

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

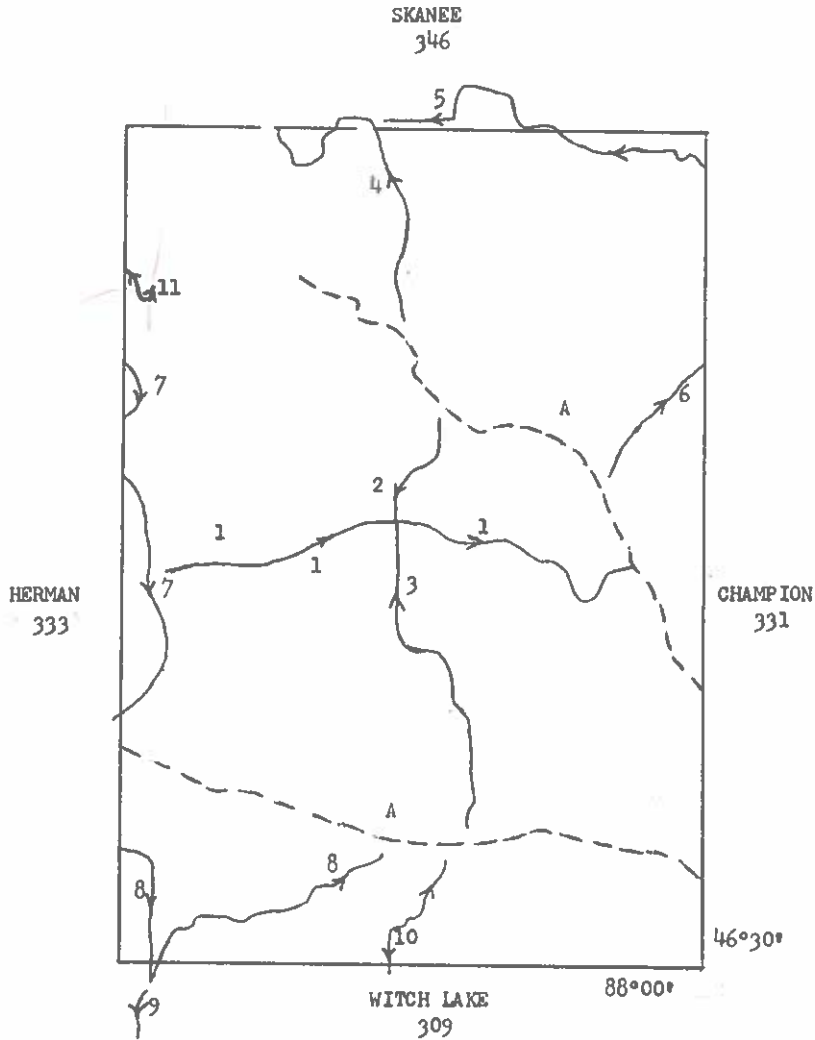
THIRD-ORDER LEVELS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

46-088-12  
MICHIGAN QUADRANGLE  
332 - MICHIGAN  
N4630-W8800/15  
DIAGRAM NL 16-4  
IRON RIVER

Baraga and Marquette Counties

Edition of: 12-15-82

PR: DDB/mf/jo



N.G.S. (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle No 460881

LINE 1

R.E. Carey, 1951; Book CV-472

FEET/METERS

0.3 Nestoria, 0.3 mi NE. of along rd., NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 48 N., R. 32 W., 45 ft N. and 200 ft E. from center of U.S. Highway 41 at rd. W. to Nestoria, in concrete post; standard tablet stamped "TT 78 S 1931 1640"	1640.471 500.017m
3.0 Nestoria, about 1.8 mi N. and about 1 mi E. from, NW. cor. sec. 6, T. 48 N., R. 31 W., 300 ft S. of Knight Lake, at "S" curve, 12 ft W. and 4.3 ft higher than center of rd., in boulder; standard tablet stamped "1 RC 1951 1763"	1763.485 537.510m
5.0 Nestoria, about 3.5 mi N. and 1.5 mi E. from, about 0.2 mi E. of lumber camp and lake, near center sec. 30, T. 49 N., R. 31 W., 30 ft SW. of large pine tree, 16 ft N. and 7.6 ft higher than center of rd., in boulder, at S. side of knoll; standard tablet stamped "2 RC 1951 1782"	1781.609 543.034m
6.0 UE 2 B, T. 49 N., R. 31 W., SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, at center of trail forks, on small boulder about flush with ground; chiseled square	1783.65 543.657m
6.0 UE 2 C, T. 49 N., R. 31 W., near E. sixteenth cor. between secs. 19 and 30, 125 ft SW. from outlet of Loon Lake, 12 ft N. of center of trail on SW. edge of large boulder; chiseled square	1789.01 545.290m
7.1 Nestoria, 3.8 mi N. and 2.5 mi E. from, 6 mi N. and 5 mi W. from Michigamme, about 0.8 mi E. of outlet of Loon Lake, 120 ft SW. of witness tree designating about 100 paces W. to quarter cor. between secs. 20 and 29, T. 49 N., R. 31 W., 70 ft W. of very dim logging trail N.-S., in SW. edge of large boulder; standard tablet stamped "3 RC 1951 1830"	1829.506 557.633m
7.1 Reference mark, about 78 ft SW. of tablet, at foot and on N. edge of huge boulder; chiseled square	1830.27 557.866m
8.0 UE 3 B, T. 49 N., R. 31 W., SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, 15 ft N. of water edge of lake on small shelf at foot of rock cliff; chiseled square	1744.78 531.809m
9.2 Michigamme, 6 mi N. and 3.5 mi W. from, SE. cor. sec. 21, T. 49 N., R. 31 W., 140 ft N. of inlet of creek into Craig Lake which connects Lake N. and Craig Lake, 100 ft SE. of right angle turn in creek from W. to S., 50 ft E. and 7.2 ft higher than water level 5-9-51, at center of creek, in top of large rock outcrop; standard tablet stamped "4 RC 1951 1733"	1732.582 528.090m
9.2 Reference mark, about 85 ft W. of tablet, 35 ft W. of center of creek on large shelf at NW. cor. of large boulder; chiseled square	1729.53 527.161m
10.0 UE 4 A, T. 49 N., R. 31 W., SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, at outlet and on N. shore of W. Peshekee River, on E. edge of large boulder 4.9 ft higher than water level 5-9-51; chiseled square	1714.53 522.589m
11.3 Michigamme, 6.5 mi N. and about 2 mi W. from, SE. cor. NW $\frac{1}{4}$ sec. 23, T. 49 N., R. 31 W., across river NE. of inlet of creek from Crooked Lake, 225 ft N. of W. Peshekee River, 200 ft E. of center of swamp, about 200 ft S. of rock cliff, on W. end of knoll, in top of boulder; standard tablet stamped "5 RC 1951 1727" (Not Found 8-56 A.W.P.)	1727.188 526.447m
11.3 Reference mark, about 35 ft W. of tablet, at W. slope of hill, on boulder; chiseled square	1716.10 523.067m
13.0 Michigamme, 6.5 mi N. and about 1 mi W. from, near center sec. 24, T. 49 N., R. 31 W., 6.6 mi generally W. along winding logging rd. from Peshekee River rd. at cor. secs. 22, 23, 26, and 27, T. 49 N., R. 30 W., 250 ft E. of John Benti logging camp, 15 ft N. and 2.6 ft higher than center of rd. at curve, in small shelf at SE. base of huge boulder; standard tablet stamped "6 RC 1951 1743"	1742.619 531.150m
13.3 Reference mark, about 270 ft W. of tablet 6 ft NE. of center of rd. at John Benti logging camp, on white boulder; chiseled square	1740.03 530.361m

Revised Description

Revised Description

LINE 1 (Cont'd)

MICHIGAMME - 322

FEET/METERS

- 15.1 Michigamme, 6.5 mi N., about 0.5 mi E. from, 150 ft N. of marked cedar tree designating quarter cor. between secs. 19 and 20, T. 49 N., R. 30 W., 4.7 mi generally W. along winding logging rd. from Peshekee River rd. at cor. secs. 22, 23, 26, and 27, T. 49 N., R. 30 W., 0.2 mi E. of stream outlet of Elinor Lake, 300 ft E. of logging camp, near crown of ridge at sharp curve, 10 ft S. and 2.8 ft higher than center of rd., in boulder; standard tablet stamped "7 RC 1951 1743" 1742.534  
531.124m
- 16.0 UE 7 B, T. 49 N., R. 30 W., near center sec. 20, at E. edge of logging camp, 23 ft N. of center of rd., 14 ft N. of gas pump, on SW. ledge of large boulder; chiseled square 1778.84  
542.190m
- 17.0 Michigamme, about 5.5 mi N. and 2 mi E. from, NE. cor. NW $\frac{1}{4}$  sec. 28, T. 49 N., R. 30 W., 2.8 mi generally W. along winding logging rd. from Peshekee River rd. at cor. secs. 22, 23, 26, and 27, T. 49 N., R. 30 W., 80 ft SW. of right angle turn in rd. from N. to E., 75 ft SW. of SW. end of wooden bridge at creek crossing, 15 ft W. of center of rd. N., in boulder; standard tablet stamped "8 RC 1951 1701" (Reported Destroyed 9-56) 1700.970  
518.457m
- 17.0 Reference mark, about 35 ft NE. of tablet, 36 ft S. of center of rd. E., on boulder; chiseled square 1696.30  
517.032m
- 19.0 Michigamme, 5 mi N. and 3 mi E. from SE $\frac{1}{4}$  SW $\frac{1}{4}$  sec. 27, T. 49 N., R. 30 W., 1.2 mi SW. of Peshekee River rd. at cor. secs. 22, 23, 26, and 27, T. 49 N., R. 30 W., 75 ft E. and 3.6 ft higher than center of winding rd. at dim trail E., 60 ft N. of small drain, 6 ft N. of dim trail, in top of boulder; standard tablet stamped "9 RC 1951 1674" 1673.656  
510.130m
- 19.0 Reference mark, 76 ft SW. of tablet, 22 ft W. of center of rd., on top of black boulder; chiseled square 1667.45  
508.239m
- 20.0 B.M., a standard disk stamped "N 155 1948", about 2.35 mi W. along U.S. Highway 41 from the station at Champion, thence 7.35 mi NW. along Huron Bay Grade, 0.1 mi S. of a dim side of rd. W., set in a shelf in the SW. face of a large and very prominent rock bluff, 45 ft NW. of a telephone pole, 22 ft NE. of center line of the rd. and about 4 ft above the level of the rd., this disk is not perfectly level. The rod was held on the highest point on the disk which is the letter 'ELEV.', standard disk stamped "N 155 1948" 1664.728  
507.409m

LINE 2

R.E. Cargy, 1951; Book CV-472

- 0.0 B.M., standard disk stamped "U 155 1948", about 2.35 mi W. along U.S. Highway 41 from the station at Champion thence 13.65 mi NW. along the Huron Bay Grade, 0.3 mi NW. of a 40 ft wooden bridge, set in the top of a rock outcrop, at the junction of a dim rd. N., 140 ft E. of the SE. end of a narrow cut thru solid rock, 60 ft NE. of the center line of the rd., 29 ft SE. of the center line of the side rd. and about 3 ft above the level of the rd., this disk is not perfectly horizontal, the rod was held on the highest point which is the letter 'U' in the stamped designation, N.G.S. standard disk stamped "U 155 1948" 1766.096  
538.307m
- 1.0 UE U 155 C, T. 49 N., R. 30 W., NE $\frac{1}{4}$  sec. 12, 20 ft S. of center of rd. at sharp curve from N. to W., on top of flat rock outcrop; chiseled square 1780.16  
542.593m
- 1.4 UE U 155 D, T. 49 N., R. 31 W., SE $\frac{1}{4}$  sec. 12, 425 ft SW. of SW. end of lake, 200 ft S. of trail forks S. and SE., 6 ft W. of center of trail, on boulder; chiseled square 1746.84  
532.437m

LINE 2 (Con'd)

MICHIGAMME QUAD. - 322    FEET/METERS

1.8 Michigamme, 8 mi N. and 0.8 mi W. from, near E. one-sixteenth cor. between secs. 12 and 13, T. 49 N., R. 31 W., 600 ft NE. of John Bentti's abandoned logging camp, 130 ft S. of hairpin curve, 100 ft S. of W. end of small bridge at creek crossing, 50 ft SE. of marked 10 in. birch tree designating  $\frac{1}{4}$  tals. W. to  $\frac{1}{4}$  cor. between secs. 12 and 13, 40 ft SE. and 7.8 ft higher than center of trail, in small shelf on W. side of rock ridge; standard tablet stamped "10 RC 1951 1789"

1789.017  
545.292m

LINE 3

R.E. Carey, 1951; Book CV-472

0.0 B.M., standard disk stamped "25 0 1934", 0.5 mi E. along the Duluth, South Shore & Atlantic RR. from station at Michigamme, on U.S. Highway 41, at a concrete culvert under the highway, in top of the S. headwall, 27.9 ft SW. of the centerline of the highway, 29.7 ft E. of a hill sign, and 62 ft NW. of a sidetrack, 300 ft SE. of Mount Shasta Lodge, a State Survey standard disk, set in the top of a concrete post, standard disk stamped "25 0 1934"

1558.852  
475.138m

1.0 UE 25 0-A, T. 48 N., R. 30 W., NE $\frac{1}{4}$  sec. 19, 150 ft N. of curve on W. side of trail, on top of large boulder; chiseled square

1625.71  
495.516m

1.1 UE 25 0-B, T. 48 N., R. 30 W., SE $\frac{1}{4}$  sec. 18, in center of trail forks, on top of boulder flush with center of trail; chiseled square

1664.21  
507.251m

2.0 UE 25 0-C, T. 48 N., R. 30 W., NE $\frac{1}{4}$  sec. 18, 40 ft SE. and 10 ft E. of log bridge at creek crossing, on top of boulder; chiseled square

1693.61  
516.212m

2.4 Michigamme, 2 mi N. and 0.2 mi E. from, 2.4 mi generally N. along trail from Mt. Shasta Lodge, SE $\frac{1}{4}$  sec. 7, T. 48 N., R. 30 W., 0.4 mi SE. by trail from SE. end of Thomas Lake, 20 ft E. and 5 ft higher than center of trail, at W. end of ridge in boulder; standard tablet stamped "11 RC 1951 1722"

1722.022  
524.872m

2.4 Reference mark, 57 ft SW. of tablet, 6 ft W. of center of trail, on top of large boulder; chiseled square

1718.94  
523.323m

4.4 Michigamme, 3.5 mi N. and 0.2 mi W. from, 4.4 mi NW. along trail from Mt. Shasta Lodge, 1.6 mi NW. along trail from SE. end of Thomas Lake, about 0.8 mi SE. of lake Keewaydin, NW $\frac{1}{4}$  NW $\frac{1}{4}$  sec. 6, T. 48 N., R. 30 W., 650 ft SE. of large clearing in swamp, 50 ft NE. of small drain between hills, 10 ft E. of trail, on SW. edge of ridge, in black boulder; standard tablet stamped "12 RC 1951 1735"

1735.375  
528.942m

4.4 Reference mark, 95 ft SE. of tablet, 10 ft E. of center of trail, on W. side of boulder; chiseled square

1731.18  
527.663m

6.2 UE 12 B, T. 49 N., R. 30 and 31 W., near N. one-sixteenth cor. between secs. 31 and 36, on N. shore of Lake Keewaydin opposite largest island, on top of boulder, 1.5 ft above water level 5-22-51; chiseled square

1724.00  
525.475m

6.7 Michigamme, 4.8 mi N. and 0.5 mi W. from, 1 mi S. along logging trail from crossing at W. Peshekee River, about 0.3 mi N. through timber from Lake Keewaydin, 650 ft E. of wooden post designating cor. secs. 25, 30, 31, and 36, T. 49 N., R. 30 and 31 W., 8 ft E. and 2.1 ft higher than center of trail, on N. slope of hill, in black boulder; standard tablet stamped "13 RC 1951 1725"

1725.343  
525.885m

LINE 4

R.E. Carey, 1951; Book CV-472

MICHIGAMME QUAD. - 322

FEET/METERS

- 0.0 B.M., standard disk stamped "V 155 1948", about 2.35 mi W. along U.S. Highway 41 from the station at Champion thence 14.4 mi NW. along Huron Grade, at the junction of a logging rd. leading W., 35 ft W. of the center line of the rd. N., 59 ft N. of the center line of the rd. W., 7 ft SW. of the extended center line of the main rd. SE, about 3 ft above the rd. and set in an outcropping of bed rock, a standard disk stamped "V 155 1948" 1775.544  
541.186m
- 2.0 Michigamme, about 11.2 mi N. and 1 mi W. from, 0.8 mi NW. along trail, thence 0.6 mi NE. through timber from crossing (locally known as Hay Press Crossing) over Peshekee River, near center sec. 25, T. 50 N., R. 31 W., on small top at E. end of high ridge, 470 ft SW. of center of swamp leading NW., 54 ft E. and 1 ft higher than small saddle, in black boulder; a standard tablet stamped "14 RC 1951 1868" 1868.212  
569.431m
- 3.5 UE 14 D, T. 50 N., R. 31 W., NE $\frac{1}{4}$  sec. 24, at N. edge of swamp leading NW. on top of large boulder in center of pass leading N. through rock cliff; chiseled square 1910.71  
582.384m
- 4.3 Michigamme, about 13 mi N. and 0.8 mi W. from 0.2 mi E. along creek and 0.8 mi S. through timber from large beaver dam on W. Branch Huron Creek, SE $\frac{1}{4}$  sec. 13, T. 50 N., R. 31 W., 150 ft S. of center of swamp leading NE.-SW. and 50 ft S. of top of S. bank, on NW. slope of hill, among group of blazed and painted trees, in black boulder; standard tablet stamped "15 RC 1951 1909" 1908.527  
581.719m
- 6.1 Michigamme, about 14 mi N. and 1.5 mi W. from, 1.5 mi SE. along trail from Sensenbrenner and Selden logging camp, 120 ft S. and 120 ft W. from marked tree designating cor. secs. 11, 12, 13 and 14, T. 50 N., R. 31 W., 125 ft SW. of yellow tag designating 30 paces E. to sec. cor., 70 ft SE. and 11.4 ft higher than center of sharp curve from E. to N., 25 ft E. of point of intersection of said curve, on slope of hill, in boulder; standard tablet stamped "16 RC 1951 1772" 1771.882  
540.070m
- 7.9 Michigamme, about 14 mi N. and 3 mi W. from, 0.2 mi S. and W. along rd. from Sensenbrenner and Seldon Logging Camp, SW. quarter sec. 10, T. 50 N., R. 31 W., 285 ft NW. of rd. forks W. and SW., 37 ft N. and 5.6 ft higher than center of rd., in black boulder; standard tablet stamped "17 RC 1951 1674" 1673.583  
510.108m
- SHANKEE QUAD. - 346
- 9.7 Michigamme, about 15 mi N. and 4 mi W. from 13 mi E. of L'anse, 410 ft N. and 200 ft W. from yellow tag designating 160 paces W. to quarter cor. between secs. 4 and 9, T. 50 N., R. 31 W., 130 ft N. and 220 ft W. from bridge over branch of Slate River, 220 ft W. of trail N. at sharp curve from S. to W., 18 ft S. and 5.7 ft higher than center of rd., in white boulder; standard tablet stamped "18 RC 1951 1456" 1456.307  
443.882m

LINE 5

R.E. Carey, 1951; Book CV-472

CHAMPION QUAD. - 331

- 2.1 B.M., a standard tablet stamped "19 RC 1951 1635" Reported Destroyed 10-29-54 1635.281  
498.434m
- SHANKEE QUAD. - 346
- 4.1 Michigamme, about 14 mi N. and 4 mi E. from, 1.9 mi generally W. along rd. from Ahonen Logging Camp, near center of sec. 11, T. 50 N., R. 30 W., 485 ft E. of T-rd. S. 50 ft S. of marked tree designating 800 paces S. to quarter cor. sec. 11, 31 ft S. of center line rd. on small knoll in boulder; standard tablet stamped "20 RC 1951 1533" 1532.431  
467.085m

LINE 5 (Cont'd)

SHANKEE QUAD. - 346      FEET/METERS

- 6.1 Michigamme, about 13.5 mi N. and 2.5 mi E. from, 4 mi SW. along rd. from Ahonen Logging camp and 1.2 mi SE. along rd. from Penagor Logging Camp, 240 ft NE. of rd. forks N.-NE. to said camps, 180 ft W. of 6 in. maple tree designating 2 tallies E. to cor. secs. 9, 10, 15, and 16, T. 50 N., R. 30 W., 42 ft NW. of center of rd., at S. side of hill, in top of rock ledge; standard tablet stamped "21 RC 1951 1802" 1802.324  
549.348m
- 8.3 Michigamme, about 14 mi N. and 1 mi E. from, 0.9 mi N. and W. along rds. from Penagor Logging Camp, near N. central one-sixteenth cor. sec. 8, T. 50 N., R. 30 W., 170 ft W. of rd. forks NW. and W., 15 ft N. of center of rd., in rock outcrop; standard tablet stamped "22 RC 1951 1761" 1760.949  
536.737m
- 10.4 Michigamme, 15 mi N. and 0.5 mi W. from, 1 mi N. and 16.5 mi E. from L'anse, NW. cor. sec. 6, T. 50 N., R. 30 W., 0.2 mi E. of Huron Creek, about 200 ft SE. of small creek crossing, 27 ft N. and 110 ft E. and 1.7 ft lower than trail forks NW. and SW., near S. bank of small creek, in flat rock outcrop; standard tablet stamped "23 RC 1951 1484" 1484.067  
452.344m

LINE 6

R.E. Carey, 1951; Book CV-472

CHAMPION QUAD. - 331

- 0.0 B.M., standard disk stamped "P 155 1948", about 2.35 mi W. along U.S. Highway 41 from the station at Champion, thence 8.75 mi NW. along Huron Bay Grade, 0.4 mi SE. of the junction of a rd. NE. to White Deer Lake, along a short NW-SE. tangent, 75 ft W. and across the rd. from a telephone pole, set in a shelf in the NE. face of a large and prominent rock outcrop; this is the only rock outcrop of any size in the vicinity, 18 ft SW. of the center line of the rd. and about 4 ft above the level of the rd., N.G. S. standard disk stamped "P 155 1948" 1672.776  
509.862m
- 0.5 UE P 155 A, T. 49 N., R. 30 W., SW $\frac{1}{4}$  sec. 15, center of bridge ove Peshekee River; copper nail and washer, Water level 11.2 ft lower 6-15-51 1674.8  
510.479m
- 2.0 Michigamme, 8.5 mi N. and 4 mi E. from, 1.6 mi NE. along private rd. to White Deer Lake from junction with Peshekee River rd. 1.8 mi SW. along rd. from McCormick Camp at White Deer Lake, near quarter cor. between secs. 10 and 11, T. 49 N., R. 30 W., 300 ft S. of S. end of long curve NE., 80 ft N. of top of hill at rd. angle, 12 ft W. and 4.7 ft higher than center of rd., in small shelf E. side of large boulder; standard tablet stamped "24 RC 1951 1803" 1804.754  
550.089m
- 2.0 Reference mark, 40 ft SE. of tablet, 16 ft E. of center of rd., on top of boulder at E. edge of shoulder; chiseled square 1801.22  
549.012m
- 2.5 UE 24 A, T. 49 N., R. 30 W., near W. one-sixteenth cor. between secs. 2 and 11, in line with W. edge of timber at E. edge of creek, 10 ft S. and 1.6 ft higher than center of rd., on top of boulder; chiseled square 1775.27  
541.102m
- 3.8 Michigamme, 9.5 mi N. and 5 mi E. from, 3.4 mi NE. along private rd. to White Deer Lake from junction with Peshekee River rd. at S. end of White Deer Lake, NW $\frac{1}{4}$  sec. 1, T. 49 N., R. 30 W., 35 ft S. and 9 ft W. from SW. cor. of E. wing of main building of McCormick Camp, 23 ft S. of center of rd., in concrete slab at NE. cor. of garage building; standard tablet stamped "25 RC 1951 1779" 1778.754  
542.164m
- 3.8 Reference mark, 78 ft NW. of tablet, 9 ft N. of center of rd. at SE. cor. of W. wing of main building, on small boulder; chiseled square 1779.53  
542.401m

LINE 6 (Cont'd)

CHAMPION QUAD. -331

FEET/METERS

- 4.7 UE 25 B, T. 50 N., R. 30 W., SE $\frac{1}{4}$  sec. 36, 575 ft W. of NE. end of White Deer Lake, on N. shore on S. point of rock bluff, 1.5 ft above water level 6-19-51; chiseled square 1732.96  
528.206m

LINE 7

R.E. Carey, 1951; Book CV-472

HERMAN QUAD. -333

- 8.9 Herman, 0.5 mi N. and 6 mi E. from, 31 ft SE. of Ford Motor Co. tag designating "quarter cor. between secs. 1 and 6, T. 49 N., R. 31 and 32 W. "500 ft NW. of creek crossing at hairpin curve from SW. to SE., 3 $\frac{1}{4}$  ft N. and 2 ft higher than center of rd. at center of curve, in flat rock outcrop about flush with ground; standard tablet stamped "32 RC 1951 1863" *Revised Description* 1863.097  
567.854m
- 11.2 Herman, 0.5 mi S. and 5 mi E. from, near quarter cor. between secs. 11 and 12, T. 49 N., R. 32 W., 0.5 mi N. along trail from Clear Lake, 170 ft N. of creek crossing, at S. edge of abandoned logging camp, 17 ft SE. of SE. cor. of southernmost building, 10 ft W. of center of trail, in top of boulder; standard tablet stamped "33 RC 1951 1830" 1830.238  
557.857m
- 11.7 UE 33 A, T. 49 N., R. 32 W., near cor. secs. 11, 12, 13, and 14, at N. end of Clear Lake, on E. end of rock bank, 2.2 ft above water level July 6, 1951; chiseled square 1797.86  
547.988m
- 12.6 Herman, 2 mi S. and 6 mi E. from, 5 mi N. and 1 mi E. from Nestoria, SE. cor. sec. 13, T. 49 N., R. 32 W., at S. end of Violet Lake (or Wagner Lake) between two bays, on S. end of peninsula 120 ft E. of W. bay, 55 ft W. and about 100 ft N. of S. end of E. bay, in high point of rock outcrop; standard tablet stamped "34 RC 1951 1818" 1817.472  
553.965m
- 12.6 Reference mark, 18 ft S. of tablet, 40 ft W. of SE. bay, on top of rock ledge; chiseled square 1811.70  
552.206m

LINE 8

R.E. Carey, 1951; Book CV-472

- 4.5 Nestoria, 2.5 mi S. and 0.5 mi E. from, NE $\frac{1}{4}$  sec. 25, T. 48 N., R. 32 W., 3.3 mi SE. along rd. from W. branch of Duluth, South Shore RR. crossing, 22 ft N. and 33 ft E. and 2.8 ft higher than center of rd at T-rd. S., in concrete post; standard tablet stamped "36 RC 1951 1768" 1768.226  
538.955m
- 6.9 Nestoria, 4 mi S. and 1.5 mi E. from 1.8 mi S. and 5.5 mi W. from Michigamme, 400 ft SW. of tag designating 2 chains N. to quarter cor. between secs. 31 and 32, T. 48 N., R. 31 W., 1.7 mi W. along rd. from Petticoat Lake, 25 ft N. and 24 ft E. and 0.7 ft higher than center of rd. at trail NW., in concrete post; standard tablet stamped "37 RC 1951 1745" 1745.219  
531.943m
- 9.0 Michigamme, 1.5 mi S. and 4 mi W. from, SW $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 33, T. 48 N., R. 31 W., 0.7 mi W. along rd. to fire tower from junction with Fence lake rd., 0.4 mi NE. along rd. from S. end of Petticoat Lake, 20 ft N. and 8 ft W. and 0.8 ft higher than center of rd. at trail N., in white boulder; standard tablet stamped "38 RC 1951 1712" 1711.669  
521.717m
- 10.9 Michigamme, 1 mi S. and 1.2 mi W. from, NE $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 27, T. 48 N., R. 31 W., 60 ft NE. and 2.4 ft higher than rd. forks N. and NE., 28 ft E. of center of rd. N., 19 ft W. of center of rd. NE., in concrete post; standard tablet stamped "39 RC 1951 1703" 1703.611  
519.261m

LINE 8 (Cont'd)

HERMAN QUAD. - 333

FEET/METERS

- 12.6 B.M., N.G.S. standard disk stamped "25 P 1934", in Baraga County, 1 mi W. along the Duluth, South Shore & Atlantic RR. from the station at Michigamme, 81.7 ft SW. of the SW. cor. of a flag station, 45 ft NE. of the NE. cor. of a sheet metal garage, at the SE quadrant of a rd. crossing, 28.5 ft S. of the track, 19 ft from the right-of-way fence, and 12.5 ft E. of a north- and-south fence, at Michigamme lumber company, 31 ft S. and 52 ft E. of R.R. crossing, a State Survey standard disk, set in the top of a concrete post, N.G.S. standard disk stamped "25 P 1934" 1602.703  
488.504m

LINE 9

W.L. Shappington, 1951; Book CV-486

- 0.7 UE 37 AA, Tps. 47 and 48 N., R. 31 W., near quarter cor. secs. 6 and 31, at a T-trail W.-SW., 15 ft W. of center of rd., in root on NE. side of 14 in. birch tree, 1 ft above ground; rail spike 1737.26  
529.517m

WITCH LAKE QUAD. - 309

- 2.1 Michigamme, 3 mi S. and 6.5 mi W. from, near cor. secs. 1, 6, 7, and 12, T. 47 N., Rs. 31 and 32 W., at SE. cor. of logging camp, 18 ft N. and 9 ft W. from center of rd. at T-rd. W., 100 ft N. of trail E.-SE., in concrete post; standard tablet stamped "TT 1 WRS 1951" 1848.736  
563.495m
- 2.1 Reference mark, 100 ft S. and 8 ft E. from tablet, 9 ft S. and 15 ft E. from T-rd. E.-SE., 82 ft S. of center of rd. W., in 24 in. maple tree, 18 in above ground; rail spike 1852.17  
564.541m

LINE 10

W.L. Shappington, 1951; Book CV-486

- 0.0 N.G.S. standard disk stamped "25 P 1934", (Described in Line 48) 1602.703  
488.504m
- 2.0 Michigamme, 1.5 mi S. and 1.2 mi W. from, near center NE $\frac{1}{4}$  sec. 35, T. 48 N., R. 31 W., 358 ft N. and 25 ft W. from center of T-rd. E., 72 ft N. of center of private rd. W., 22 ft W. of center of N.-S. rd. 1 ft E. of right-of-way fence, in concrete post; standard tablet stamped "TT 9 JNF 1951" 1691.861  
515.679m
- 2.0 Reference mark, 30 ft S. and 49 ft E. from tablet, 328 ft N. and 24 ft E. from T-rd. E., on small boulder; chiseled square 1690.81  
515.359m
- 4.4 Michigamme, 3.5 mi S. and 1 mi W. from NE $\frac{1}{4}$  sec. 11, T. 47 N., R. 31 W., at Luke and Carlsen old logging camp site, 0.7 mi S. along rd. from Spruce River, 225 ft S. of rd. fork S.-SW., 115 ft W. from SE. cor. of logging camp horse barn, 21 ft W. of center of rd., 6 ft W. of remains of loading rack, in concrete post; standard tablet stamped "TT 10 JNF 1951" 1698.906  
517.828m

LINE 11

D. E. King, 1982; Book CV-3660

MICHIGAMME QUAD. - 332

- 1 9 2.01 UE 31 B 1982, 2 mi (3.22 km) NE. along trail and road from BM 31 RG 1951, located at W. end of Dirkman Lake; near the quarter cor. between secs. 24 and 25, T. 50 N., R. 32 W., 72 ft (22 m) N. and 49 ft (15 m) W. of T-rd. SW., to Dirkman Lake, top of small knob encircled with white paint on SW. cor. of a 6 ft (1.8 m) by 3 ft (0.9 m) by 3 ft (0.9 m) embedded boulder, painted "UE on S. face of boulder" 1934.159  
589.533m

LINE 11 (Cont'd)

MICHIGAMME QUAD. 332

FEET

1 13	3.1 Reference mark No. 1, 95 ft (29 m) NE. of BM, 2 ft (0.6 m) W. of a footpath leading to the top of Mt. Curwood, near the S. end of a 5 ft (1.5 m) long and 1 ft (0.3 m) high embedded boulder, a chiseled square; painted red	1,977.694 602.802m
14	3.2 Reference mark No. 2, 8 ft (2.4 m) NE. of BM, between roots, near ground level, on E. side of a 1 ft (0.3 m) maple tree, a RR. spike	1,978.522 603.055m
15	3.2 Reference mark 3, 24 ft (7.3 m) W. of BM, near ground level, in NE. side of 1 ft (0.3 m) maple tree, a RR. spike	1,977.206 602.654m
16	3.2 BM, Herman, 2.0 mi (3.21 km) N. and 6 mi (9.65 km) E. of; T. 50 N., R. 32 W., in the SW $\frac{1}{4}$ of NW $\frac{1}{4}$ sec. 30; 426 ft (130 m) N. along road from a low spot, 250 ft (76.2 m) N. along road from road at a dim trail NE., 41 ft (12.5 m) S. of road at a bend to the E., and a footpath W. leading to the top of Mount Curwood, 182 ft (55.5 m) W. of N.-S. road, set flush with ground; a standard tablet fastened to copper-coated steel rod encased in a 1 ft (0.3 m) cylinder of concrete and stamped "MT CURWOOD 1982 1978"	1,978.284 602.982m