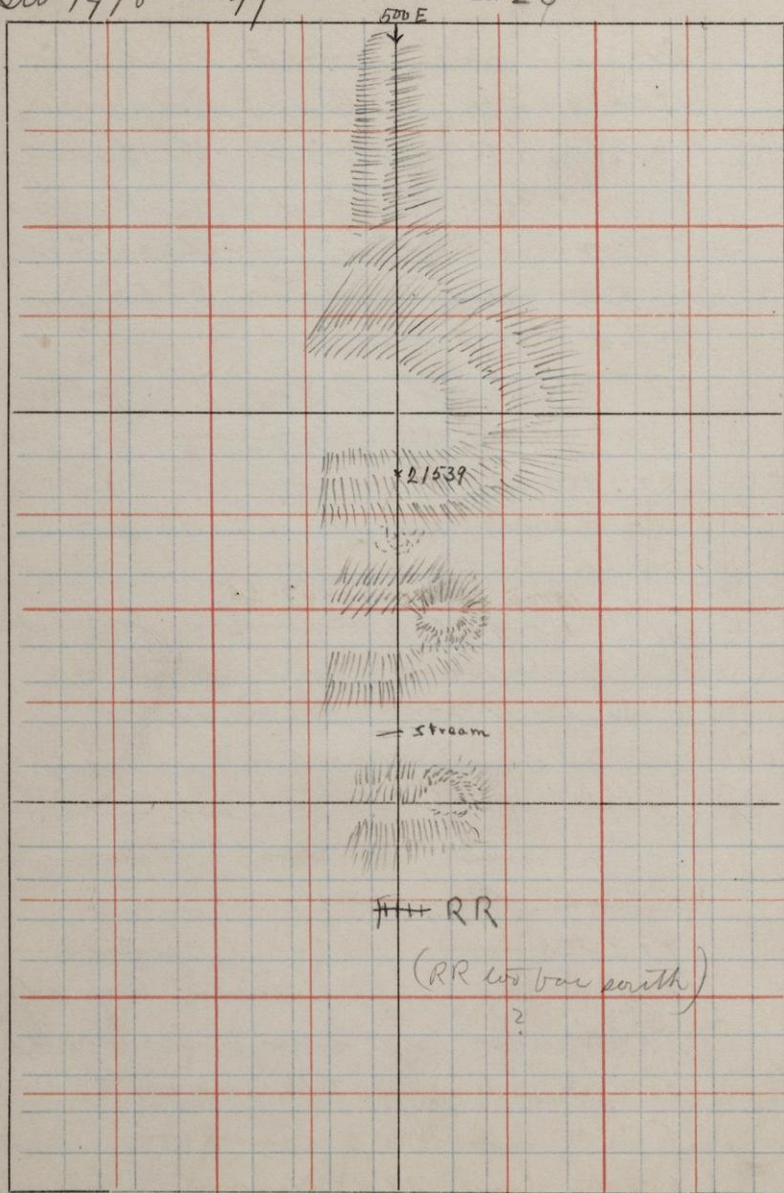
1925 S stream

1969 S Greenstone ledge side of hill

R.R. track 145 S into Sec 19-47-26

Sw 1/4 18 T. 47

R. 26



Started from 1000 E of SW cor
Sec 18-47-26. at R.R. which is
40 N R.R. - This is 40 paces
west of west end of long bridge
274 N. Actinolite-schist small

21540

7 paces. Took Spec 21540.

This dips 8° to west little south.

275 N 940 E 12 x 5 ft ledge of
actinolite-schist. Same as Spec 40

320 N 925 E Small ledge of actinolite
schist same as Spec 40

320 N 970 E similar ledge

1000 E SW cor 18-47-26

345 N 1 ledge of actinolite-schist

25 paces long 10 ft wide

Strike $\frac{1}{2}$ 8° N Dip 40° N

21541

Took Spec 21541

450 N top of hill - greenstone ledge

Cog pines: frequent - hill side
east and west

490 N small ledge of greenstone

570 N Small greenstone ledge

515 N slope of spur - ledge -

560 N stream 3 ft wide

575 N ledge of greenstone

600 N same 3 ft stream

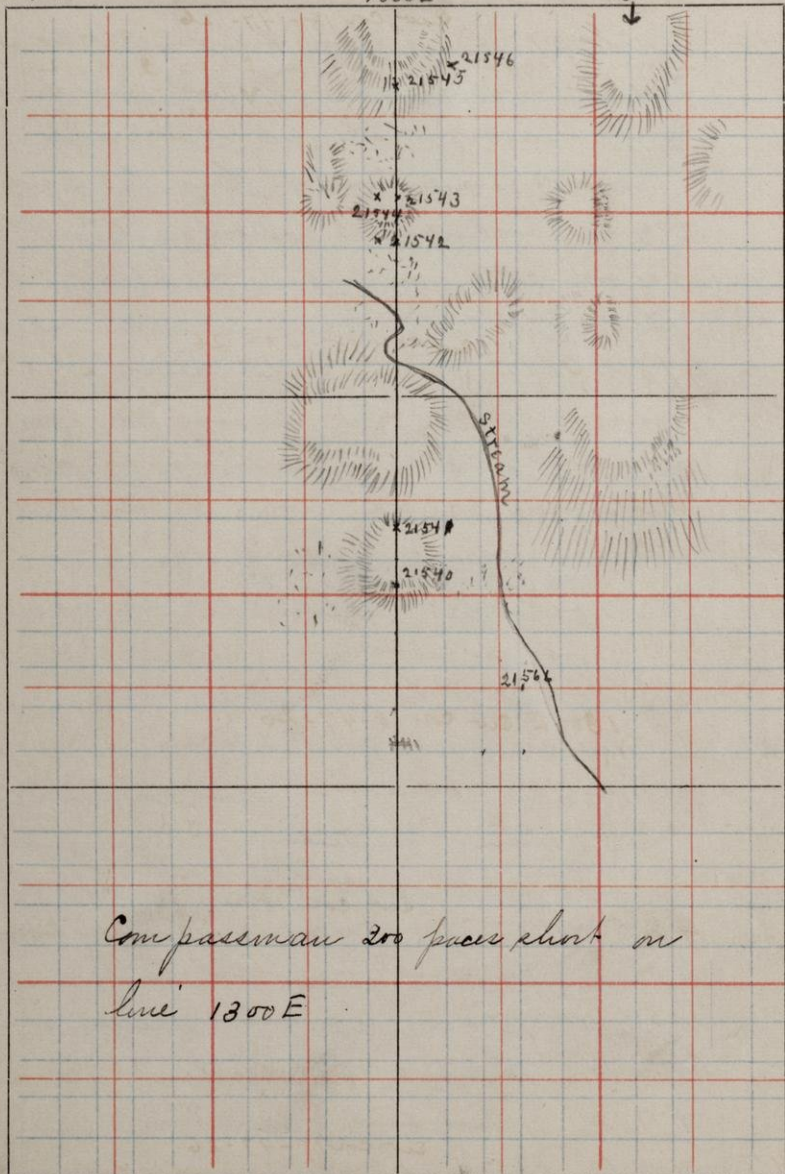
SE 1/4 18

T. 47

R. 26

1000 E

1300

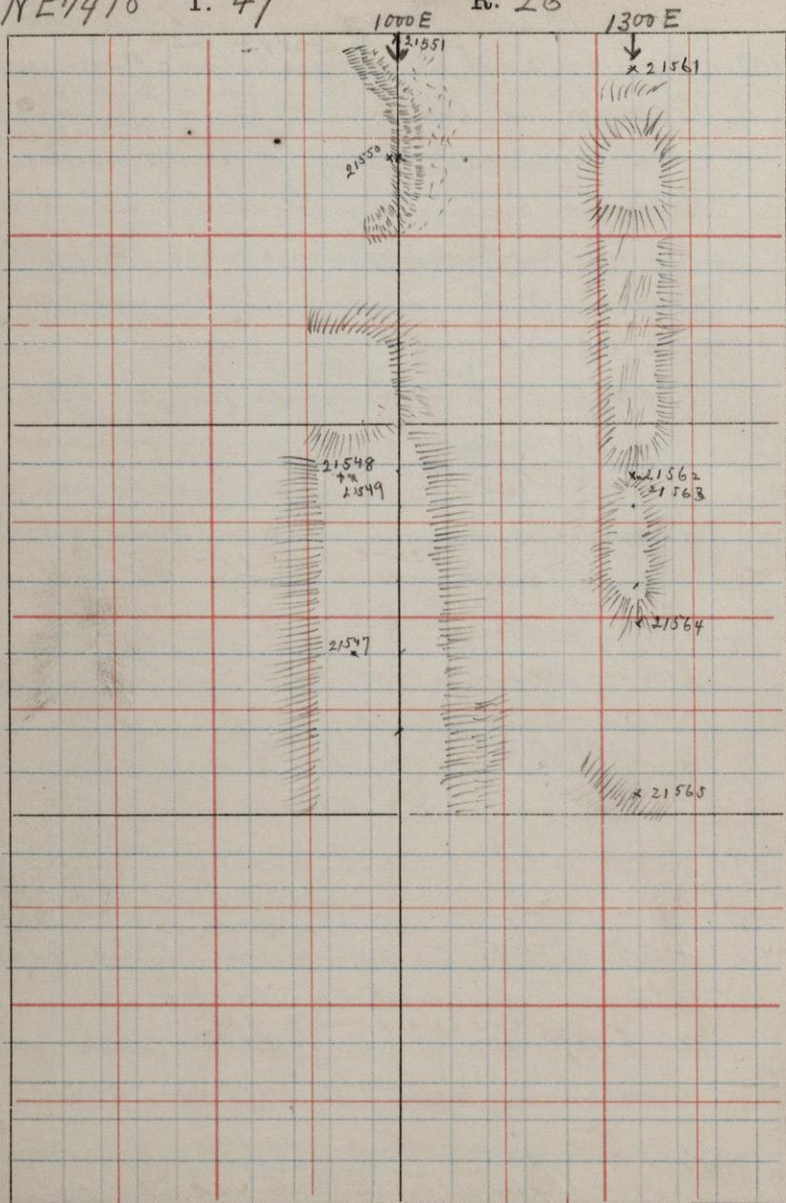


Compassman 200 paces short on
line 1300 E

- 600 N 10 20 E Small greenstone ledge
 Sw cor 18-47-26
 ✓ 21542 705 N 975 E ^{Sw cor 18-47-26} large ledge of greenstone
 ± wall 25 paces long 10 ft high - Spec 21543
 770 N on top of hill ^{at where section base I took spec 42} is a large
 & piece of actinolite schist
 much decomposed but showing
 a dip and strike similar to other
 species of the day - Took spec
 21543
 ✓ 21543 770 N 925 E ^{Sw cor 18-47-26} actinolite schist Spec 21544
 ✓ 21544 Large ledge - dipping to the
 north. This is the first instance in
 which the schist dips to the north,
 on this side of 1/4 line.
 780 N Swamp
 900 N Swamp
 Slope to hill
 1000 E ^{Sw cor 18-47-26}
 915 N near top of slope is a 15 x 6 ft
 ledge of actinolite schist
 ✓ 21545 Spec 21545 Dip 45°
 Strike N 30° W
 ✓ 21546 925 N 1075 E ^{Sw cor 18-47-26} greenstone Spec 21546
 1112 N greenstone ledge
 1152 N 972 E small greenstone
 ledge on west side, top of slope.
 1170 N greenstone ledge
 ✓ 21547 1200 N 925 E ^{Sw cor 18-47-26} west of greenstone
 exposure on base of western

NE 1/4 18 T. 47

R. 26



slope. took Spec 21548

✓ 21548 - 1430 N 920 E ^{Sw cor Sec 18-47-26} ac. and lite schist dipping
westward. Ledge on brow of hill.

This is the beginning of schist exposure
on this hill. the spur having
for its western slope as far as
seen and nothing but greenstone.
The schist now follows the western
slope of main hill from brow
& base as will be seen later.

Took Spec 21548

10 paces east of Spec 21548 or

✓ 21549 1430 N 930 E ^{Sw cor Sec 18-47-26} took Spec 21549

1480 N 990 E small greenstone ledge
which appears again at 1015 E

1570 N 980 E eastern slope or spur
of main hill with greenstone exposure
on side.

1800 N 965 E large greenstone ledge
at eastern end of swamp or valley

✓ 21550 1851 N 985 E 40 ft bluff of greenstone
took Spec 21550

2000 N ^{Sw cor Sec 18-47-26} large ledge of actinolite schist
dipping westward Spec 21551

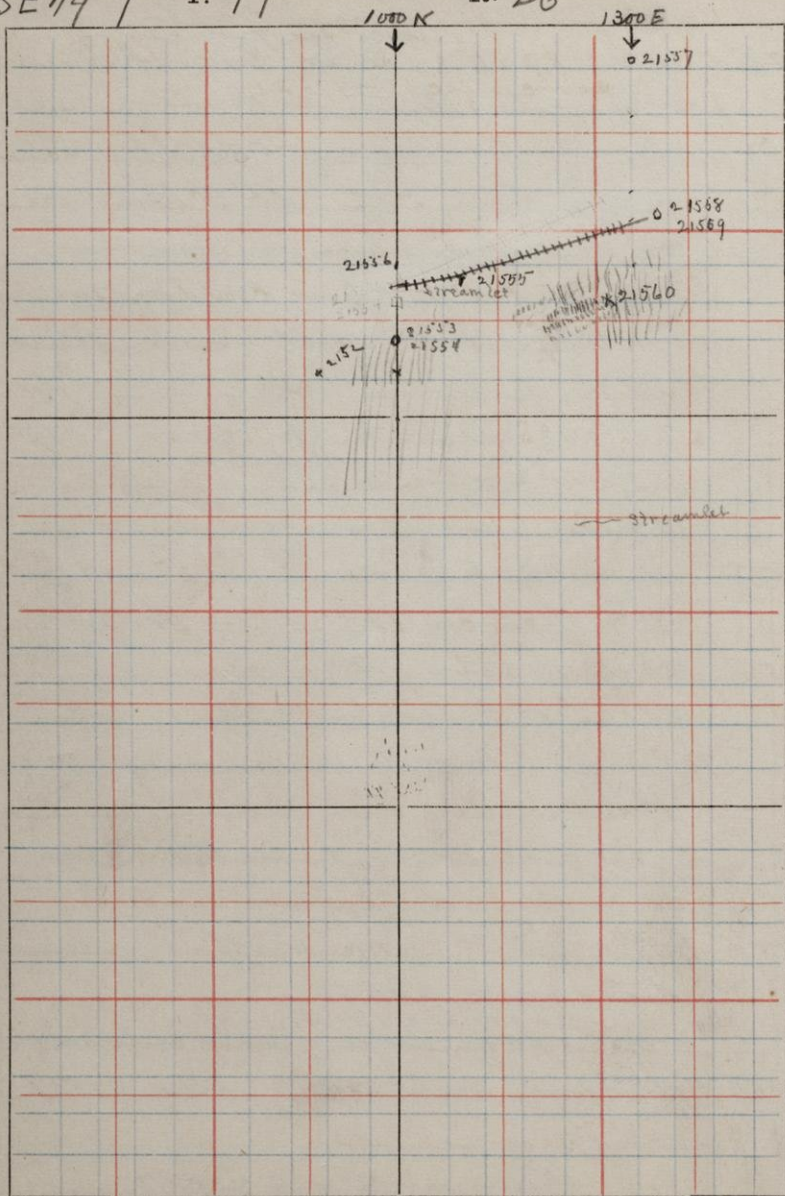
✓ 21551

Run north into Sec 7

Swamp to 100 N

SE 1/4 7 T. 47

R. 26



460 N foot of gradual slope
sw con sec 7-47-26

21552 566 N 875 E 1 Spec 21552 greenstone
sw con sec 7-47-26

600 N nest of least pits. From

21553 largest block Spec 21553 Chloite Schmit

21554 " 21554 Churij ore

680 N 1 ft ^{wide} stream

690 N 1075 E of sw con sec 7-47-26

on RR track is a cut through a
banded greenstone. Dipping to the
South 50° S. Strike N 75° W.

It is only a surface cut. 1 ft deep
and extends for about 50 paces east
and west.

21555 Spec 21555

700 N of sw con sec 7-47-26 block

21556 Spec 21556 from a large greenstone
ledge

775 N large greenstone ledge

East of the old mine workings
to be done with. O. Lane. Table

820 N 980 E greenstone ledge

855 N R.R.

900 N 1040 E R.R. cut through greenstone
ledge - 30 paces long

1000 SE corner of greenstone hill

South of which is old mine
just over hill

1000 N 1025 E greenstone ledge

By correction at 14 feet of north 1/2
line we found ourselves
22 paces too far north.
40 " " " East.

- Run south on 1300 E line (S 7,
1040 S ^{and 1300} NW cor sec 7-47-26
Spec
- 21557 took Spec 21557 from pit 20
paces wide. Actinolite Schist dipping
to the south
- 1235 S 1330 E SW cor sec 7 47 26
- 21558 another test pit Spec 21558 Actinolite Schist
- 21559 21559 Banded Chert
- 1300 S test pit on slope of hill
Rock similar to 58 & 59
- 1350 S 1290 E East end of 100 ft
- 21560 Huff greenstone Spec 21560
- 1342 S 1280 E greenstone ledge running
west to run line
- 1627 S little streamlet in swamp.

- Run south into Sec 18
1300 E of NW cor 18-47-26
- 21561 40 South ledge of greenstone Spec 21561
- 100 S top of hill greenstone exposure
- 210 S 1300 E greenstone
- 257 S large ledge of greenstone

running South East covered in patches

380 S 139 E large ledge of greenstone forming eastern slope of hill and dropping precipitously

500 S small greenstone & p. greenstone

520 S large " " "

560 S 1290 E of ~~new~~ cor Sec 18-47-26

actinolite Schist dipping to westward. Took Spec 21562

560 S is a greenstone ledge also foot of hill which began at 40 S

21563 Took Spec 21562

600 S ledge actinolite Schist dipping westward. This ledge continues to 625 S.

21564 754 S ^{Spec 21564} actinolite Schist large ledge. This seems to have a continuous appearance to 600 S

21565 980 S actinolite Schist Spec 21565 Dip 30 W

Strike N 15° W.

Greenstone bluff back of it & west runing must be mapped.

1075 S large greenstone ledge

1164 S " "

1200 S 1320 E large green lime ledge

1270 S 1315 E " " "

1270 S 1310 E Small " "

1340 S large " "

1380 S small " "

1428 S " " "

1428 S 1260 E large " "

ledges on eastern side of short ridge
with 4 pinn also on top.

1550 S small green lime ledge

1570 S another " "

Curly sweeping southward to a
lower level

2000 came upon stream

2020 RR bridge (marked A 139)

striking this about plum center

Correction from south $\frac{1}{4}$ past 318

shows woodsman to be off

200 faces short

Actinolite Shist ledge just north

21566

of track 1170 E and 1840 S ^{near cr. 1847-26} true

location look Spec 21566

NW 1/4 20

T. 47

R. 26

250E

750E

*21567

*21672

21569

21570

21571

Started 250 E of new cor sec 20
47-26

Country level with very gradual
slope to the south.

330 S 240 E of new cor sec 20-47-26

21567 On top of hill is a large
granite knot - Spec 21567
480 S bottom of steep slopes
740 S across level.

Low mt. far reaching swell
East and west of us. The line
swinging toward western swell
and leaving eastern

1000 S low mt. land

1150 S " level mt. mt.

1785 S Country which has been
almost level except for slight
undulations here dips into a
swamp by a steep bank

1800 S swamp

1862 S stream 5 ft wide

1950 S crossed stream

1985 S line - 15 paces short.

Run East 500 steps. and
run north on 700 E

SW 1/4 20

T. 47

R. 26

250E

750E

low
wet
land

Gently Undulating Country

stream

2156y

Stream

Line runs on top then on west side of high hill.

75° E SW cor sec 20-47-26
340 N A + round an out crop (?)

shown up. by tree roots.

21568 Spec 21568

400 N foot steep slope

470 N " 3 slope

540 N swamp

560 N stream

620 N out of swamp

700 N foot of slope

800 N becomes steeper

1160 N 73° E ^{SW cor sec 20-47-26} summit of hill

ledge of actinolite schist
through which are flows of a
very fine grained greenstone

21569 Spec 21569 Contact piece

21570 " 21570 actinolite schist

21571 " 21571 greenstone



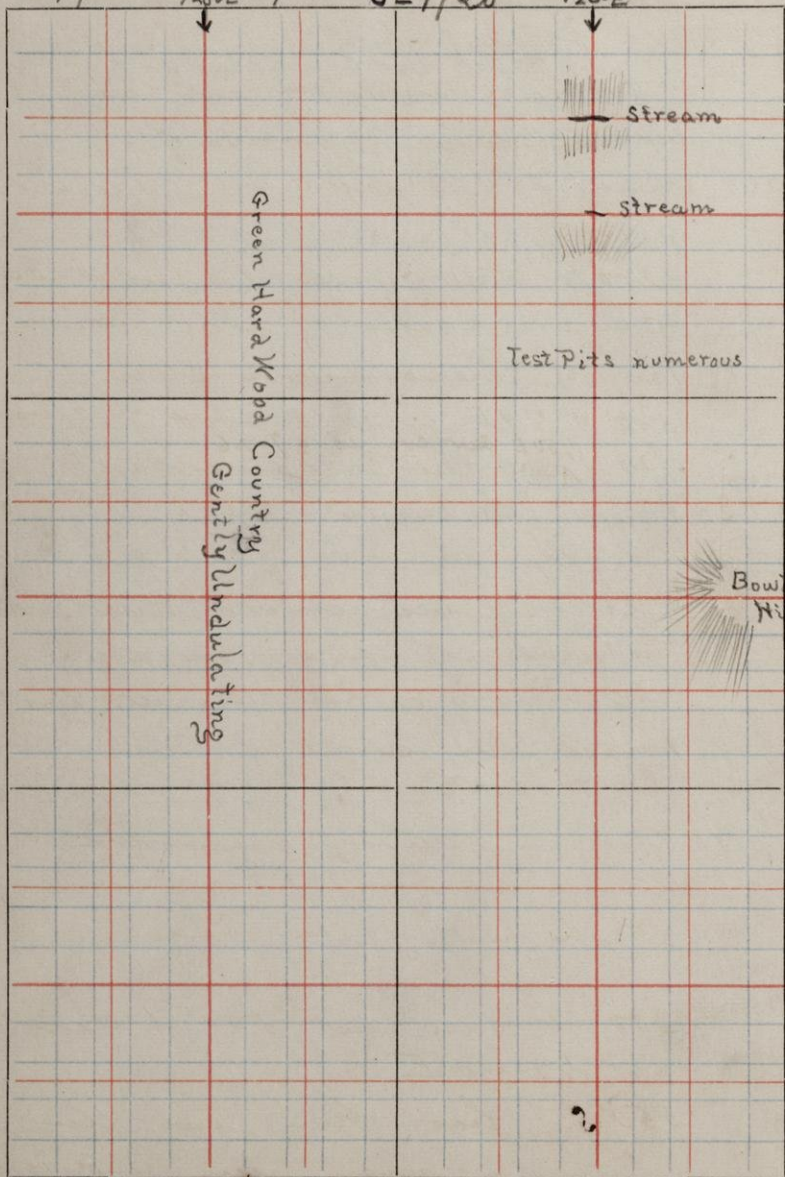
Reduced showing appearance of exposure on top of hill
Shaded portion actinolite schist

NE 1/4 20 T. 47

125°E

SE 1/4 20 R. 26

125°E



1160 N 850 E ledge of greenstone on
top of hill.

This ridge shows on east side
top continuous & prisms of this
Schist interpregnated with greenstone
flows.

1200 N line crosses a spur of this
composed also of above material

1200 N line crosses a spur of

490 1300 N 79 E 10 x 10 ledge of Schist

750 E SW cor 20.47-26

1520 N on hill side ledge of

21372 greenstone begins. Spec 21573

1600 N top.

Ridge runs almost due north
The western slope is very steep
and at 1640 N for 100 paces east
& west the slope is bare from
top to bottom.

Many & prisms of greenstone both
large and small are seen
to the end of the mile

2000 N run east 500 paces
to 1250 E

550 S have been travelling
through a nice green hard wood
country - gently rolling

550 S 1240 E boulder hill of
greenstone

1000 S south out of timber

Cowby has continued the same

1115 S stream 4 ft wide

1200 S top of slope.

1250 S stream 1 ft wide

1770 S boulder hill 1630 E

Completed the mile in open
country.

SE 1/4 17

T. 47

R. 26 17 50

1000 E

1250 E

Big Roll

Country same as 1000 E

Clover Field

Broadlow Swell

low

land

alder Swamp

Started from south 1/4 post
of 17-47-26

Line on slope big hill
no ledges

300 N low land

450 N beginning of gradual slope
swall.

1000 N end of swell and swamp

1100 N passing over western
spur of greenshine ridge running
East and west

1225 N 1070 E of SW cor Sec 17-47-26

21573

Spec 21573 from large greenshine
ledge on northern side of swell. This
swell quite steep dropping 20 ft in 10 paces.

1265 out of swamp

1500 N on eastern slope of hill as it
dips into low land.

Intended north to north 1/4 post.

Compassman was 150 paces long.
that is shrub at 1850 N.

Turned south on 1250 E line 17

Ran south 500 paces. country high
with slight slope to the north

500 S came upon a large greenshine

NE 1/4 17 T. 47

R. 26

1000 E

1250 E

1750 E

Brushy

*21573

21574

streamlet

hill.

Since we were trying to pass
on this run and I found that we
had swung in almost to the $1/4$
line, I did not take any specimen.
Run south to south section line of
17 - Open fields - simply easy
Swells.

~~Continued south into section 20-47-26
on 1250 E line~~

~~1 $\frac{1}{2}$ half mile ^{green} hard wood
country gently undulating.
1125 S small stream~~

~~1200 S " "~~

~~2000 S test pits frequent but
sign that any ledge has been
reached.~~

Returned to south section line of
17-48-26 and run north on
line 1750 E

Swamp to 200 N

1040 N Swamp

1060 N Stream 4 ft wide

1100 N out of swamp

1300 N base of long green line

SW $\frac{1}{4}$ 8

T. 47

R. 26
NW $\frac{1}{4}$ 8

1000 E

↓ 21579

↓

RR.

x 21578

x 21577

Road $\frac{1}{2}$ x 21576

x 21575

Stream

17980

x 17981

x 17982

Road

ridges running east and west
 21574 1500 N. to the Spec 21574 - greenish
 from top of hill.

Continued north to line

Went to the south 1/4 post of Sec 8
 47. 26

430 N. Easy slope into valley

490 N. foot of slope and 10 ft stream

21575 530 N. ledge (?) Spec 21575

ledge 30 ft long ^{N.S.} 50 ft wide

625 N. 1025 E. small ledge of shale

21576 Spec 21576

635 N. Road

Ledges ^{large} & boulders of this slate (Spec 76)

run east and west of line

21577 700 N. ledge (?) 11 ft across in diameter
 Spec 21577

700 N. swampy bog

710 N. " ends

760 N. ledge 15 ft. in diameter Spec

21578 21578

820 N. double RR track

930 N. R.R. track

21579 1000 N. 1060 E. last pit Spec 21579

1038 N. Road

1300 N top of hill

1400 N North side (top) is a large
quartzite ledge about ^{approx} 100 ft
long 20 wide. precipice of 40 ft
to the north and very precipitous
to the west. at base found a contact
with Slate. Took three Specs.

✓ 21580 Spec. 21580

✓ 21581 " 21581

✓ 21582 " 21582

1/4 pt in yard of school house

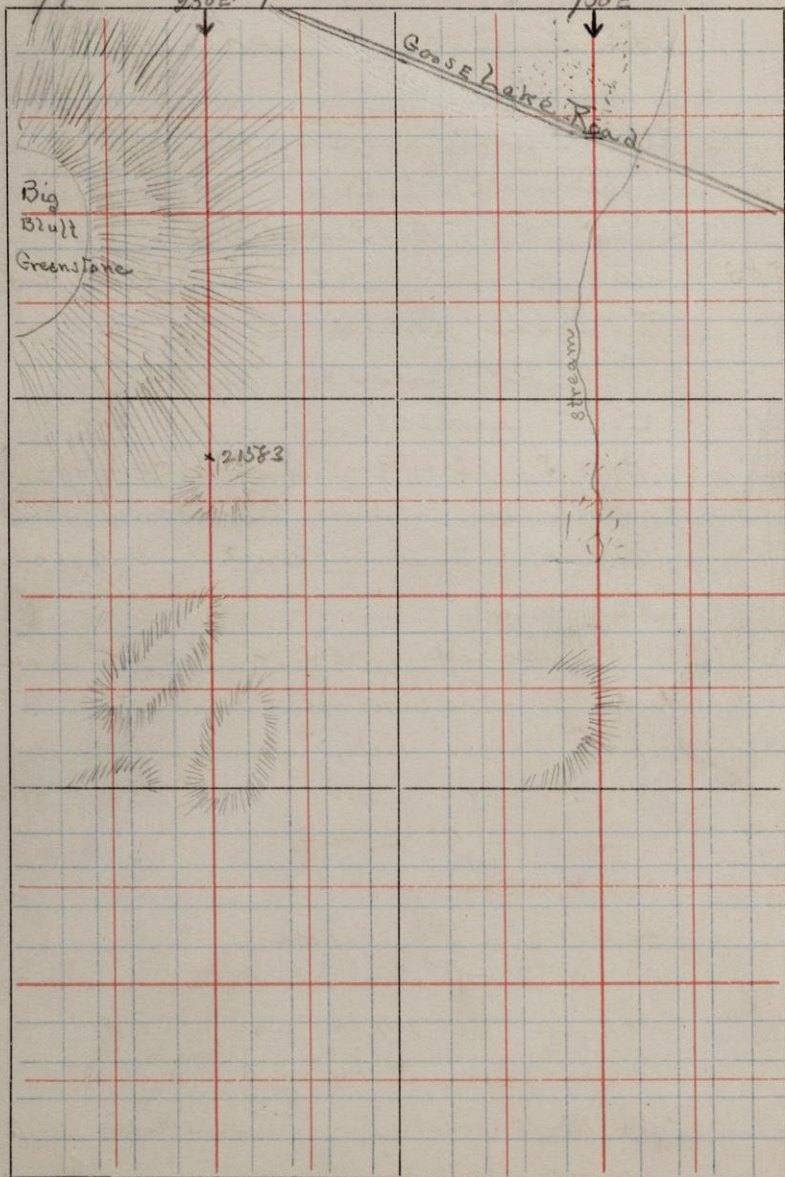
NW 1/4 16

T. 47

R. 26

250E

750E



Started 250 E of mvcov sec 16.47.26

Run south ^{easting} over slope of big
gneissitic hill.

21583 570 S 225 E Small ledge of very
fine grained gneissitic Spec 21583

This ledge comes in patches - is
about 20 paces in diameter

Line passes over low hills
1300 S struck level country -
green hard wood.

This continued to south line of section

Run east and

turned north on 750 E line

1 N } hard wood country
1000 N } slightly rolling

1100 N high land of the west dips
east in 5 low.

1300 N Swamp

1440 N " Ends

A little stream of spring source
began at 1400 and kept on
our line to 1450 N.

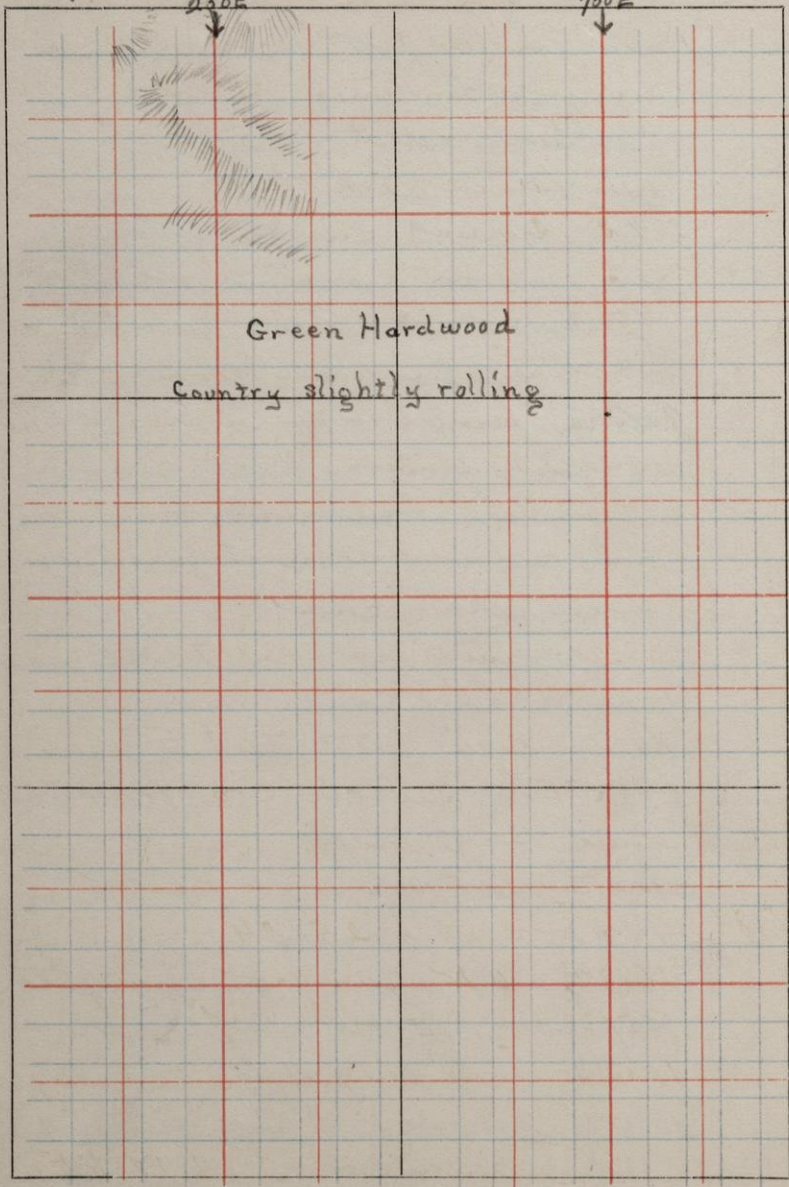
1800 N crossed the little stream at (3 ft)
which has been keeping just west of us

SW 1/4 16 T. 47

250 E

R. 26

760 E



1860 N Goose Lake Road

1860 N Swamp

Swamp continues to line.

Run east to 1250 E

and turned South

200 S Swamp ends

310 S Goose Lake Road

This line to South line of section is through a hard wood country with a few low hills as I have mapped them.

Line as before runs out at edge of woods i.e. the lumber men have cut up to this South line of sec 16-47-26

Run east to 1750 E line

1495 E of SW cor sec 16-47-26

there is a small ledge of quartzite jutting out of a low hill

Took spec 25184

1610 E 10 ft ledge of quartzite

15 ft long E to 10 ft wide

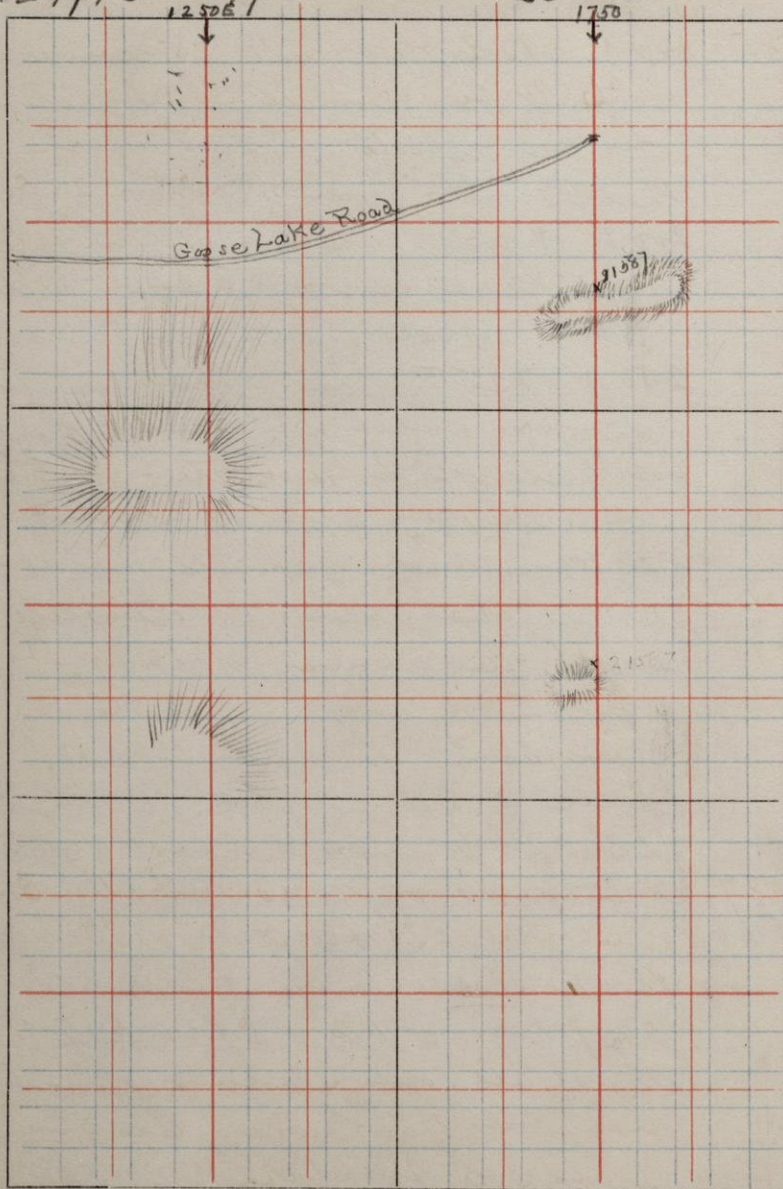
1650 E another ledge of quartzite

Turned north at 1750 E

NE 1/4 16

T. 47

R. 26



21585 140 N 1690 E low hill 25 paces E & N
 15 ft wide small 4 p. of quartzite
 on north side. This is much
 veined with green. Spec 21585

200 N 1700 E small 4 p. quartzite
 10 ft long + face 2 ft - south side
 of low swell

256 N 1725 E little ledge of quartzite
 much smaller than 200 N.

400 N ledge of quartzite - little
 4 p. running east 12 paces

520 N foot of a decided slope

680 N 1720 E ledge of actinolite

21586 Schist - Exposed about 60 ft
 long E & N and 25 wide
 Dip 45° N General strike N.

Spec 21586

1630 N line runs N & S east end

21587 of a greenish ledge or hill. On south
 side is a 12 ft bluff 100 ft long.

Low Bluff on north side. Ledge about
 20 ft across top. Spec 21587

This hill with 4 p. runs runs
 east about 150 paces. East end ^{on north}
 shows a 50 ft bluff.

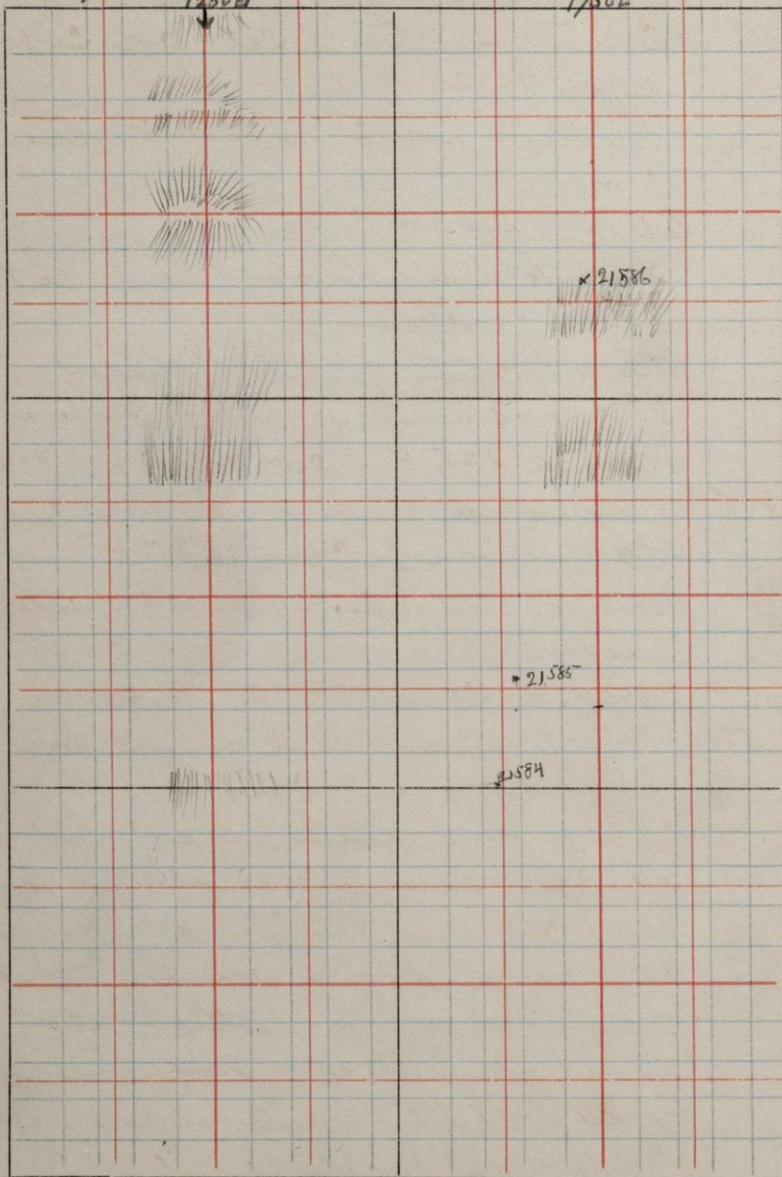
1865 N Goose Lake Road

S E 1/4 16

T. 47

R. 26

1750 E



Started 250 E of Sw cor sec
10-47-26

Run north on 250 E line

1 N }
500 N } Swamp

240 N line touched west side of
10 ft stream

420 N center of 11 ft stream

800 N strike the eastern slopes

1500 N 225 E of Sw cor - 10-47-26

21588

greenstone ledge 50 ft long N.S.

20 wide - Spec 21588

1025 N another fragment of same
ledge

21589

1034 N Small ledge of very
fine grained dark colored rock -
graywacke (?) Spec 21589

6 x 10 ft in diam size

1063 N Same as spec 89

1070 N " " " "

1100 N a long fragment 50 ft
runny east a little south

6 ft wide. Rock same as 89

1180 N 265 E greenstone ledge

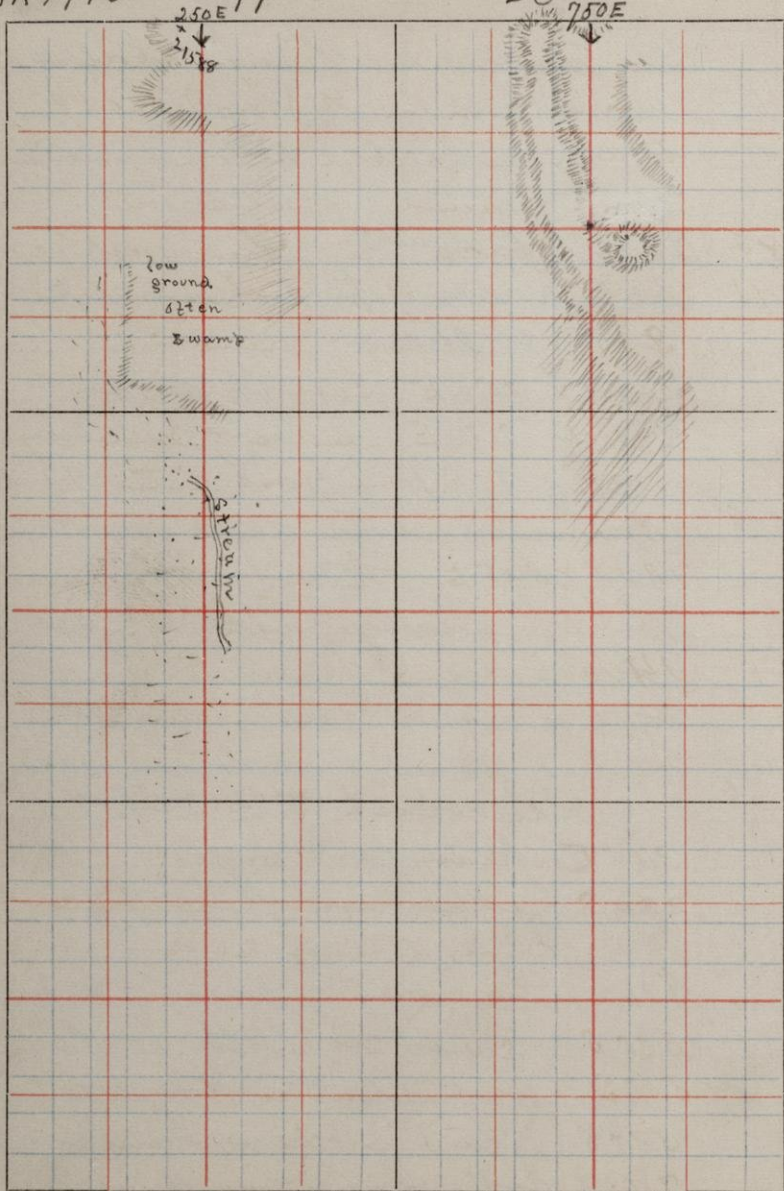
6 ft high facing west 25

paces long. There is a transition

SW 1/4 10

T. 47

R. 26



True from a fine grained dark gray
rock similar to Spec 21589
to a fine (almost little coarser than
other) grained greenstone.

Specs 90 Graywacke

91 Greenstone

1236 N ledge of greenst.

1245 N 250 E Same ledge

1260 N 270 E ledge of same size
as one just cited

1300 N in low land again

1300 N 325 E beginning of greenstone
bluff running east.

1400 marsh begins

1600 " ends Swamp begins

2000 "

Run east to 750 E

325 E stream 8 ft wide

220 S after heavily over low country.
came to spur sloping in
from the east

300 S Swamp

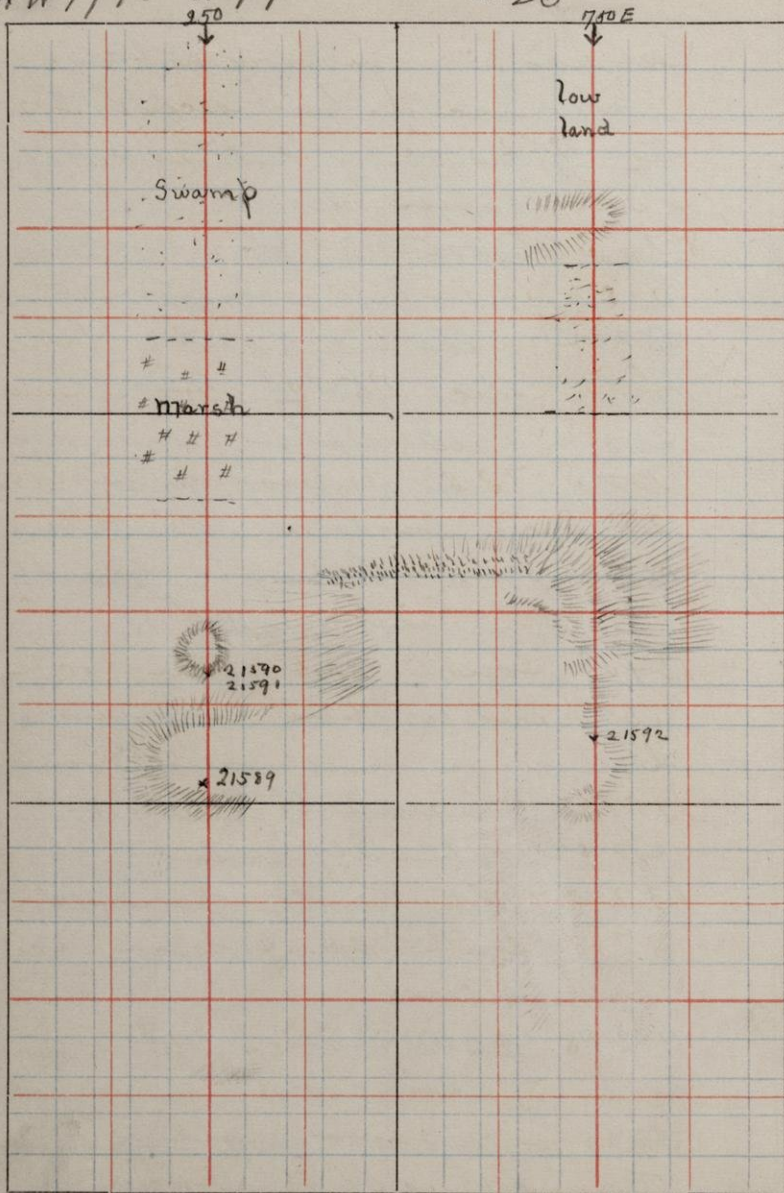
500 S " ends

590 S top slope of hill

780 S top of hill. Line runs on

NW 1/4 10 T. 47

R. 26



East side. It is now on edge
 of a precipitous descent dropping
 in 40 in 15 ft. This is -
 of green quartzite.

876 S to bottom

920 S on slope of spur shooting
 out from south side of big hill
 121592 loc 3 Spec 21592 from a small
 ledge of quartzite.

1000 S 735 quartzite ledge
 25 paces long N.S. 10 wide.
 covered in center and forming
 a little hillock.

1040 S south end of hillock
 50 paces west is a quartzite
 hill rising north and south.

1057 S Small ledge quartzite

1100 S west end of quartzite ledge

1324 S 775 E foot of quartzite

1370 S south end of precipitous
 quartzite

1473 S foot of steep slope

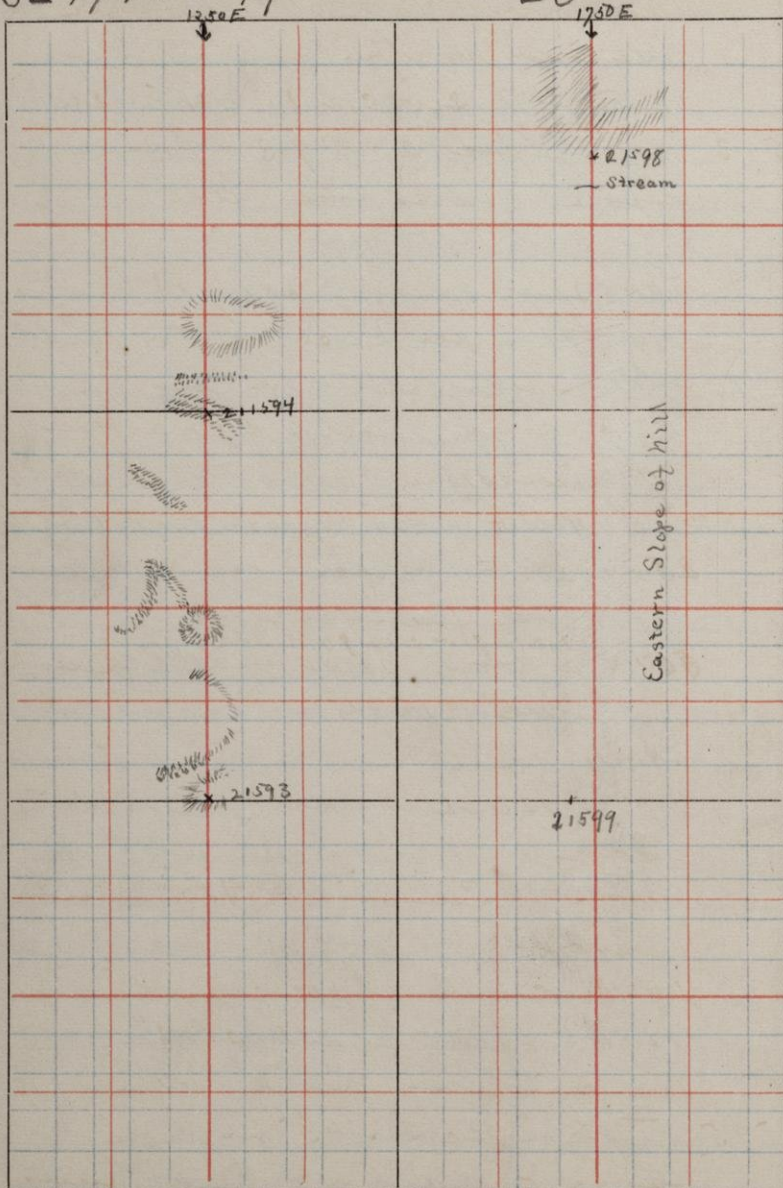
Run to line however on easy
 slope of same hill

Turned east at 2000 S

& passes of quartzite

SE 1/4 10 T. 47

R. 26



numerous at 1200 E when
I turned north.

1200 E of SW cor 10-47-26

21593 Took Spec 21593 from a
very large greenstone hill

50 N same ledge as (93) drops of
15 ft precipice to the west.

90 N large greenstone ridge

190 N edge of hill. 5 ft drop
of greenstone

280 N 1175 E Big ledge of greenstone

280 N 1200 E precipice of greenstone
10 ft high facing north.

1250 E SW cor 10-47-26
500 N a bluff 20 ft high of greenstone

21594 Spec 21594

546 N ditto

680 N 1260 E Small greenstone
ledge

1000 N. Country from 700 almost
level

1000 N country slopes rapidly north.

1120 N foot of sharp slope

1160 N foot of next slope

21595 Took Spec 21595 from side of hill
ledge covered. Carbonaceous greenstone

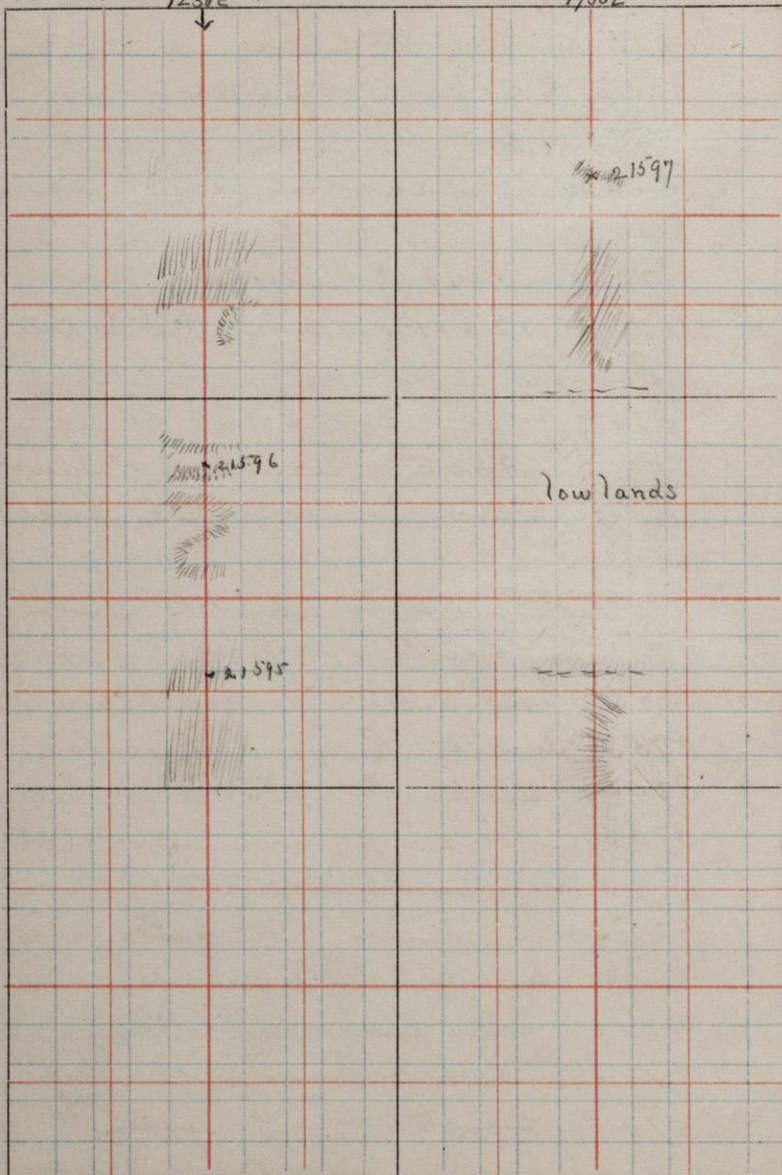
NE 1/4 10 T. 47

12.50 E



R. 26

17.50 E



1425 N base of hill on precipice

21596

10 ft high - Took Spec 96

greenstone

1450 N on second slope of large hill

1466 N top of hill

1570 N west of greenstone ledges

1600 N 1260 E large greenstone
ledge

1658 N

" "

2000 N 1340 E west end of greenstone
ridge which is bare and precipitous
on south side

Run east to 1730 E and
turned south.

21597

200 S precipice 15 ft high Spec 21597

275 S Small ledge of greenstone

330 S slope of hill.

370 S large fragments of greenstone
on south side of hill

425 S greenstone ledge on side of hill

450 S foot of sharp slope

490 S low land

850 S " " end

870 S came to slope of hill

Run south-east

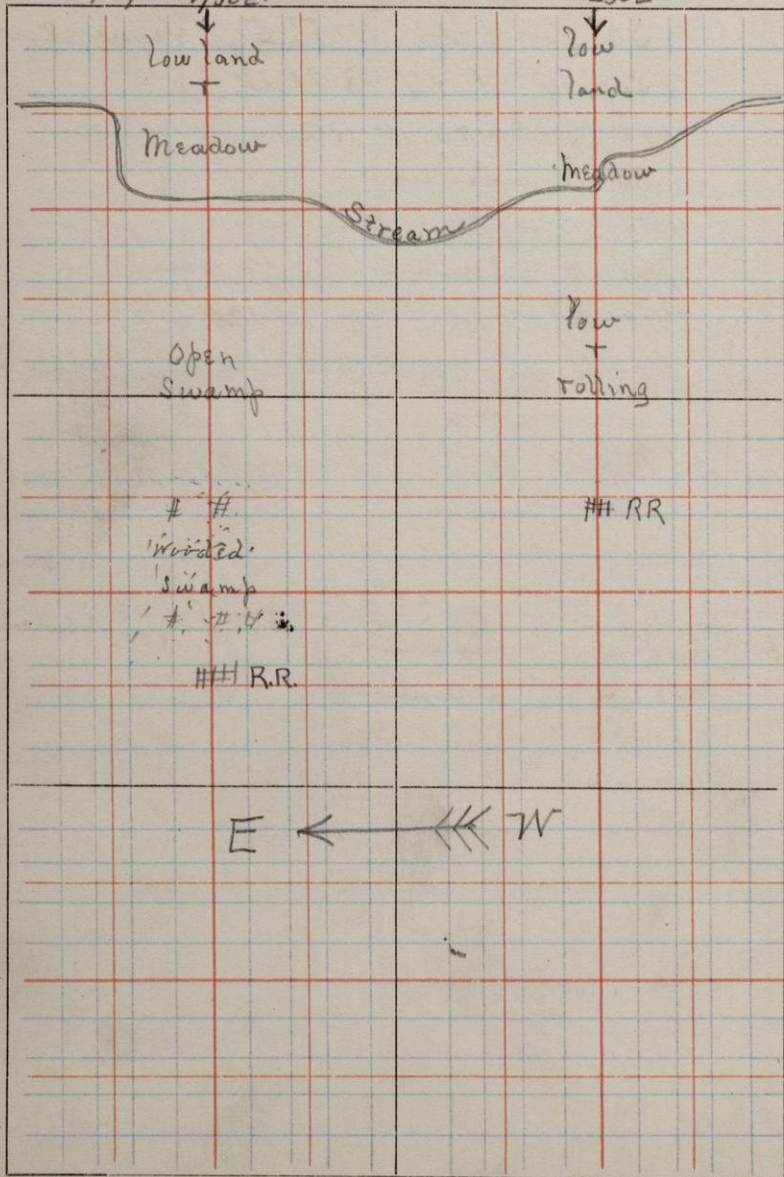
1160 S small ledge 10 x 2 ft

- 21598 Spec 21598 - Banded greenstone
 1220 S ledge of same dipping NW
 1840 same 20 ft long
 1780 S 1730 E small ledge
 greenstone.
 1800 S little thin bed 1 ft wide
 1930 S nest of greenstone & spars
 2000 S 1720 E on W cor 10-47-26
 21599 Spec 21599 from small ledge
 greenstone

SE 1/4 9 T. 47

1750E

R. 26 1250E



Started from 1750 E from SW cor
Sec 9 T 47 R 26 W

140 N Ch. N. W RR

155 N Swamp

400 N wooded " Ends

760 N Stream 10 ft wide

940 N offset east 100 steps

1160 N 1650 E a stream 5 ft wide
elbows in.

1792 N out of swamp

1800 N slight slope

Run west 1250 E

21600

310 S took spec 21600 { 310 S } SW cor 9
1180 S meadow { 1250 E }

1205 S stream

1500 S swamp

1635 S RR

2010 S still in swamp

NE $\frac{1}{4}$ 9

T. 47

R. 26

1250E

1600E



21600

low and rolling

Swampy

Stream

Run north into Sec 9-47-26 on 750 E

288 N Stream 12 ft wide

406 N Ch & L. H. RR.

460 N very swampy

1150 N beginning of long gradual slope

1245 N 780 E small ledge of quartzite on south side of hill

✓ 21601 Spec 21601 ledge 10 x 11 faces.

1511 N 730 E quartzite ledge about same size as (Spec 1600)

1347 N 785 E gramma & pum of quartzite about 20 ft in diameter

1430 N Small ledge quartzite spread area 5 ft square

1500 N steep slope to hill begins

✓ 21602 1582 N 700 E top spec 21602

Exposure almost + facing south and runs west for 100 paces

1600 N to top of bluff

1700 N steep slope to the north.

1780 N 710 E ^{Sec 9-47-26} ledge of quartzite about 50 paces long and almost + facing

✓ 21603 north - Spec 21603

1800 N foot of steep slope - Level to 2000 N and no ledges

SW 1/4 9

T. 47

R. 26

25th
↓

7th DE
↓

low
Ground

low
land

+

+

Swampy

Swampy

RR.
stream

RR

stream

Run south on 250 E - 9-47-26

220 S 210 E nw cor 9-47-26 lot 2

✓ 21604 Spec 21604 - This shows transition
from slate to graywacke

✓ 21605 270 S + ledge running east and
west 15 paces along hill side
Spec 305 quartzite

435 S 230 E small ledge quartzite

446 S small outcrop quartzite

865 S 255 E ^{nw cor 9-47-26} Large quartzite ledge
10 ft wide and running east

✓ 21606 50 paces. Spec 2806

960 S 240 E small quartzite ledge

1150 S low land

1545 S Ch & L. N. R.R.

Line touches head of stream at
1550 S and crosses it at 1600 S.

NW 1/4 9 T. 47

250 E

R.

26 950

21604
21605

21608

21602

21606

+ + 21601

Run north on 17.50E line of
Sec 8 - 47.26

450 N swamp begins

500 N stream

625 N End of swamp & R.R.

1000 N slope to begin

1186 N 1720 E of sw cr - 8-47.26

a ledge of quartzite - dark and
very fine grained - runs west

✓ 21607 Took Spec 21607

1265 N ledge of quartzite begins

This runs south-east and knobs

off in size 15' E of it and 50 paces

✓ 21608 N.S. Spec 21608

1285 N exposure of same ledge 10 ft
in diameter

1345 N Edge precipice

✓ 21609 Spec 21609 - A very fine

grained dark quartzite. Hand

specimen ^{are very small} shows a lenticular

mass of much finer material.

1400 ft of precipice

across low land to ridge

1534 N Tact pit near top of ridge

✓ 21610 Spec 21610 - Black Slate

SE 1/4 8 T. 47
1752E
↓

NE 1/4 8 R. 26
1750E
*

level
country

RR

stream

21612

21611

21610

lowland

21609

21608

21607

1544 N Little ledge 21 + 6 ft exposure
also exposed in other places
of same material as 21610
Strike N 16° W

Dips very sharply south.

1590 N Int. to low land

1760 N foot of steep slope
of long ridge running east
and west

1850 N to foot of steep slope

1850 N on slope small exposure
of black slate dipping +
strike very same as Spec 21610
Fork Spec 21611

✓ 21611

1915 N 1740 E surface exp. of same

1934 N Edge of precipice

Precipice begins 10 paces east of
line and runs west.

✓ 21612

Spec 612 Black slate
2000 N Road at foot of another
long E & W ridge

Finis

