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## **Township 44 north, ranges 32 and 33 west, specimens 30415-30433. No. 224 1891**

Phillips, H. F.

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

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LAKE SUPERIOR SURVEY

Phillips



*Index*

## LAKE SUPERIOR SURVEY. INSTRUCTIONS.

**Topography.**—On the left-hand page map as much of the section as has actually been seen, counting each of the spaces between the blue lines as 100 paces, and 20 of these spaces to one mile, or 2,000 paces. The scale is four inches to the mile, and the heavier blue lines, outlining one inch squares, mark forties. Denote streams, lakes, swamps, marshes, etc., by the topographical signs annexed.

The geologist will consult with the compassman, and describe as accurately as possible, the timber traversed. When pine is found, give its proportion; tell whether good or poor, and indicate kind—white, norway, jack. If hemlock is found, note the relative amount. In hard wood districts, designate as good or poor, heavy or light, and indicate predominant kinds, oak, maple, birch, etc. Cedar swamps, spruce swamps, tamarack swamps and meadow swamps will be always discriminated. Outline burnt timber.

Each day, just before leaving camp, the geologist will compare his own and the camp aneroids, and the reading of each, with time, will be recorded. At work the aneroid will be read on gentle slopes at intervals of 200 paces; on steeper slopes at intervals of 100 paces; also at all maxima and minima. When minima are streams the map and notes will indicate this, showing width and character of streams. When a stream has made a cut of importance, aneroid readings will be made where the banks break off and at water level. If instead of an abrupt break, the stream valley has steep slopes, aneroid readings will be made with sufficient frequency to show this character.

At reading points the compassman will stop, read the dial compass, and remain until the records are complete. The readings will, as fast as made, be placed upon the map at the right-hand side of the line traveled, and in the notes, the numbers being inclosed in parentheses, basing the work upon the bench-mark which served as a starting point. At bench-marks the absolute reading of the aneroid and the altitude as shown by the bench-mark will be recorded to serve as a base for subsequent readings. For instance, aneroid 29.13 inches; altitude on bench-mark, 275 feet. At each subsequent reading, by setting 275 on the altitude circle at 29.13 on the fixed dial, altitudes may be directly recorded. When the next bench-mark is found at two miles distance, the difference between the aneroid reading on the basis of the first bench-mark and the second bench-mark will be recorded. At intervals of a half hour during the day the time will be attached to the aneroid readings. Upon reaching camp, after the day's work, the geologist will record the readings of his own and the camp aneroid, and also the time. Interpolations will then be made, based upon the bench-marks and times (not distances) if the day has been one of no abnormal atmospheric disturbances, or upon both bench-marks and camp aneroid readings if there have been unusual disturbances, and the corrected numbers, less a constant of 4 feet, will be placed upon the face of the map at the left-hand side of the lines of travel, and in the notes without parentheses, but the parentheses numbers will not be erased.

At each aneroid reading the trend of a horizontal contour line will be indicated upon the face of the map, making the length of the line correspond as nearly as may be with the actual distance seen. In passing directly up or down a slope, the contour lines will be at right angles to the direction of travel. In passing up a hill diagonally the contour lines will intersect the lines of travel at various angles, which can be estimated and plotted with sufficient accuracy by an appreciation of the north and south direction.

The course of travel will be always north and south. In starting from a quarter or a sixteenth post, the work will be plotted on the assumption that the true course is followed, but upon reaching the next section line the geologist will remain in the position at which the line is struck by the compassman until the latter finds the adjacent bench-mark. The intervening distance will then be paced by the compassman, and the point of intersection of the section line marked. From this point to the starting-point, a right line will be drawn as the actual course of travel. The positions of the contour lines, aneroid readings, etc., will not be changed.



Geology. — In running the north and south lines, the compassman will, if possible, determine the course by the dial compass. At the time the geologist reads his aneroid, the compassman will determine the magnetic variation, which will be given to the geologist and recorded in the note-book. Each morning the watch of the compassman will be set to apparent time (corrections being made for the equation of time and for longitude), so that he will need to make no correction in reading magnetic variation. On cloudy days, and at times when the sun is too low for the use of the dial compass, the course run will be by needle upon the supposition that the magnetic variations indicated on the township plats are right when corrected by deducting  $3^{\circ}$  if the variation is east, or by adding the same amount if the variation is west.

Not less than once per week the accuracy of the watch of the geologist in charge of a party (who will give time each morning to the compassmen), will be tested. This may be done, first, by obtaining correct time from a railway station by means of a packer when sent out for provisions. Such time will be mean, i. e., watch time for the nintieth meridian. Second, corrected time may be found by blazing out a north and south section line, preferably a range line, for some distance, setting a signal on the line and placing the dial compass duly leveled, in a north and south direction upon a Jacob's-staff just before mid-day, and setting the watch at 12 at the time the line strikes the noon hour. In a watch thus set all corrections are made.

It will be the constant business of the geologist to search for outcrops. All hills within a reasonable distance of the course of travel will be examined. Oftentimes upon the steeper slopes of a hill a rock surface is covered with a coating a few inches thick of moss, leaves or vegetable mold and can be stripped with the pick. Where the exposure is small and there is the least possibility that it may be a large bowlder, indicate this fact in the notes and by a query on the map. All ledges off the line of travel of the compassman will be located by the geologist pacing to this line in an east and west direction, his course being determined by compass.






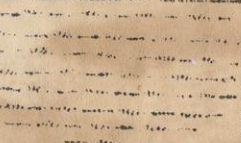
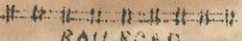
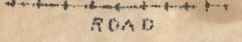
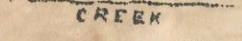
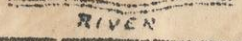




Denote the ledges of rock, when no structure is made out, by cross-hatching, making the cross-hatching cover as nearly as possible the areas occupied by the exposures. If the rock is a massive one, but still more or less plainly bedded, use the same sign with a dip arrow and number attached, showing 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, having strike line and dip arrow with numbers attached. 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 specimens representing it. 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, No. 437, 1226, N., 353 W., Strike,  $N. 47^{\circ} E.$ , Dip,  $68^{\circ} S. E.$  Then follow with as full a description of the ledge as possible.

Collect a specimen from every ledge, and if the ledge exposes different kinds of rock, collect a specimen of all varieties. Take care to get fresh material, unless for a special purpose the weathered surface is desired. Where ledges are infrequent the normal size of specimens will be  $3 \times 4 \times 1$  inch. In case several specimens of the same ledge are necessary, and when ledges are numerous, specimens  $2 \times 2 \frac{1}{2} \times \frac{3}{4}$  inch will be allowed. In all cases collect chips for slicing. No two specimens will be given the same number. In the cases in which several specimens come from the same ledge, the different numbers assigned to them will enable an easy description of their relations. Specimens will be placed at once in paper bags provided, upon which shall be marked in at least two places, with a blue or red pencil, the specimen number.



# TOPOGRAPHICAL SIGNS.

 <p>PINE OR HEMLOCK</p>	 <p>HARDWOOD</p>	 <p>PINE OR HEMLOCK AND HARDWOOD</p>	 <p>CEDAR SWAMP</p>
 <p>SPRUCE OR TAMARACK SWAMP</p>	 <p>MARSH</p>	 <p>RAILROAD</p>  <p>ROAD</p>  <p>CREEK</p>  <p>RIVER</p>	 <p>NO STRUCTURE</p>
 <p>↓ 35° S. NEARLY MASSIVE</p>	 <p>35° S. 36° E. SHALY OR BEDDED</p>	 <p>↑ 13° SECONDARY STRUCTURE.</p>	

# EQUATION OF TIME FOR 1891.

Day	Min.	Day	Min.	Day	Min.
-----	------	-----	------	-----	------

## JUNE.

Add to watch time.

1-6	2	7-11	1	12-16	0
-----	---	------	---	-------	---

Subtract from watch time.

17-21	1	22-26	2	27-31	3
-------	---	-------	---	-------	---

## JULY.

Subtract from watch time.

1-6	4	7-13	5	14-31	6
-----	---	------	---	-------	---

## AUGUST.

Subtract from watch time.

1- 7	6	8-13	5	14-18	4
19-23	3	24-26	2	27-29	1
30-31	0				

224



# SEPTEMBER.

Add to watch time.

1- 2	0	3- 5	1	6- 8	2
9-11	3	12-14	4	15-17	5
18-19	6	20-22	7	23-25	8
26-28	9	29-30	10		

# OCTOBER.

Add to watch time.

1	10	2- 4	11	5- 8	12
9-12	13	13-16	14	17-22	15
23-31	16				

# NOVEMBER.

Add to watch time.

1-13	16	14-19	15	20-23	14
24-28	13	27-29	12	30	11

Phillips

Jas Carlin - Conspicuous

SPECIMENS: 415-433

TOWNS: 44-32  
44-33

W.L

d+s

ck





Course begins  $8\frac{1}{4}$  Sec 21. Running N.

Camp Miroid 28.420 7.45-

No 3 " 28.388

B.M. No 3 - 28.344 8.10 am

100

Enter old burning. Cherry Pine

900

389 (387)

" "

" "

1100

374 (370)

"

" burnt clean

1400

395 (382)

"

"

7.15-

2020

392 (378)  $\frac{1}{4}$  Stake. Enter recent burning

" on paced line.

Specimens 408-414 sent in

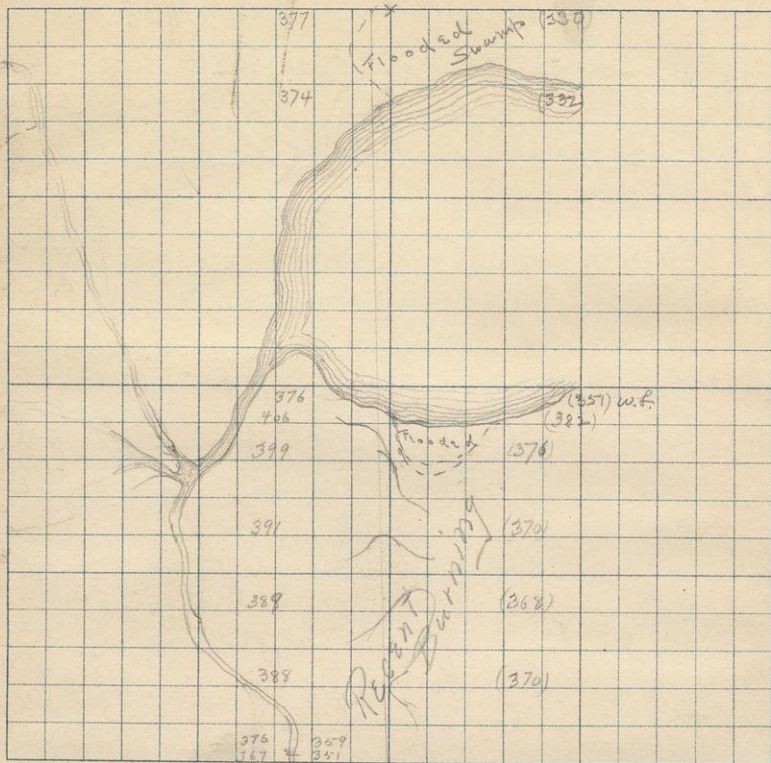


S.

16

T. 44

R. 32



200

388(370)

400

388(3/8)

19

391 (370)

21

399(376)

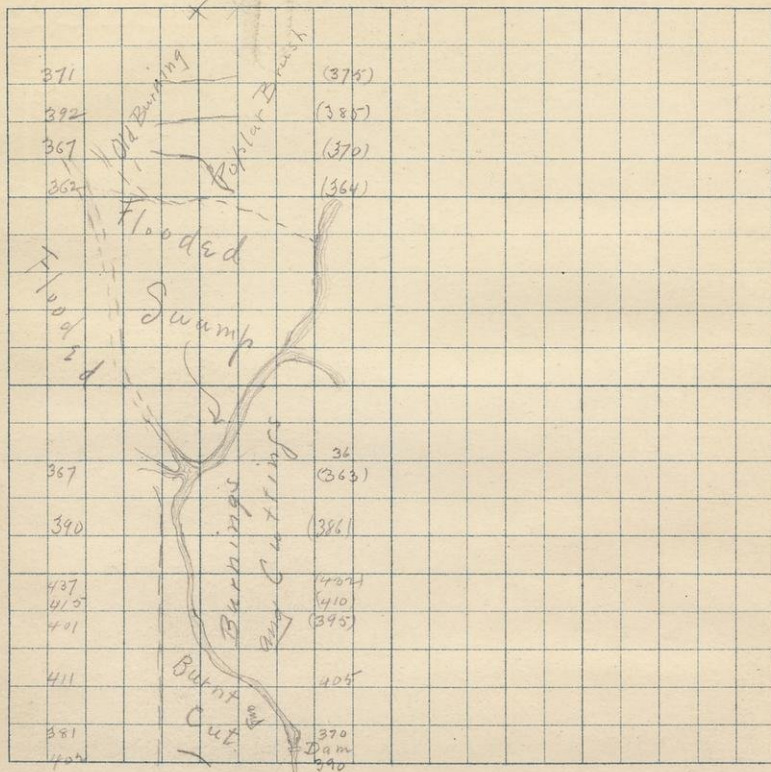
745

B.M.  $M\frac{1}{4}$  sec 16 = 380.96.

Course begins  $S\frac{1}{4}$  Sec 16, Running N

250 p.s. w. of 30	367 (351) Water level below dam	
" " " " 40	376 (359) " " above "	925
900	406 (382) Top of Lake bank	
925	376 (351) Water level <del>is</del> Lake lake,	9:30
925 - 1750	374 (332) Lake, W.L. N. side,	10:30
1750 to $\frac{1}{4}$ stake	Flooded swamps,	
	1327 B.M. on $\frac{1}{4}$ stake	





B.M. w  $\frac{1}{2}$  blue sec 9 + 16 = 377.3

200	371 (375)	Old burning, poplar brush. Around every
400	367 (370)	" " " "
600		Flooded Swamp
800		
1000		
1200		
1400	390 386	Burnt. Along bank west.
1600	( )	" "
1800	411 (405)	Burnt. Hardwood west. 12.40
2000	402 (390)	$\frac{1}{2}$ stake 140

Course begins w/8 ftw Sec 9+16 Running S.

B.M

28.370 Spruce + tamar swamps 11:25

100

Enter old burning. Cherry poplar

300

392 (385)

" "

11:40

500

362 (364)

" Flooded swamps w/ windfall.

1250

367 (363)

S. side river + flooded swamps. 12:25

1576

437 (432)

Max. Run wt

1586

415 (410)

River bank break

1620

401 (395)

Water level just 8 ft wide, flows S.

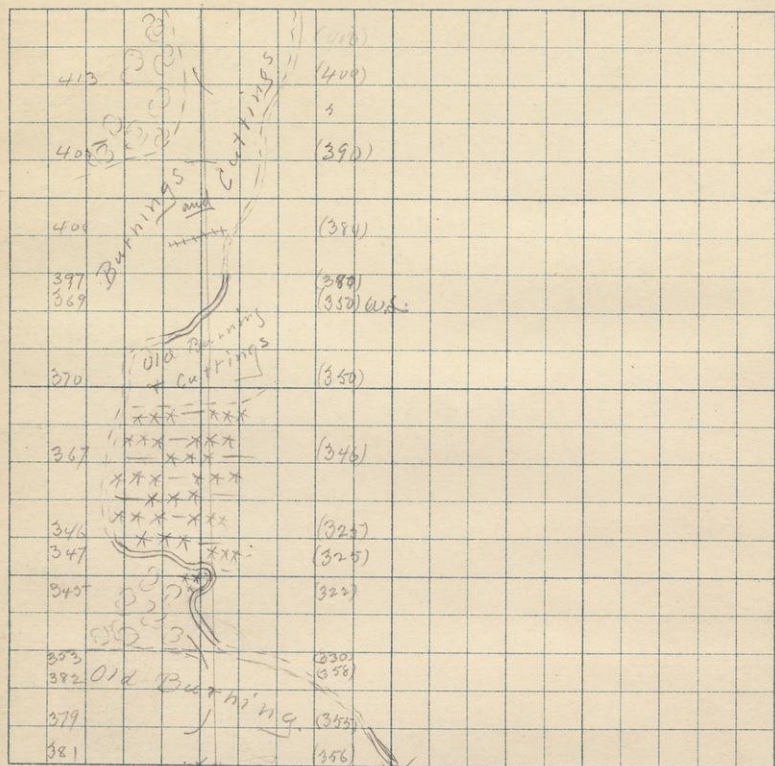
250 ft S. of

1970

381 (370)

" " below dam. 1:20





Course begins w/ 1/4 th. Sec 16 + 21. Running S

770	397(380)	River bank breaks. Burnt.
1050		Enter Cedar swamps. 2:10
1460	347(325)	N. Edge river 30 f's wide. Flow E
1535	345(322)	" " "
1600		" " " Hardwood w.
1645		S " " " "
1715	353(330)	Enter burning. River edge
1750	382(358)	old " 2:55
1960		Struck line
B.M	381(356)	Cor 40 f's w. of line.

Camp Amaroid 28.495 3:20  
 No 3 " 28.432



467	(477)	(480)
452	477	(465)
415	415	(422)
408	415	(415)
390	396	(396)
356	362	(362)
351	357	(357)
374	380	(380)
390	396	(396)
405	410	(410)
406	411	(411)
415	415	(415)

B.M. S.W. Cor Sec. 21 = 420.2

Course begins S.W. Cor Sec 21 - Running N

Camp anemoid 28,658 6.30

M 3 " 28.621

28.554 7.40

Cr 02° 00' at Hardwood maple & birch

500 02° 15' Maple

900 374 (380) Burnt Hardwood 8.20

1100 356 (362) " " & pine

1250 408 (415) " " & "

1600 1520 513 (525) Top of ledge. Description p. 267 9.45

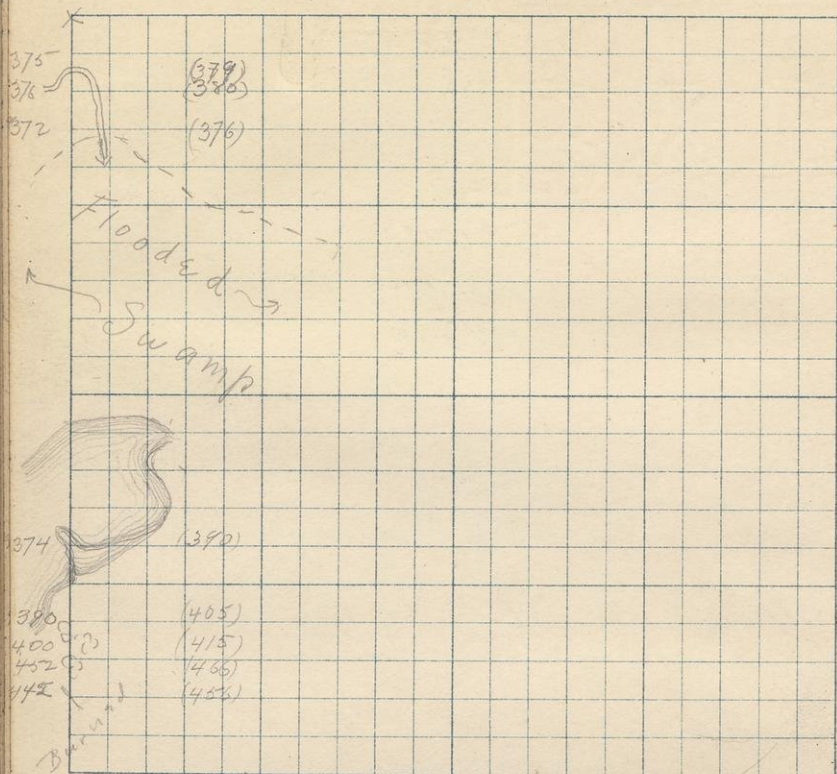
2500 " " 468 (480) East base of ledge 10

1500 452 (465) 06° 2' Enter hardwood 10.30

1730 467 (480) 07° 2' Top of bluff. Sept. 27 Maple hem. w.

Mile 200 ft short





200	442 (456)	Burnt Bluff. Pine west
400	390 (405)	" poplar 0602
600	374 (390)	Water level in lake 0702 11/15
800	( )	} Lake flooded Swamp.
1000	( )	
1200	( )	
1400	( )	
1600	( )	
1800	280	
2000	( )	

B.M. N.W. Cor Sec 16 = 377.3

Course begins N.W. Cor. 16. Running N

11 am.

230

57° 2

280

452 (466) Bluff. Max

350

400 (415) Foot of "

Course begins N.W. Cor. 16 Running S.

28,610

Cor

45° E Cedar + Alder swamps. 1150

1150

375 (379) Water level in river N. side. Flows eastward

1200

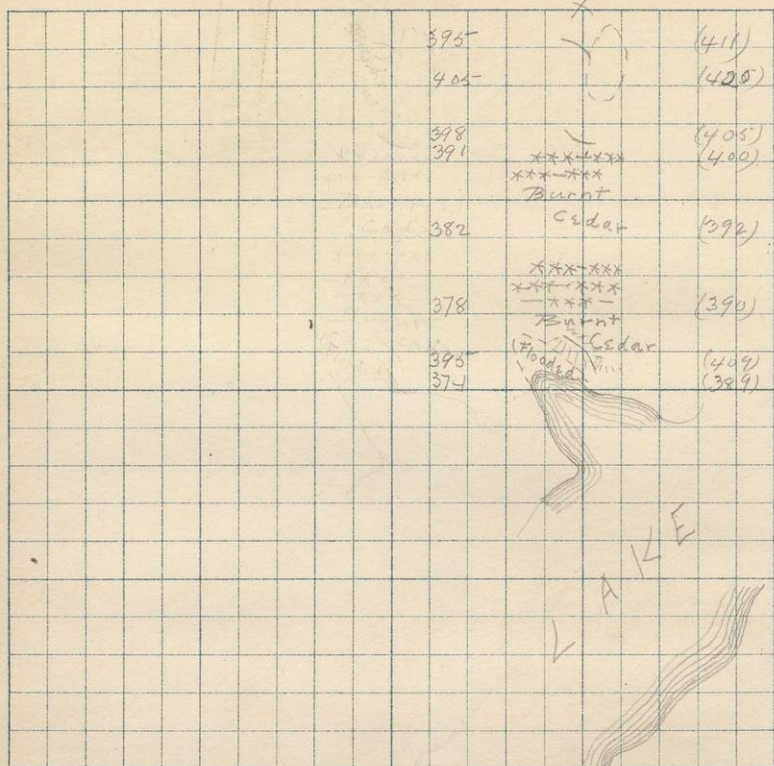
376 (380) River bottom W. side. Cedar cuttings

3400

372 (376) N. edge flooded swamp 12.05



S. 17 T. 44 R. 32



B.M. E 1/8 Sec 84 17 = 399.8

200	405(420)	Burnt cuttings 1/15
400	391(400)	" Cedar swamp
600	382(392)	swampy Cedar
800	378(390)	Burnt Cedar
1000	( )	Lake
1200	( )	
1400	( )	
1600	( )	
1800	( )	
2000	( )	

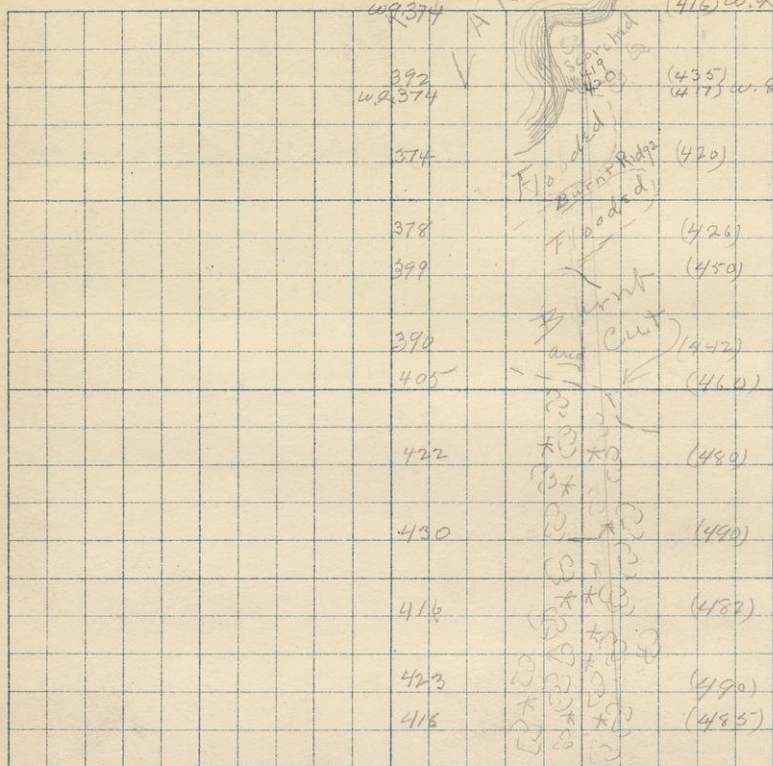
Course begins  $E\frac{1}{8}$  4th Sec 8+17 Running B.

100	395 (411)	Burnt Cuttings. Swamp to E	
340	397 (405)	" "	12.20
380		Enter cedar swamp	
415		Leave " "	
500		heavy " scorched	
700		Cedar swamp	
770		Leave " "	
930	395 (409)	Top of ridge along lake.	12.50
945	374 (389)	w.L. lake	12.55



S. 20

T. 44 E. R. 32



200	392/435	Top of ledge on lake shore. Poplar River
400	374/420	View Flooded swamp w. 145
600	378/426	Entire burning. Flooded swamp.
900	390/442	Running & clearing
1000	405/460	U.S. 2. Entire maple & ham.
1200	422/480	Heavy birch, maple & ham.
1400	430/490	" " " basswood
1600	416/482	U.S. 2. " cedar + "
1800	423/490	" " + basswood
2000		

B.M.  $E \frac{1}{2}$  Sec 20 + 29 = 419.5

Course begins  $E\frac{1}{2}$  Sec 17+20. Running S

$\frac{1}{8}$  stake in Lake. 374(+15) W. 2. lake 09 E 12.40

200 374(417) W. 2. lake. 1 P.M.

700 399(450) Burnt pine

1000 07° 2

1800 416(485) B.M. 07° 15' E 2.40

$\frac{1}{8}$  stake 100 ft w. of line

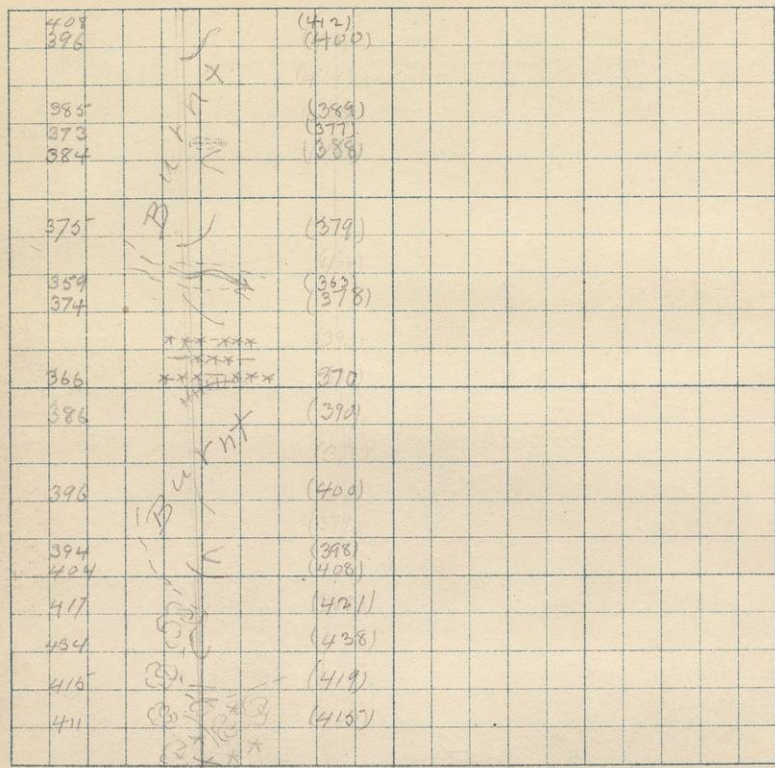
Mile 100 ft short.

L Bluff cut 200 ft  $\frac{1}{8}$  line facing south, well exposed, about 40 ft along base  $\pm$  12 ft high. On edge of lake and somewhat weathered

419 1800 N 500 W Sandstone bedding with an easterly dip of about 65°. Forms the mass of the exposure. Irregularly bedded with grain from an  $\frac{1}{8}$  to 1 inch

420 1800 N 500 W. Small exposure at eastern part of ledge. Principle plane dips at about 75° west.





10 m. W  $\frac{1}{2}$  Sec 20 + 29 = 433.4

200	415(419)	Burnt
400	417(421)	Spruce maple
600	396(400)	Clearing 02°E 9:20
900	386(390)	Burnt Poplar brush.
1000	366(370)	Logging road. Enter cedar swamp.
1200	374(378)	Burnt
1700	375(379)	"
1600	384(388)	" max 03°E 9:50
1900	396(400)	"
2200		

Cause begin w/8. the Sec 20 + 29. Running N.

Camp Auroid 28.610 8.15 am

No 6 " 28.555

✓ 28.580 8.50

100	411 (415)	Maple + hem.
300	434 (438)	burnt hardwood
500	404 (408)	" cuttings
550	394 (398)	Ravine to lake
1145		Enter burning U2°E
1260	359 (363)	" alder swamp
1325		" burning
1640	373 (377)	min. Marshy.
1700	385 (389)	burnt
1935	408 (412)	" Secline. 10 am.
		1/8 lake 40 ps w. U4 1/2° E



S.

17

T.

44

R.

32

436		(441)	388		(395) w R
427		(432)			
425		(430)			
418		(420)			
403		(408)			
405		(410)			
414		(419)			
413		(418)			
395		(400)			
385		(390)			
386		(390)			
366		(370)			
400		(404)			

200	366(370)	w. edge cranberry marsh
350	385(390)	Burnt, some maple & birch
600	395(400)	" " "
800	413(418)	Heavy maple 10:30
1000	414(419)	Cedar, " , birch
1300	405(410)	" swamp 5:50
1400	418(423)	Entire burning
1600	425(430)	" " 11 am.
1800	427(432)	Heavy maple & birch
2000	436(441)	" " "

B.M. 10 1/8 640 Sec 8 + 17 = 441

6-29-91

21

Course begins w/ 1/4 btw Sec 17 + 20. Running N

125	400 (404)	Burnt Max.
300	386 (390)	
400		N. 5° E.
700		Enter hardwood, maple
900		Some pine
1010		Enter cedar + spruce swamp.
1300	403 (408)	" " "
1315		Leave " " "
1700		Enter Maple, birch + cedar
2040		See line. Stake 20 ft E. of line
B.M.	437 (442)	1115

River btw 1/4 + 2 1/4 388 (395) 1130



S.

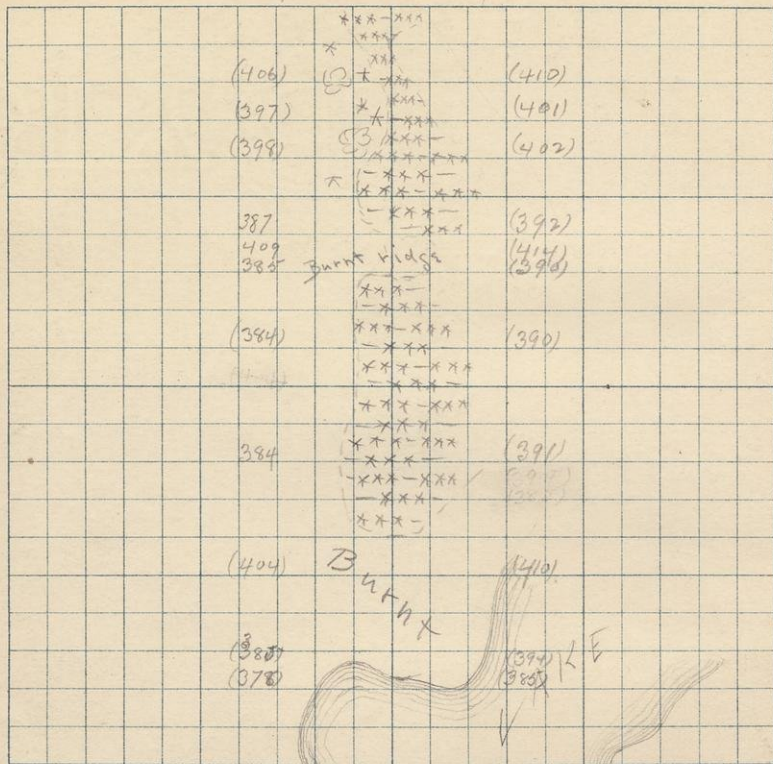
17

T.

44

R.

32



B.M.  $11\frac{1}{4}$  Sec 17 = 407.8

200	406(410)	Cedar swamp, Burned.
400	398(402)	" "
600	387(392)	Leave " "
800	384(390)	" " Lane
1000	( )	
1200	384(391)	" " Windfall 45° E 245
1500	404(410)	Burnt.
1600	( )	
1800	( )	
2000	( )	} end lake

B.M. S.E. cor Sec 19 = 427.

Course begins N $\frac{1}{4}$  Sec 17. Running S

$\frac{1}{4}$  lake 28,358 Burnt Cedar swamps 1:40  
U 8° E

100. Edge cedar swamps

200-500 Burnt pine wet.

300 397 (401) E edge burning of pine U 7° E

650 409 (414) Hem & cedar Max 2:15

700 385 (390) Enter Cedar swamps

700-1300 Burnt hardwood & Hem wet.

1380. Large cedar swamps.

1740 385 (394) Top of lake bank

1761 374 (385) W.L. of lake 3:05

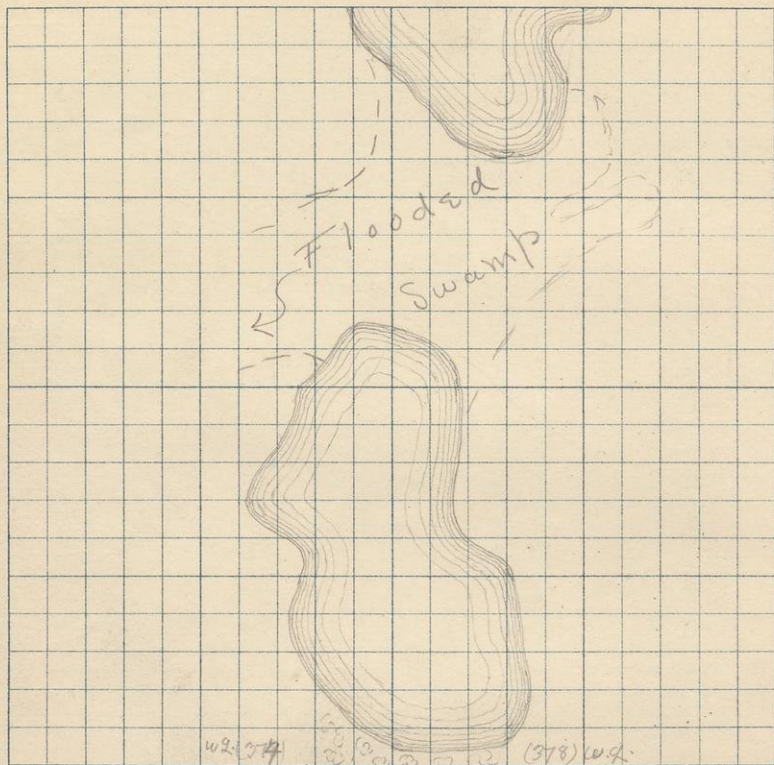
Bm. 423 (434) 4:27

Ok on B.M. SE Cor 19 = 427 4:45

Camp auroid 28.548

No 6 " 28.515





W2. 374

387

(378) W2.

(378) W2.

(391) 131m.

Course begins  $S\frac{1}{4}$  Sec 20. Running N.

Bm  $S\frac{1}{4}$  Sec 20 = 391.3

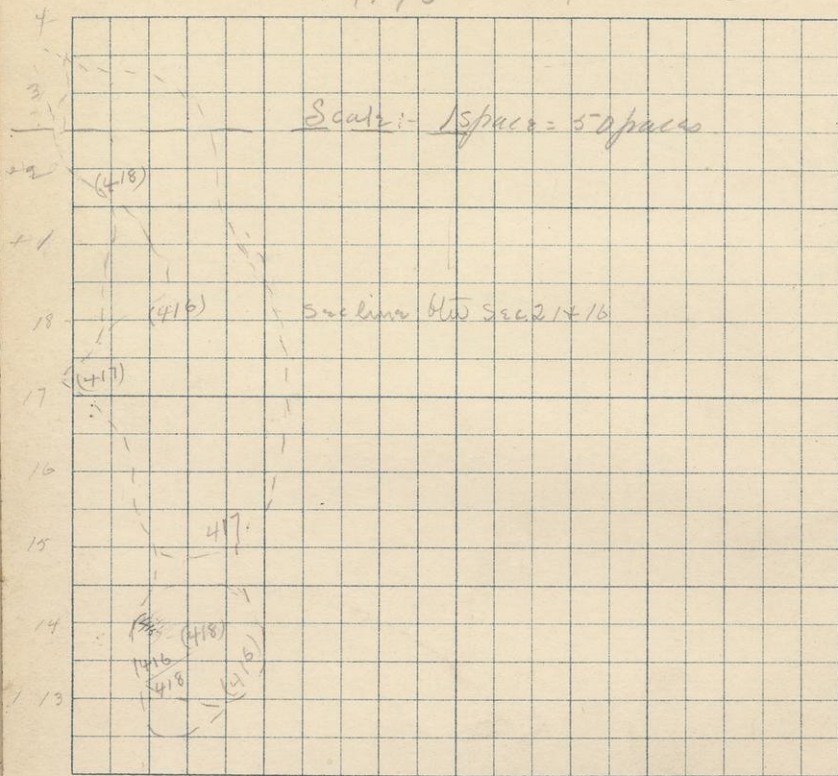
50

374(378) Water level in lake

Remainder of mile impassable,  
lake and flooded swamps.



S. 214/6 T. 44 R. 32



Outcrop rounded or shulere off. Any no uniform dips or strikes. Eastern face dipping about  $35^{\circ}$  N.E. and somewhat more on western side to S.W. Strike irregular north west. Well exposed faces and top.

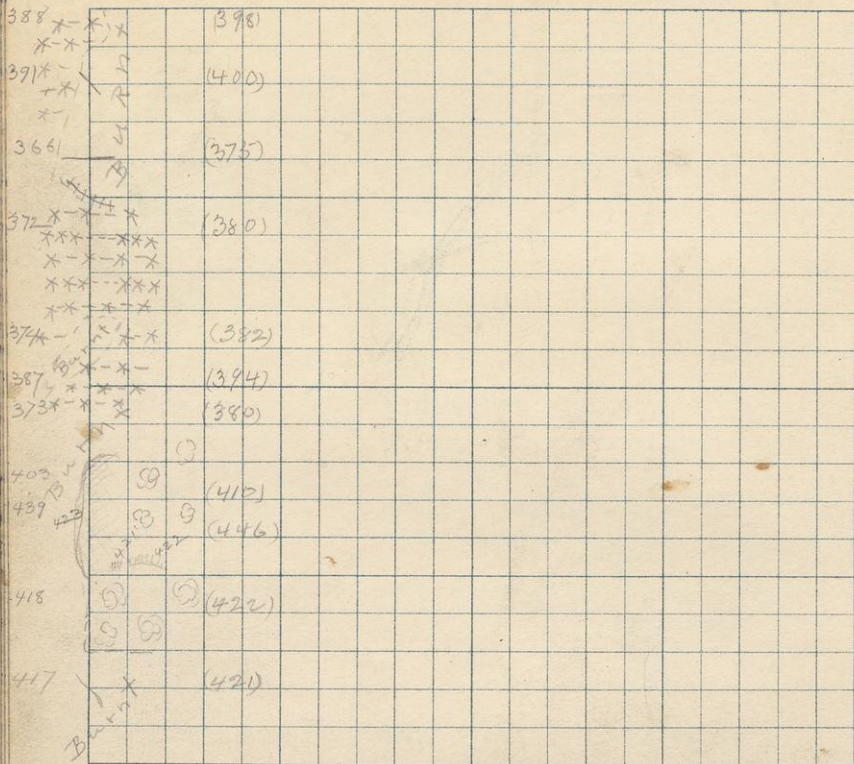
415 1450 N 1910 W. Presents fine grained surface  
Only seen in small exposures.

416 1350 N 1900 W. Weathered surface resembles that of a granitic or conglomeritic rock  
Contact with 418. Forms mass of ledge, but exposed on eastern face

417 1350 N 1800 W. Well exposed face & top. Sharp planes, but little uniformity. Height of face 12'

418 1350 N 1900 W. Well exposed on top and alternates with 416 on S.W. face  
Contact where specimens were taken.





B.M. S.W. Cor Sec 20 - 427

- 2000 — 417 (421) Burnt Cherry brush
- 400 — 418 (422) Edge burning
- 600 — 439 (446) Burnt Cedar. O 20 10 am.
- 800 — 403 (410) " " pine & hem
- 1000 — 387 (384) " "
- 1200 — ( )
- 1400 — 372 (380) Cedar swamp
- 1600 — 366 (375) Burnt stand & hem
- 1800 — 391 (400) " " & 20 west
- 2000 — 388 (398) Pine & spruce swamp Ham

6-28-91

29

Cove begins S.W. Cor Sec 20 Running N

Camp Anaroid 28.568 8:10 am

No 6 " 28.630

BM 28.628 Burnings &amp; cuttings

300

Enter scorched birch + hem

500

Chain of knobs running south  
easterly. Main exposure toward west at 630 ft. n.  
composed of 423. The knobs of 421 + 422 begin  
about and probable on this.

421

500 N 1950 N. Abrupt, weathered face to S.W. +  
top sloping off to N.E. Top unexposed.  
Numerous planes developed. At base strike is  
about north with a dip 50° E, changing toward  
top to N 20 W + 35° S.E. " " "

422

460 N 1800 W Face toward S.W. Top partially exposed  
Face 10 ft high. 421 also occurs.

423

650 N 40 ft wide line. Strike N 35° W Dip 75° S.W.  
Face toward S.W. 15' high. Dip + strike from prin-  
cipal planes. Minor planes give dr. s. of 421 + 422  
which are exposed above 423. Total height 45'

940

373 (380) Enter tan + spruce swamp

1100-1180

374 (382) Recent burning cedar + spruce

1180-1520

Tan + cedar swamp. Enter burning

1500

Logging road S.E. + N.W.

1900

Enter tan + spruce swamp





Course begins S.W. Cor Sec 17. Running N

10	Enter burnt cuttings of pine	
245	" alder swamp.	
382	377 (388) Creek flowing easterly	
575	lava swamp.	
900	418 (430) Maple	
1760	437 (450) lava swamp.	
2200	452 (466) Sec. line	1240
Bm	455 (469) 110 ft east of paid line	





Course begins E. 1/2 Sec 7 + 18 Running S

~~25~~

1 P.M.

~~480~~ 60

Heavy maple + basswood

Total road 0702

380

486 (492) Heavy cedar + birch

460

459 (467) Creek 6' wide, Run S.E. 1:40

560

Leave Cedar swamp

1816

454 (470) Heavy maple 2:20

1860

463 (480)

"

1900

452 (470) Burnt east, hard, west.



S. 19

T. 44

R. 32

	465	XXX-XXX	(485)	
	443	XXX-XXX	(464)	
	446	XXX-XXX	(468)	
	437	*) *	(459)	
	450	*) *	(472)	
	440	*) *	(462)	
	452	*) *	(475)	
	467	*) *	(480)	
	455	*) *	(479)	
	476	*) *	(500)	
	506	*) *	(530)	
	513	*) *	(538)	
	480	Burned	(570)	
	450	Burned	(480)	
	429	Cut	(460)	
	416	Cut	(448)	
	392	Cuttings	(426)	
	394	Burned	(430)	
	380	Cuttings	(418)	424

200	443 (464)	Cedar Swamp
400	450/472	" Birch & balsam
600	452/475	" "
800	476/500	Heavy Cedar & hem 3.15
1000	513/538	Enter burning Top of bluffs
1200	"	maple & basswood
1400	429/460	Burnt Foot of bluffs
1600	392/426	Enter Cedar Swamp
1800	394/430	Burnt cuttings
2000	380/418	Marsh

B.M. E  $\frac{1}{8}$  blw Sac 19 + 30 = 384.2

Course begins  $S \frac{1}{4}$  bls Sec 18 + 19. Runing S.

2.45- P.M.

75	465 (485) Hardwood	
190 - 225	Arm of Cedar swamp	
300	446 (468) Cedar, birch & pine.	
340	437 (459) U 5° E	
500	440 (462) Cedar birch & spruce	
700	467 (490) Maple & birch	
750	455 (479) .. + pine cuttings	
870	506 (530) Map	3.25
1100	480 (570) Min	U 3° E 3.40
1260	450 (480) Burnt	
1500	416 (448) Burned Cuttings	
1710	Leave swamp Enter burnt	
2012	380 (418) B.M.	4.10

$\frac{1}{8}$  stake 12 ft w. of passed line

424 ON 75 W Strike N 40 W Dip 75° S.W.  
Exposure facing SW 10' long 3' high



S. 19 T. 44 R. 32

471	* /	(500)
507	☁ / ☁	(533)
491	☁ *	(514)
500	☁ * *	(520)
498	☁ ☁ ☁	(515)
524	* ☁	(542)
527	* /	(542)
522	☁ * ☁	(536)
500	☁	(512)
510	☁ / ☁	(520)
488	☁ * *	(498)
458	☁ * /	(465)
450	☁ * ☁	(455)
469	☁ ☁	(474)
460	☁ *	(464)
	Burnt	

6-26-91

37

Course begins S  $\frac{1}{4}$  Sec 19. Running N.Camp Anaroid 28,872 8.25 am  
No 3 28,855

" 3 28,860 8.30

 $\frac{1}{4}$  Stake

Burnt, U 30' E

110

460(464) Enter hardwood

100 p's west 400

507(515) Top of ridge N + S 8.50

500

458(465) Birch, some pine &amp; hem

700

510(520) " maple &amp; barwood

937

522(536) Maple &amp; hem U 2° E 9 am

1100

524(542) Hard &amp; heavy cedar

1500

Heavy hard, cedar &amp; hem U 20° E 9.30

2030

Sec line

 $\frac{1}{4}$  Stake 17 p's W. 9.50425 400 N 1105 W. Massive. Fresh appearance.  
Exposure facing S.W. Trend to N.W.

426 840 N 1000 W. Strike west. Dip 80° S

Face North west 10' long 5' high







Course begins S  $\frac{1}{4}$  Sec. 18, Runney N.

U 2° E

1/4 stake	Enter spruce, tan swamp.
100	460 (490) Swamp alder <sup>10</sup> am
370	Enter hard, hem + cedar
1100	503 (549) Basswood & maple
1300	447 (495) Birch, pine & hem.
1320	Enter cedar swamp
1370	442 (492) Creek 6' wide, flows east.
1445	Enter hard, hem + cedar 1 am
1540	459 (511) Tate road 2 w.
1700	492 (552) Birch + cedar.
1900	Heavy maple, birch some pine & hem.
Bm	504 (570) 25 ft. w. U 60° E 11.20



467	* x	x	(471)
495	B	x	(499)
485	* x	x	(490)
483	B	B	(488)
454	x	B	(460)
458	B	x	(465)
505	+		(512)
509	B	B	(517)
512	x	B	(520)
516	B	B	(525)
501	B	B	(510)
482	B	B	(492)
464	x	x	(474)
457	x x x	x x x	(468)
477	B	x	(488)
448	x	x	(460)

B. M. 10 1/8 bto sec 7 + 18 = 4584

200	495/499	Maple + cedar
400	483/488	" + birch
600	454/460	Heavy hard Maple, Some pine 10°
800	509/517	" " + birch. 0102
1000	512/520	" " + "
1200	516/525	" " + "
1400	501/510	" " + bass. 010 as. 130
1600	482/492	" " "
1800	457/468	Cedar swamp.
2000	448/460	Birch + cedar.

Course begins w/ 8<sup>th</sup> Sec 18. Running S.

28.752 0000'

B.M.	Some pine 12:30
30	Creek 6' wide flows southward
100	467 (471) Birch
300	485 (490) Heavy maple
660	458 (460) Top road. S & W 1 P.M.
725	505 (512) Maple & birch
900	" " Some Hem
1700	464 (474) Open Cedar & Hem 12:30 W
1720	Enter Cedar swamp.
1805	" Maple, cedar & birch.
1900	477 (488) Maple & birch
2025	See line. Edge cedar swamp 1/8 stake 20 ft's west of line



				449	X-X-X	(461)		
					X-X-X			
					X-X-X			
				456	X-X-X	(468)		
					X-X-X			
				466	⊙ X ⊙	(478)		
					⊙ X ⊙			
				470	⊙ X ⊙	(482)		
					⊙ X ⊙			
				468	⊙ X ⊙	(480)		
					X ⊙ X ⊙			
				473	X ⊙ X ⊙	(486)		
					X X X - X X X			
				448	- X X X -	(461)		
					X X X - X X X			
				435	- X X X -	(448)		
					X X X - X X X			
				442	- X X X -	(458)		
					X X X - X X X			
				436	- X X X -	(453)		
					X X X - X X X			
					- X X X -			
				445	X X X - X X X	(466)		
					- X X X -			
				438	X X X - X X X	(460)		
					- X X X -			
					X X X - X X X			
					- X X X -			
				447	⊙ X ⊙	(470)		

300	456(468)	Ham. + birch	
400	466(478)	U 2° 30' W Maple + birch	
600	470(482)	Heavy " "	
800	473(486)	Swampy, Ham + cedar	2.30
1000	435(448)	Thick cedar Swampy	42
1200	442(458)	" " "	U 30° 30' W
1400	436(453)	" " "	U 0°
1600	445(466)	" " "	4 P.M.
1800	438(460)	" " "	
2000	( )		

B.M. W 1/8 S.W. Sec 19 + 30 = 451.3

Course begins w  $\frac{1}{8}$  Sec 18 19. Running S

$\frac{1}{8}$ stake	U 3° W. Enter spruce swamp	2 P.M.
700	449(461) Spruce swamp.	
280	Leave " "	
700	468(480) Swampy. Hard + hum.	U 33° E
815	Enter Cedar swamp	
900	448(461) U 1° E Thick cedar swamp.	
1080	Swamp 3:30 P.M.	
1910	Enter heavy birch & Maple 4:30	
2040	Sec line 2. Heavy hard.	
P.M.	447(470). $\frac{1}{8}$ stake 6 p's E of line	

Camp Anadol 28.772

No 3 " 28.753

427 6N 1715W massive. Ry cut 3' wide  
E side no exposure. 6" roll on top.



Blank Pages

44-47

Skipped

511	460	485	464	455	468	481	510	501	501	503	511	527	535	
(531)	(578)	(502)	(480)	(470)	(482)	(494)	(527)	(552)	(500)	(510) Ry	(571)	(578)	(533)	(520)

B.M. J.W. Cor 19 = 344.13-



6-27-91

49

Course begins S.W. Cor Sec 19. Running N.

Camp Anroid 28.720 7:45 am

M.G. " 28.680

No. 6 28.582 8 am

Cor Heavy maple, birch

900 501 (570) Center Ry track N.W. &amp; E

950 490 (500) Heavy Hardwood trees

1300 481 (494) " " "

1410 Enter Cedar swamp

1500 455 (470) " "

1700 485 (502) Hard + Cedar

Cor stake on line at 1992

B.M. 1992

Ry. cross section between 19+30 at 283 paces  
East of corner

493	(528)
492	(532)
522	(560)
578	(555)
548	(583)
524	(558)
508	(520)
500	(529)
498	(526)
496	(522)
503	(528)
508	(531)
572	(534)
498	(578)

Course begins S.W. Cor Sec 18. Running N

360 512 (534) Mixed hard + <sup>heavy</sup> some pine  
 940 Total road 9 am  
 1200 - 1400 Ridge to west parallel to line  
 No exposure of rock, ~~concrete~~

100 paces W 300 554 (585) Top ridge  
 1650 548 (583) " " on line Birch  
 1770 578 (555) min  
 1840 492 (532) "  
 1997 493 (538) B.M. on line 9.30

58570





Conours begins  $5\frac{1}{8}$  b/w Sec 12 & 13 Running S

Cor	28.588	U 30' E	Grate 6' wide
8			Severely " 5' w
70	488(492)		Lower swamp 9.5 am
100	508(512)		Heavy hardwood + pine
160	531(535)		Max. hardwood + maple
300	520(524)		Heavy maple. Some heavy pine
445	529(532)	"	" " " + " " "
500	515(518)		min
625	542(545)	"	" " "
680	527(530)		min
770	556(559)		Max Burnt ridge
920	506(508)		min "
975	524(526)		Max " " 10.15
1045	509(511)		min "
1130	508(510)		" "
700-1200			Burnt + scorched.
1300	507(508)		Heavy maple + birch.
1348			Top road rim
100 ft. a. of 1400	557(558)		Top or ridge <sup>NEVEN</sup> Rock exposure
			Heavy maple + birch on top + sides
1450-1550	497(498)		Along W. edge <sup>Heavy pine on E edge</sup> than heavy maple
1700	492(492)		Heavy m + d 10.40



S. 24 T. 4.4 R. 33

					508	* 2*	(508)
					514	2 2*	(514)
						100	
					508	2	(508)
					503	2	(503)
					533	2 2	(532)
					521	2 2	(520)
					505	2	(504)
					521	2	(520)
					516	* 2	(512)
					511	2*	(510)
					514	2*	(512)
						2 2	
					520	2 2	(520)
						2 2	
					532	2	(530)
						2 2	
					543	2 2	(541)
						2 2	
					544	2*	(542)
						2*	
					527	2 2	(525)

200	514 (514)	Heavy maple birds + basswood
400	508 (508)	Right of way or NW Ry.
600	521 (520)	Along burnt ridge 60 paces wide
800	513 (512)	Heavy maple, basswood + <sup>up</sup> fawn pine.
1000	514 (512)	" " + birds + " cut."
1200	530 (528)	" " + " "
1400	532 (530)	" " + " "
1600	542 (541)	" " + " "
1800	544 (543)	" " + " fawn pine
2000	527 (525)	" " + " 11, 40

B.M.  $\frac{1}{8}$  bu. Dec 24, 25 = 531



Course begins @ 1/8 to Sec 13 + 24. Running S

100 508(508) Heavy maple birds + some pine

429 503(502) Center road bed. NW + SE

Report of 7' shows pond and boulders

500 532(531) Top burnt ridge. NW + S.

660 505(504) Mini

700 501(520) Maple + birds. 11.15

900 511(510) " " " "

1 1/8 stake 18 ft E of line at 2000 ft.

Camp Guard 28.658

Notes 28.608

2

S. 24

T. 44

R. 33

537		(556) (562)
539		(550)
528		(545)
523		(544)
539		(546)
528		(550)
533		(550)
534		(550)
525		(570)
548		(560)
530		(543)
534		(565)
551		(561)
543		(532)
532		(560)
533		(580)
564		(570)
553		(558)

6-29-91

57

Specimens 415-423, inclusive.

Course begins S  $\frac{1}{4}$  Sec 24, Running N

Camp Arrowood 28.310 7.40

N. 6 " 28.295

B.M. 30 ft S  $\frac{1}{4}$  stake 28.168 U30W 8.15 $\frac{1}{4}$  stake 533(558) Mixed hardwood-heavy maple,

100 584(570) " "

500

Heavy maple &amp; basswood

900

554(565) " "

1080

546(560) Top of ridge S  $\frac{1}{2}$  W. N 84.5  
U20W

1300

534(550) Mixed hard. Some cedar &amp; pine.

1660

538(559) " "

1700

523(545) " heavy  
pink burnt East

1975

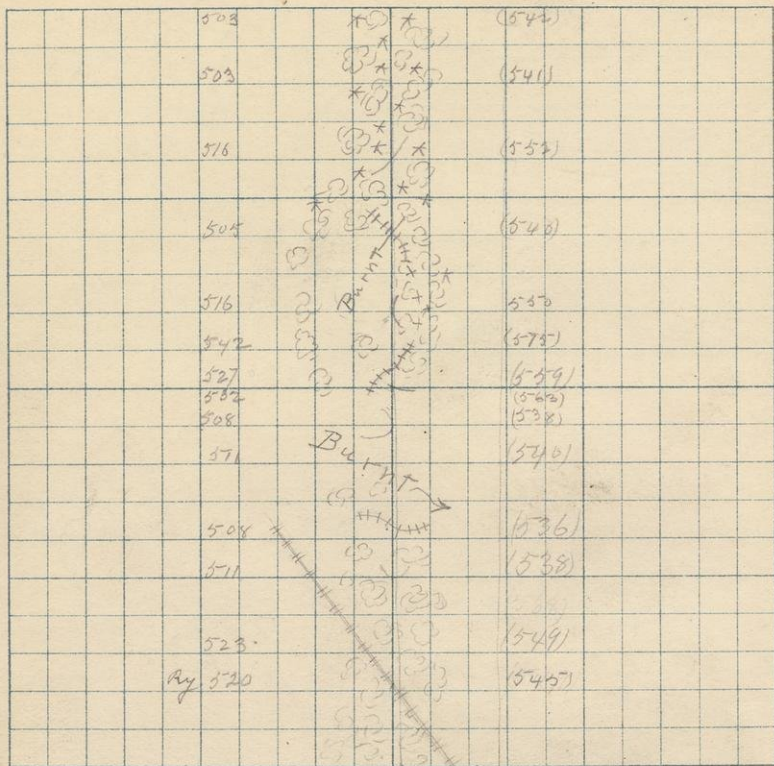
539(562) " hardwood. Some pine &amp; cedar

2005

532(556)  $\frac{1}{4}$  stake on line.



S. 13 T. 44 R. 33



300	523 (5-49) Mixed hard. Maple
500	511 (538) " " " 11.02
600	508 (536) Enter burning Standing hard.
800	511 (540) " " " "
1000	527 (559) " Hardwood Maple
1200	516 (550) Birch " Some pine 9.45
1400	505 (540) In the hardwood, maple & birch.
1600	516 (552) Hardwood & heavy pine
1800	503 (541) Maple & Pine " "
2000	503 (542) Pine " " with 10.05

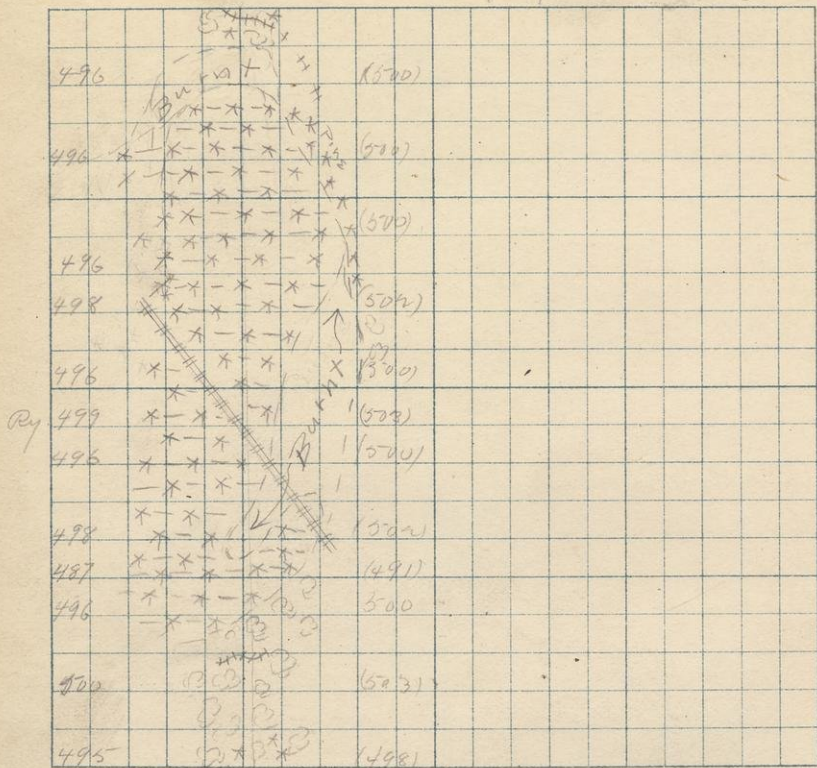
B.M. 2 1/4 Sec 13 = 506.6

Course begins  $3\frac{1}{4}$  Dec 13 Running N

216	520 (545)	Centre road bed	9.15
628		Total road	
900	508 (538)	10' Runnt	
960	532 (563)	"	
1054		Total road	
1110	542 (575)	Burnt ridge. Hard, pine cedar	
1300		U 20 W	
1500		Hardwood, maple, and heavy pine	
1800		U 20 W	

Bm. 28.194 Cor 16 p's w of line 10.00





? B. M. W. 1/8 Dec 13 = 509.5

200	—	(500)	Enter of an open forest	10.45
400	—	(500)	" " " "	
600	—	(500)	" " " "	
800	—	(502)	" " " "	
1000	—	(500)	" " " "	
1200	—	(502)	" " " "	
1400	—	(500)	Enter mixed hardwood	
1600	—	(503)	maple + birch	
1800	—			
2000	—			



Course begins W  $\frac{1}{2}$  Sec 12 & 13. Running S.

B.M.	28,190	00°	10:15
20	Took road. Mixed hard & pine.		
100	Enter old burning " " " east		
300	Spruce & larch swamp. Burnt west 00°		
	Hardwood & white pine east.		
1100	(503)	Center of road bed.	
1180	83° E	By track to east	
1357	Enter burnt spruce larch.		
1425	Enter open spruce swamp		
1500	(491)	" " "	
1710	Took road. 11:15		
1901	52° 30' E.		
2006	(498)	Sec line. Heavy wet pine	
	W $\frac{1}{2}$ of lake 25 ft west		11:30

497		(500)
498		(500)
499		(499)
512		(512)
521		(520)
526		(525)
517		(514)
540		(536)
535		(538)
538		(532)
547		(540)
545		(535)
561		(552)
560		(550)
562		(550)
574		560

B.M.  $5 \frac{1}{4}$  Sec 24 = 578.2

Concord 64 pds w/ 1/4 lb Syc 13+24 Running S

400	V 2° 30' E	
650	512 (512) Maple, elm, cedar	1145-
770	521 (520) Hardwood & "	"
900	517 (514) " maple,	
1160	535 (530) " "	
1220	558 (552) " " + birchwood	1100

1500	U 1° 30' E	
1900	562 (550) Heavy hardwood	1215-
1331	574 (560) 1/8 stake 100 ft w.	1225-

No 6 anroid 28300 2:00 pm  
Camp " 28300





6-30-91

65

Course begins S.W. Cor Dec 24 Running N

Camp August 28

B.M.

28.218, Hardwood 8:25

500

530 (532) Heavy " Maplebirds

700

532 (533) " " "

900

525 (523) enter burning

975

Enter Cedar Swamp

1050

" burnt cuttings

1100

500 (503)

1250

541 (340) Top of knob. p. 119 9:00

1400

100 <sup>faces nos</sup> ~~along~~ From base to top 28'

1500

517 (512)

1700

Heavy maple &amp; birch forest

1880

511 (505) Elder burnt in gaps

Cor on line

428

1240 N 2000 W. Massive. Knob ~~at~~ <sup>at</sup> ~~the~~ <sup>the</sup> ~~edge~~ <sup>edge</sup> ~~off~~ <sup>off</sup>  
to S. or S. 2. at about 30° to 40°

Face to N.W. max. height 18'

428

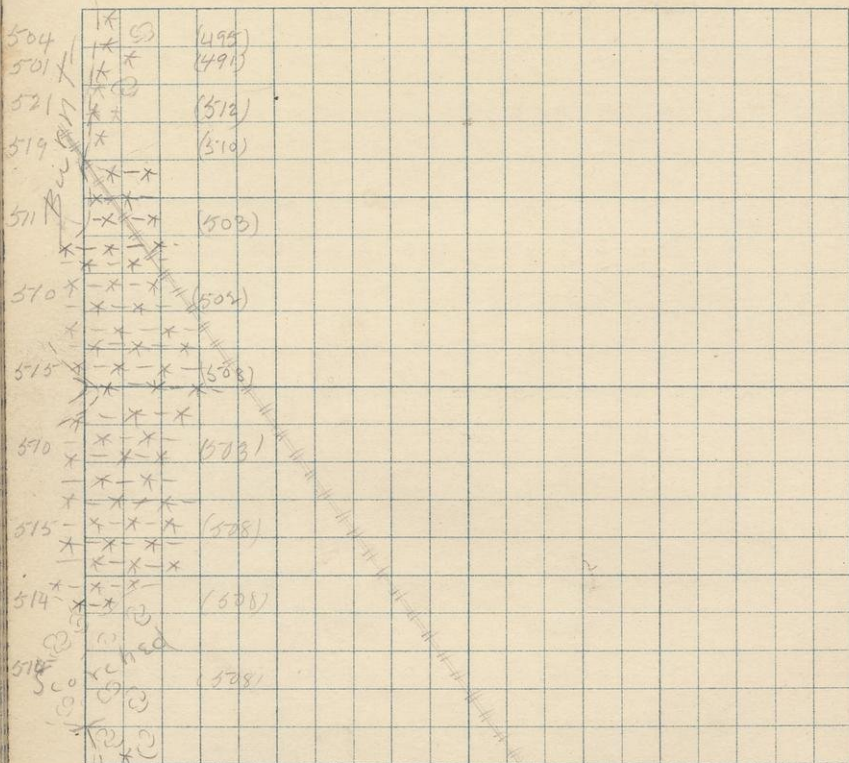
1240 N 2000 W. Massive. Weathered. From south

$\begin{array}{l} \times 2 \times 5 \times 8 \\ \times 25 \text{ faces.} \end{array}$ 
 face of knob 8' high. Contact with 428  
 as shown in fig., grading into each other.

Ledges at 1800 N-1900 W, 1600 N-1990 W, &amp; 1800 N-1990 W.

Mass x 428 faces, 5' to 12' high, facing N.W. and  
sloping to S.E.





200	504/508	Overlaid hardwood
400	514/508	Side open spruce forest
600	515/508	" " " "
800	500/503	" " " "
1000	510/508	Overlaid
1200	510/502	Open spruce swamp
1400	511/503	" " "
1600	519/510	Center of road bed
1900	504/495	Wedge barrier Heavy wt. pine
2000	( )	

B. M. M. W. Cor Sec 13 = 504.8



Courses begin S.W. cor Sec 13, Panning N.

Cor	E. edge burnt culling
100	enter pasture
940	" old burning
1015	" spruce tree swamp
1374	Drainage ditch etc
1400-1600	along w. edge swamp
1700	521 512 White pine E. burnt w. 1015-0
1990	501 (491) B.M. cor 10 p's w. of line
	28300

S. 14 T. 44 R. 32

497	Cutting	(518)
506	Cutting	(519)
574	Burnt Spruce	(518)
516	Cutting	(520)
578	Cutting	(522)
498	Cutting	(532)
534	Cutting	(508)
511	Cutting	(515)
537	Cutting	(511)
511	Cutting	(515)
521	Cutting	(525)
538	Cutting	(512)



Course begins  $\frac{1}{2}$  mile S. Sec 11 & 14. Running S  
28.2.92 11.40.

$\frac{1}{4}$  stake

Old burning & cuttings

60

Enter dense spruce tree swamp

700

Brown spruce scrub. Burnt w. grass "

740

576 (531)

Hardwood scrub. Burning extending with  
cuttings

15-1600

Burnt

1800-1700

Spinescampa

1700-1790

Cedar "

1900

521 (525) Burnt

S. 23 T. 4 R. 33

507 ~~Print~~ <sup>50</sup> ~~50~~ <sup>50</sup> - (511)

496 <sup>cut</sup> (500)

498 <sup>cut</sup> (500)

498 <sup>cut</sup> (500)

495 <sup>cut</sup> (500)

508 <sup>cut</sup> (500)

501 <sup>cut</sup> (500)

498 <sup>cut</sup> (500)

499 <sup>cut</sup> (500)

596 <sup>cut</sup> (500)

512 <sup>cut</sup> (500)

506 <sup>cut</sup> (500)

512 <sup>cut</sup> (500)

526 <sup>cut</sup> (500)

534 <sup>cut</sup> (500)

539 <sup>cut</sup> (500)



Course begins  $8\frac{1}{2}$  miles S. 23° 26'. Running S  
12' 30"

1800	Enter hardwood Maple & birch
300	V 2' 0"
460	496 (500) Enter spruce & aspen
900	508 (512) Burnt & cut / 100'
960	to road
1050	488 (491) Amaral
1450	Enter hardwood, birch & cedar
1500	572 (576) " burning
1540	509 (512) "
1700	572 (575) Hardwood, Maple, birch & cedar
1800	534 (537) " " & birch
2010	533 (536) 1/8 Mile 37' S. of line 130

S. 23

T. 44

R. 33

509	(32)	(32)	560
512	(32)	(32)	561
515			522
516			560
510			556
519			572
517			558
514			554
510			551
306			543
508			542
538			570
514			572
505			565
			571
484			488



7-1-91

73

Course begins S  $\frac{1}{4}$  Sec. 23. Running N.

Camp anaroid 28.560 7.30

720 6 " 28.515

" " 28.508 8 am

" " Old burning of hwy wood

300 505 (511) " " " "

370 514 (522) " " Foot of ledge

Top rounds off on all sides, some what broken  
toward S, where it is exposed at total height

26 Eastern portion of face 428 + 429

430 380 N. 100502 No structure. Contact not discerned

440

500

Old burning &amp; cuttings

630 500 (536) " " " 8.30

700 506 (543) " " "

800 Total road even

900 - 1050 Some standing hardwood

1100 517 (558) U3° W.

1300 510 (556) Old burning &amp; cuttings

14-1500 Some standing hardwood Elm.

4 Stakes 18 ft E. of line.

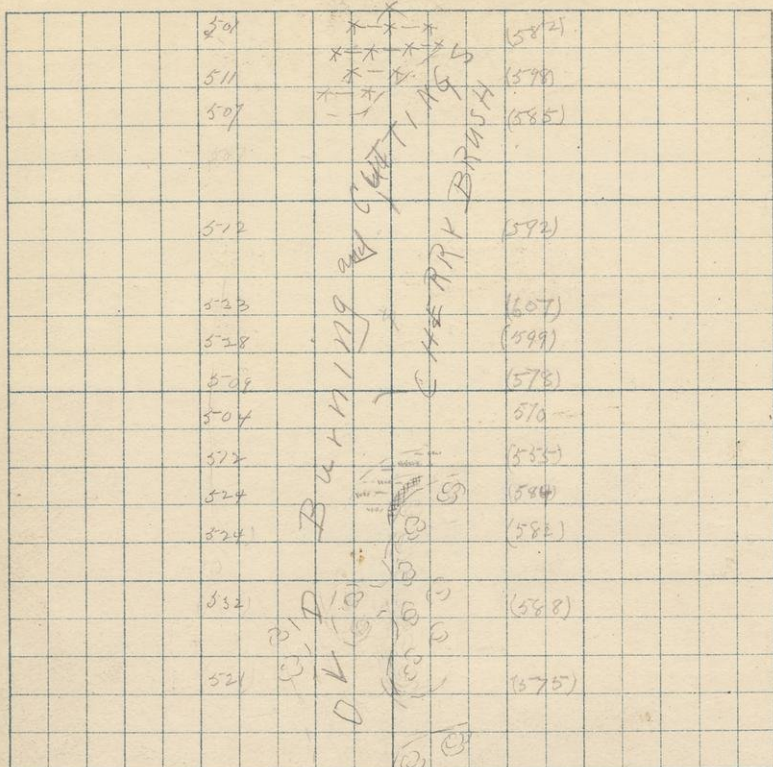
S.

14

T.

44

R. 33



200	521 (575)	old burning + cuttings
400	532 (581)	Brush + windfall
600	524 (582)	" "
800	512 (575)	" " + cuttings marshy
1000	509 (578)	" " thick cherry brush
1200	533 (597)	remnants cut " "
1400	512 (572)	" " windfall
1700	507 (585)	" "
1800	511 (590)	Enter open spruce swamp
2000	501 (582)	Bm " "

B.M. 11 1/2 S 20 14 = 501.



Course begins S  $\frac{1}{4}$  Sec 14. Running N.

$\frac{1}{4}$  stake W. edge of some standing hard.

700	524 (584) top of ledge 428
900	504 (578) All barney. Bushwinfall
1008	542W 10 ac
1100	528 (589) foot of face 428 + 429
	9' high, 30' long Face to south
	Tops rounded and well exposed

$\frac{1}{4}$  stake on line at 2000 paces. 10.40  
28.400





Course begins W  $\frac{1}{4}$  Sec 11-14. Running S

	28.398	11 am
$\frac{1}{8}$ stake	Edge Spruce (tree running)	
200	Enter vacant bearing of harden & cedar	
500	N 2° W.	
700	S 30° W	
1580	Enter cedar running	
1620	489 (485) Stream 3' wide, flowing west	S. 15° W. 12.15
1700	500 (505) All burning & cutting since clearing had	
1900	" " " " " "	

$\frac{1}{8}$  stake 150 p's west at 2050.

432 1100 N 1500 W. No structure. Top sharply rounded, smoothed and well exposed. Extends to east and west in a rising and falling with sharp curves. Exposed ~~at~~ 1615 N and from 1500 to 1000 in similar manner.

S. 23 T. 44 R. 33.

476	3	(481)	
486	3	(491)	
474	3	(479)	
470	3	(475)	
477	3	(482)	
471	3	(476)	
480	3	(486)	
469	3	(478)	
464	3	(470)	
482	3	(488)	
484	3	(490)	
482	3	(488)	
456	3	(462)	

- 200 — 474(479) *Wedge marsh + alder*  
 400 — 470(475) " " "  
 600 — 471(476) *Old burning + cutting*  
 800 — 469(475) " " " " " U12°E  
 1000 — 464(470) " " " " "  
 1200 — 482(488) *W. edge hardwood*  
 1400 — 484(490) *Inter Old burning U8°E*  
 1600 — 482(488) " " " " "  
 1800 — 486(462) " " " " "  
 2000 —

B.M. 665 Sec 14 + 23



Course begins at  $\frac{1}{2}$  Sec 14 T 23 Running S

$\frac{1}{2}$ Stake	480 (485) Old burning. $U 5^{\circ} W$ .
190	476 (481) Stream 3' wide
400 - 345	Swamps. Alder, spruce & cedar. Hardwood west
365	486 (491) Old burning of hardwood.
500	$U 3^{\circ} E$
565	Stream flows southward
685	Leaves near old burning stream
700	477 (482) $U 8^{\circ} E$
920	480 (485) Old burning & cutting
1660	Total road
7020	(Per line $\frac{1}{8}$ stake 30 p. 145)
22m	456 (462) On or S.W. Cor Sec 23. 460.4
	28.470 1958 PM

Station	Notes	Value
491		(505)
486		(500)
490		(503)
489		(502)
469		(481)
409		(470)
453		(464)
446		(456)
438		(448)
432		(442)
416		(426)
425		(432)
407		(443)
439		(444)

B.M. S.W. Cor D<sub>2</sub>C 29 = 460

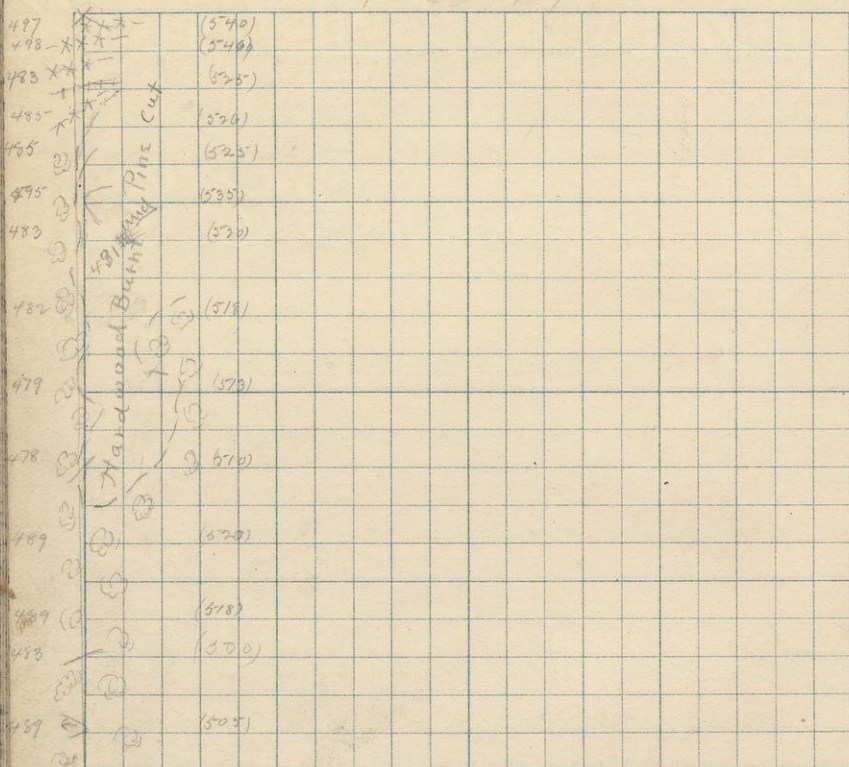


7-2-91

81

Course begins S.W. Cor Ore 23. Running N.

Camp Anard	28,450	7:15 am.
No 10	28,770	
	28,750	7:30
Cor	U 102	7:45
"	W. edge turning & cutting	
335	Stream 3' wide. Flow westerly	
500	U 302	
788	446(426) Creek 4' wide "	
845	Enter old burning & cutting	
950	Total road.	8:15
1100	446(456) Hardwood west	
1300	459(470) U 402	
1500	489(502) Heavy hardwood maple & elm.	
2030	Pre here. Cor 60 ft west.	
1200-2000	Hardwood burnt in spots and misc cut.	



300	483(520)	Hardwood, Maple + Birch.
400	489(518)	" light
600	489(520)	"
800	478(510)	W. edge burnt + cut spot
1000	479(513)	" " " "
	482(518)	" " " "
1200	483(520)	Scorched cedar + Hamlock.
1400	485(525)	E. edge cedar swamp. Some hardwood.
1600	483(525)	Entire burning logging road
1800	497(540)	Edge burnt cedar swamp
2000		

13.21. N.W. Cor Rec 142 \$99.9



Course begins D.W. Cor (20 14. Rising N.  
9. am

100	489 (505) Hardwood. Maple & elm	
400	U 12° W.	
600	U 20° W.	9.20
800	U 13° W	
900	U 6° W <del>Soft</del> Hardwood.	
1000	U 9° W	
1200	U 12° W	

431 1400 N 1900 W. No structure made out. F am  
 Top rounded, well exposed. Similar  
 Exposure to N. and E. 431 from S.  
 1 End of exposure. Grades into 428

1500	493 (535)	
1700	495 (526) E. edge swamp	
1900	494 (540) Summit & cut. U 10° W	10:45
2050	496 (540) B.M. Bent Cedar swamp.	
	28678	Cor 20 ft east of paved line 10:55





Course begins E  $\frac{1}{4}$  Sec 10+15 Running S

	28638	1410
$\frac{1}{2}$ stake	Burnt	+ cut
100	491 (495)	" "
300	500 (504)	" "
475	Enter cedar swamp	
530	Logging road 4+10	
640	Enter burning	
700	493 (498)	" "
760	515 (520)	" "
1900	481 (486)	Heavy hardwood + cedar
	$\frac{1}{2}$ stake 50 p's W.	
	Hardwood scorched + burnt in spots and first cut along this mile	

400. Xd

S. 22 T. 44 R. 33

					479	Q.	14837
					464	Q.	(472)
						Q.	
					459	Q.	(465)
					454	Q.	(460)
						Q.	
					434	Q.	(440)
					440	Q.	(432)
					424	Q.	(430)
					424	Q.	(430)
					414	Q.	(420)
					406	Q.	(412)
					424	Q.	(430)
					412	Q.	(418)
					412	Q.	(418)
					392	Q.	(402)
						Q.	
					409	Q.	(416)

300	459 (465)	Hardwood
400	454 (460)	"
600	446 (452)	Burnt Hardwood
800	424 (430)	" "
1000	406 (412)	Edge cedar swamp. Heavy cedar
1200	412 (418)	Burnt hardwood
1400	412 (418)	" + cedar.
1600	( )	Impassable marsh
1800	( )	
2000	409 (416)	B.M. E. edge stream. Cedar. 1,300

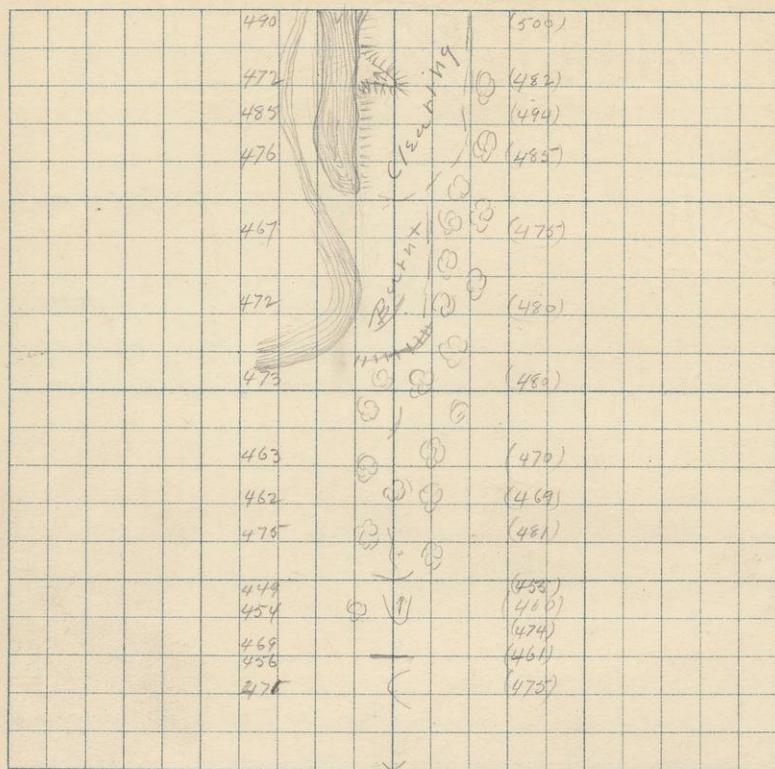
B.M. E. 600/200 22 + 27 = 413



Course begins E  $\frac{1}{8}$  Sec. Dec 15 + 22. Running S

12:15

$\frac{1}{8}$ stake	479 (483) Hardwood	
100	464 (470)	"
300-400	Clearing, timothy, 100 ft. east.	
400	Toll road	
500	434 (440) Marsh	
700	424 (430) Burnt Hardwood	
830	Enter cedar swamp	
890	Brook, 2' wide, flows westerly	
900	414 (420) Cedar swamp	12:45
1040	Enter burnt hardwood	
1100	424 (430)	" "
1230-1300	Alfalfa spruce swamp.	
1430	Enter cedar swamp	
1520	3957 (402) Enter flooded marsh.	1:10
Camp	28540	2 P.M.
700 10	28740	



B.M. 5 1/4 Dec 22 = 46

200 —	471 (475)	run out hand and out from
400 —	452 (460)	" " " " " "
600 —	475 (481)	Some " (Maple) " " "
800 —	463 (470)	" " " " " "
1000 —	473 (480)	Scorched maple, birch & cedar
1200 —	472 (480)	Run out. Check brush. 100 ps w to
1400 —	467 (475)	" " " " " "
1600 —	476 (485)	" Enter clearing.
1800 —	472 (482)	Head of ravine to lake 1500
2000 —	490 (800)	Clearing . 8120



7-3-91

89

Course begins  $5\frac{1}{4}$  Sec 22. Running N

Camp Aurora 28.540 7:10  
 m 10 28.740

28.710 7:20

Old burning &amp; cutting

280 456(461)

410 469(474)

460 449(455)

700 462(467) Some hardwood &amp; o. of pine

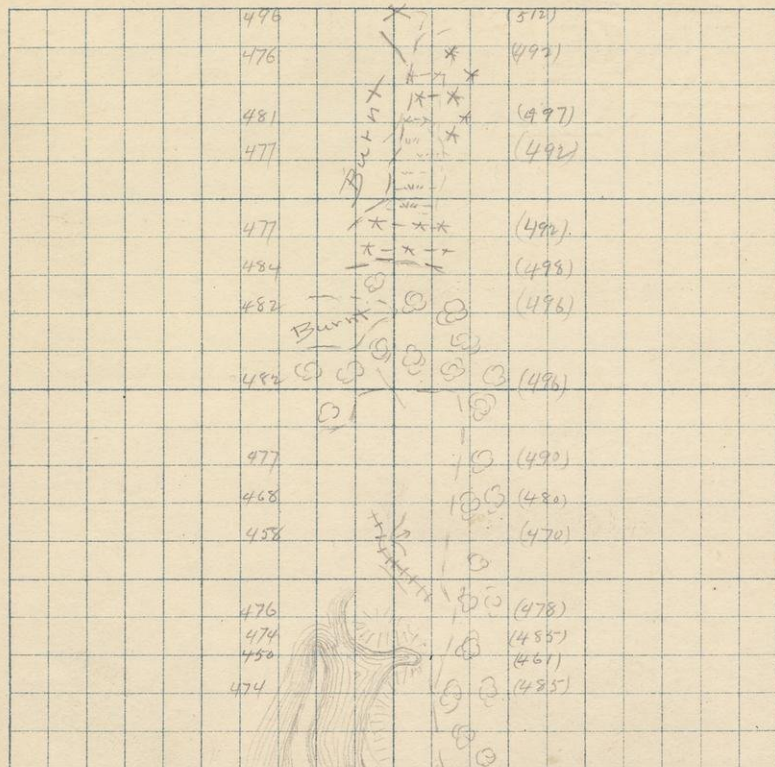
1100 Total road 7:50

80 ft cut 1500 452(460) Lake level 8 am

1700 488(494) Clearing

2100 482(492) " See line of post in [line]

S. 15 T. 44 R. 33



200	474 (485)	Burnt & cut
400	476 (478)	"
600	458 (470)	"
800	477 (490)	"
1000	482 (496)	Entire hardwood Maple
1200	482 (496)	Hardwood. Burnt strip with
1400	477 (492)	Burnt & cedar
1600	477 (492)	Entire burning
1800	( )	"
2000	( )	"

B.M. D. 1/4 Dec 15 = 5-00.5

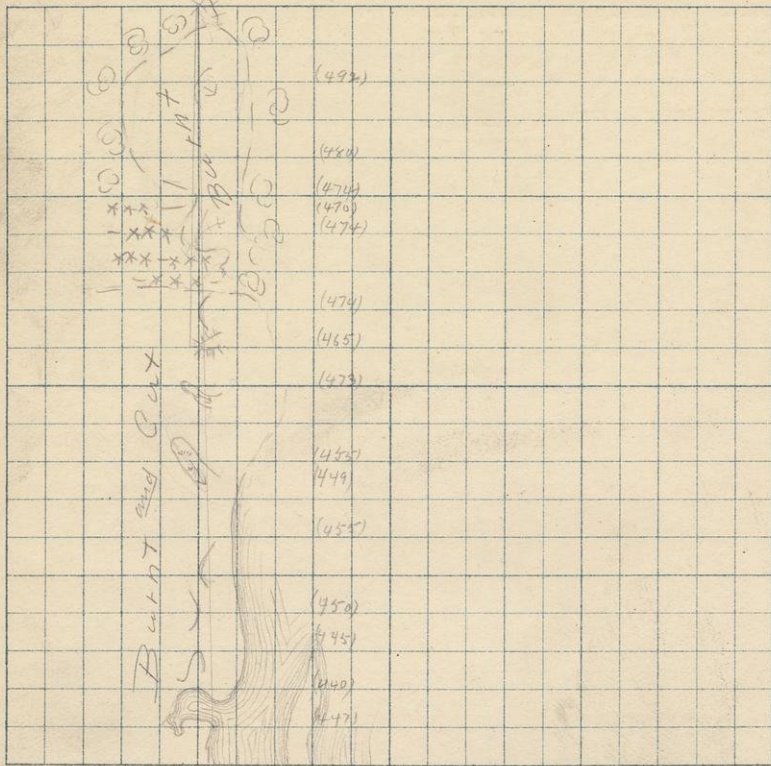


Course begins 5 1/4 Dec 15. Running N

270	460 (461) Water level.
<del>367</del>	474 (475) Burnt & cut V 402
500	460 (472) " "
530	Total road
700	468 (480) Burnt & cut
1300	484 (495) Hardwood & cedar.
1350	Enter split in alluvium.
1700	481 (497) Burnt & cut.
1890	476 (492)
1910	496 (512) <sup>n.m.</sup> 1/4 stake on line 7.20
	28,654

? 433 2000N/1000W Massive, 30' by 40'. Exposure  
 ? to n. of apparently same rock.  
 Possibly a boulder.

S 15 T 44 R 33



Dist w/2 Sec 10 & 15 = 519.05

300	489(492)	Berret hard wood + feather	
400	477(480)	"	"
600	472(474)	"	"
800	472(474)	"	"
1000	472(473)	"	"
1200	455(456)	"	"
1400	456(455)	"	"
1600	451(452)	"	"
1800	442(440)	to 2 in arm of lake	
2000	( )		



Course begins w/66 to S26 10+15. Runs S

B.M	15° 2	28.638	Hardwood chain 9.410
50			Enter burnt hard road
500		471 (474)	wedge swamp. alder.
600		+	Total road
632		468 (470)	Enter cedar swamp
750.			Enter burning road
900		464 (465)	Road from running E.
1250		449 (449)	Marshy pool.
1700		446 (445)	Road track.
1900		449 (447)	Off road 60 ft's west paved line. <sup>1030</sup>

S. 22 T. 44 R. 33

467	②		(464)
471	②	*	(468)
473	②	*	(470)
480	②	*	(476)
480	②	*	(476)
459	②	*	(455)
468	②	*	(463)
473	②	*	(468)
470	②	*	(464)
436	②	*	(430)
436	②	*	(430)
462	②	*	(456)
466	②	*	(459)
422	②	*	(415)
413	②	*	(405)

200	471 (468)	Burnt
400	473 (470)	Some heavy maple, bright cedar
600	480 (476)	Wedge birch, " + " west
800	480 (476)	Burnt + cut
1000	468 (463)	" + " Top of lake bank
1200	473 (468)	Some heavy maple + birch
1400	470 (464)	Burnt west. Some hard east.
1600	436 (430)	" + pine cuttings
1800	466 (459)	" + " "
2000	403 (405)	marsh

B.M. W  $\frac{1}{8}$  bls. Sec 22 + 27 = 421.70



Course begins W of the Sec 15 & 22. Runing

$\frac{1}{2}$ stake,	02° E Burnt	
100	467(464)	Some hardwood & cedar
300	"	maple & birch
500	02° E	
700	459(455)	
3000 & 1000	450(445)	W. L. Lake " dry
1150		Butler's <del>Shore</del> had a hard
1150		Butler road.
1300	04° E Burnt	toward west.
1500	436(430)	" + pine cuttings
1700	462(455)	" + " "
1900	422(415)	" + " "
1920		Enter marsh
2100	418(410)	Run. 04° E 11:30
	$\frac{1}{2}$ post on line	

Camp around 28,532

No 10. " 28,770

Note -  $\frac{1}{4}$  &  $\frac{1}{2}$  mile in Sec 22, 100 paces long each  
and  $\frac{1}{4}$  &  $\frac{1}{2}$  " in Sec 15, 100 paces short "





B-6-91

97

Course begins S.W. Cor Sec 21. Mining N

No 10 28.812

28.125

No 8 28.380

500

500 (505) Burnt drain. Hard maple w.

1100

478 (485) " "

1500

Enter Hardwood Maple

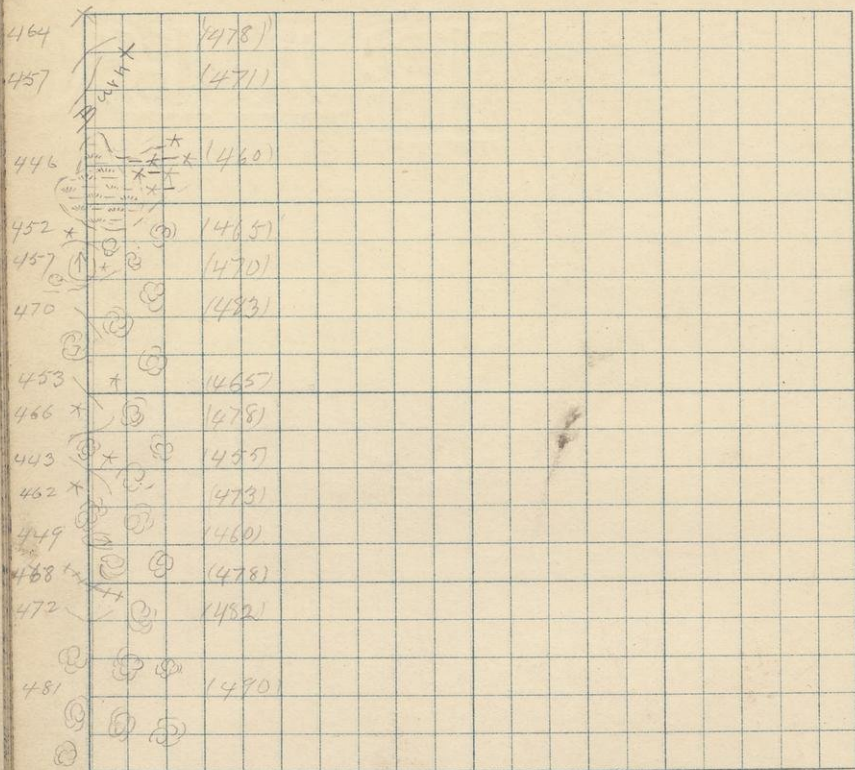
1970

476 (485) Pacilia birch + maple

4

BSM 25 ft west of pacilia  
8:15

V's used as per plat.



200	481 (490) Heavy maple & birch.
400	474 482 " "
600	449 (460) Mixed hard, maple, elm.
800	443 (455) 455 " " " + cedar
1000	453 (465) " " " birch & hem.
1200	470 (483) Heavy maple birch & elm.
1400	452 (465) Scorch'd vacant brushy. Cedar.
1600	448 (460) Cranberry swamp.
1800	457 471 Eastern old birch swamp.
2000	

B. M. N. W. Cor Dec 16 = 479



Course begins S.W. Cox Dec 16. Running N

500	468(478) Totr Road
700	462(473) Elm, maple, bass.
900	466(478) Birch + " + 6
1200	457(470) Burnt
1475	455 Enter spruce & evergreen. <sup>burnt</sup> <del>burnt</del> <sup>burnt</sup> <del>burnt</del>
1680	enter recent burning 1975
1900	Burnt Hardwood & pine antelope.
1950	464(478) Spruce, burnt " " "
37M	475(490) 25% w. of road line 10.25
	28.762 .

U6°30' is used as per plat.

S.

17

T.

44

R.

33

										444	X		(445)
										444	X-X-X		(445)
										457	Burnt + CHERRY BRUSH		(452)
										463			(466)
										473	X		(478)
										474	X		(480)
										464	(3)		(470)
										474	X		(480)
										449	X		(455)
										453	X		(460)
										457	X		(464)
										463	X		(470)
										461	X		(468)

- 200 B.M. @ 1/8 flw Sec 8 + 17. 450.34  
 400 444/445 Sutar cherry brush  
 600 457/462 Burnt hard + pine Cullbigs  
 800 473/478 Scorched " + cedar  
 1000 474/480 Heavy birch, maple + cedar  
 1200 484/470 " maple + cedar. LI am  
 1400 474/480 " " + cedar  
 1600 449/453 " " + fair w/ pine  
 1800 457/464 Scorched " + cedar  
 2000 463/470 " " + cedar



Course begins  $2\frac{1}{4}$  miles S. &  $1\frac{1}{2}$  Running S.

28,800 10:35

$\frac{1}{8}$  stake

Burnt hardwood + pine cutting

100

444/448 Spruce swamp cut.

520

463/468 Burnt cut.

700

Enter heavy hard. maple

1170

Total road

1000-1200

Overhead.

1000

453/460

" hard + cedar

1997

461/468

$\frac{1}{8}$  stake on line. 11:30

Heavy maple

Entire mile more of <sup>light</sup> ~~dark~~ scorched  
by recent burning of brush.

S. 20 T. 44 R. 33

[illegible]



Course begins  $E\frac{1}{8}$  Sec 5 & 17 + 20. Running S

1300

447 (456) Old burying + fence cutting <sup>12 N</sup>

1700

452 (462) " "

1960

437 (447) Section " 12.20

 $\frac{1}{8}$  stake 60 p.c east of guard line

✓

409 (420) BM  $S\frac{1}{4}$  Sec 20 413.4 <sup>12.30</sup>

28832





Diary  
First notebook

Part in back of book



