

CHEMICAL ANALYSES OF WISCONSIN CLAYS AND SHALES  
FROM PUBLICATIONS AND FILES OF THE WISCONSIN  
GEOLOGICAL AND NATURAL HISTORY SURVEY

Open-File Report 75-4

Key to Reference for Chemical Analyses of Wisconsin Clays and Shales

1. Steidtmann, Edward, 1924, Limestones and marls of Wisconsin. Wisconsin Geological and Natural History Survey Bull. No. 66, Econ. Series No. 22. 208 pp.
2. Ries, Heinrich, 1906, The clays of Wisconsin and their uses. With a report on molding sands by H. Ries and F. L. Gallup. Wisconsin Geological & Natural History Survey Bull. XV. 259 pp.
3. Buckley, Ernest Robertson, 1901, The clays and clay industries of Wisconsin. Wisconsin Geological and Natural History Survey Bull. 7. 304 pp.
4. Chamberlin, T. C., 1883, Geology of Wisconsin, Survey of 1873-1879, Volume I. 725 pp.
5. Chamberlin, T. C., 1878, Geology of Wisconsin, Survey of 1873-1877, Volume II. 768 pp.
6. Chamberlin, T. C., 1880, Geology of Wisconsin, Survey of 1873-1879, Volume III. 763 pp.

CHEMICAL ANALYSES OF WISCONSIN CLAYS AND SHALES  
FROM PUBLICATIONS AND FILES OF  
THE WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY

Compiled by

M.E. Ostrom  
1975-4

| LOCATION |      |    |     |     |     |     | REF    |            | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |      |      |     |                               |                   |                  |                  |                               |                               |              |               |       |                                                                 | REMARKS                                                   |                                                               |
|----------|------|----|-----|-----|-----|-----|--------|------------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|------|-----|-------------------------------|-------------------|------------------|------------------|-------------------------------|-------------------------------|--------------|---------------|-------|-----------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 1/4 | 1/4 | 1/4 | #      | Page       | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO  | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> | H <sub>2</sub> O <sub>3</sub> | P <sub>2</sub> O <sub>2</sub> | Loss<br>Ign. | Mois-<br>ture | Total | Nearest village, type<br>of deposit, thickness,<br>extent, etc. |                                                           |                                                               |
| Ad       | 2    | 15 | 7E  |     |     | NW  | 1      | 156        | 47.7              | 7.9                            | 3.4                            |                   |                   |     | 11.6 | 8.6  |     |                               |                   |                  |                  |                               |                               |              | 16.7          | 1.9   | 96.0                                                            | Friendship fairgrounds. Marley clay.                      |                                                               |
| Ad       | 6    | 17 | 6E  | C   | SW  | NE  | 1      | 156        | 53.1              | 17.5                           | 5.2                            |                   |                   |     | 7.3  | 6.4  |     |                               |                   |                  |                  |                               |                               |              | 11.2          | 3.0   | 100.7                                                           | Dry lake clay. Auger hole 1 mi. SE Brooks.                |                                                               |
| As       | 9    | 47 | 4W  |     |     |     | 1      | 157        | 58.1              | 25.3                           | 4.4                            |                   |                   |     | 2.4  | 1.9  |     |                               |                   |                  |                  |                               |                               |              |               | 4.1   | 96.4                                                            | Ashland. Glacial lake clay, lake shore to 530' elevation. |                                                               |
| As       | 9    | 47 | 4W  |     |     |     | 1      | 157        | 64.6              | 18.9                           | 4.1                            |                   |                   |     | 3.6  | 1.7  |     |                               |                   |                  |                  |                               |                               |              |               | 2.6   | 95.3                                                            | Same                                                      |                                                               |
| As       |      |    |     |     |     |     | 3      | 69         | 58.1              | 25.3                           | 4.4                            | 4.3               | 4.0               |     |      |      |     |                               |                   |                  |                  |                               |                               |              |               | 4.1   | 100.3                                                           | Lacustrine clay from near Ashland.                        |                                                               |
| As       |      |    |     |     |     |     | 3      | 69         | 58.1              | 25.3                           | 4.4                            |                   |                   |     | 2.4  | 1.9  |     |                               |                   |                  |                  | 4.0                           |                               |              |               | 4.0   | 100.3                                                           | Red marly clay from near Ashland.                         |                                                               |
| As       |      |    |     |     |     |     | 3      | 69         | 64.6              | 18.9                           | 4.1                            |                   |                   |     | 3.6  | 1.7  |     |                               |                   |                  |                  | 4.7                           |                               |              |               | 2.6   | 100.0                                                           | Same                                                      |                                                               |
| As       |      |    |     |     |     |     | 3      | 69         | 57.6              | 25.9                           | 4.1                            |                   |                   |     | 3.6  | 1.7  |     |                               |                   |                  |                  | 4.7                           |                               |              |               | 2.6   | 100.1                                                           | Siliceous red clay from near Ashland.                     |                                                               |
| As       | 22   | 46 | 4W  |     |     |     | 3      | 272        | 47.7              | 15.0                           | 6.0                            |                   |                   |     | 10.3 | 4.1  | 0.3 |                               | 0.7               | 2.2              | 0.6              |                               |                               |              | 13.2          |       | 100.0                                                           | Marengo. Edward Hartman. 8'/10' thick.                    |                                                               |
| As       |      |    |     |     |     |     | 6<br>4 | 213<br>306 | 58.1              | 25.3                           | 4.4                            | 4.3               | 4.0               |     |      |      |     |                               |                   |                  |                  |                               |                               |              | 4.1           |       | 100.3                                                           | Ashland. lake clay.                                       |                                                               |
| As       |      |    |     |     |     |     | 4      | 307        | 58.1              | 25.3                           | 4.4                            |                   |                   |     | 2.4  | 1.9  |     |                               |                   |                  |                  |                               |                               |              |               |       |                                                                 |                                                           | Red marly clay, Lake Superior.                                |
| As       |      |    |     |     |     |     | 4      | 307        | 64.6              | 18.9                           | 4.1                            |                   |                   |     | 2.6  | 1.7  |     |                               |                   |                  |                  |                               |                               |              |               |       |                                                                 |                                                           | Same                                                          |
| As       |      |    |     |     |     |     | 4      | 307        | 48.7              | 34.7                           | 4.4                            |                   |                   |     | 2.4  | 1.9  |     |                               |                   |                  |                  |                               |                               |              |               |       |                                                                 |                                                           | Red clay, Ashland.                                            |
| As       |      |    |     |     |     |     | 4      | 307        | 57.6              | 25.9                           | 4.1                            |                   |                   |     | 3.6  | 1.7  |     |                               |                   |                  |                  |                               |                               |              |               |       |                                                                 |                                                           | Siliceous red clay, Ashland.                                  |
| As       |      |    |     |     |     |     | 6      | 213        | 61.7              |                                | 7.2                            |                   |                   |     |      |      |     |                               |                   |                  |                  |                               |                               |              |               |       |                                                                 |                                                           | Ashland. From lake bluffs rear & shore end of R.R. pier.      |
| As       |      |    |     |     |     |     | 6      | 91         | 61.9              |                                | 7.2                            |                   |                   |     |      |      |     |                               |                   |                  |                  |                               |                               |              |               |       |                                                                 |                                                           | Vicinity of Ashland. Red marly clay soil.                     |
| Br       |      |    |     |     |     |     | 3      | 273        | 50.8              | 34.1                           | 1.1                            |                   |                   |     | 0.6  |      |     |                               | tr                | 0.2              |                  |                               |                               |              | 13.0          |       | 99.8                                                            |                                                           | Barron, undeveloped.                                          |
| Bn       | 22   | 22 | 20E |     | SW  | NE  | 1      | 157        | 32.3              | 12.8                           | 4.9                            |                   |                   |     | 13.4 | 10.9 |     |                               |                   |                  |                  |                               |                               |              | 21.9          | 2.9   | 96.2                                                            |                                                           | Pit in valley wall. 5'/10' overburden, 20' Maquoketa Shale.   |
| Bn       | 10   | 23 | 20E |     |     |     | 1      | 157        | 60.0              | 16.3                           | 7.1                            |                   |                   |     | 1.0  | 2.0  |     |                               | 1.0               | 4.2              | 0.6              |                               |                               |              |               | 8.2   | 100.4                                                           |                                                           | Green Bay. Finnegan's Brick Yard. 2' cover, 6'/16' lake clay. |
| Bn       |      | 23 | 20E |     |     |     | 2      | 94         | 43.6              | 12.0                           | 4.6                            |                   |                   |     | 13.0 | 4.2  |     |                               | 3.1               | 3.2              |                  |                               |                               |              | 16.7          |       | 100.5                                                           |                                                           | Blue clay from Roffers & Albers pit at Green Bay (S).         |
| Bn       |      | 23 | 20E |     |     |     | 2      | 94         | 44.9              | 12.7                           | 5.4                            |                   |                   |     | 12.1 | 4.9  |     |                               | 1.2               | 3.1              | 0.1              |                               |                               |              | 15.8          |       | 100.2                                                           |                                                           | Clay from Barkhausen Brick Co. located S. of Green Bay.       |

| LOCATION |      |    |     |    |    |    | REF   |      | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |      |      |     |                               |                   |                  |                  |  |  |      |      | REMARKS       |       |                                                                 |                                                                                                                                                                                                                     |
|----------|------|----|-----|----|----|----|-------|------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|------|-----|-------------------------------|-------------------|------------------|------------------|--|--|------|------|---------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 41 | 41 | 41 | #     | Page | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO  | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  | Loss | Ign. | Mois-<br>ture | Total | Nearest village, type<br>of deposit, thickness,<br>extent, etc. |                                                                                                                                                                                                                     |
| Bn       | 14   | 23 | 20E |    |    |    | 3     | 92   | 60.0              | 16.3                           | 7.1                            |                   |                   |     | 1.0  | 2.0  |     |                               | 1.0               | 4.2              | 0.6              |  |  |      |      | 8.2           |       | 100.4                                                           | Clay from Finnegan's Brick Yard-<br>red burning. Between Green Bay &<br>DePere. W side of Fox River, edge of<br>Clay from Finnegan's Green Bay<br>Brick Yard-white burning. Located<br>between Green Bay & De Pere. |
| Bn       | 14   | 23 | 20E |    |    |    | 3     | 92   | 43.4              | 10.8                           | 3.6                            |                   |                   |     | 13.7 | 5.9  |     |                               | 0.9               | 3.2              | 0.4              |  |  |      |      | 18.1          |       | 100.0                                                           |                                                                                                                                                                                                                     |
| Bn       | 3    | 24 | 20E |    |    |    | 3     | 271  | 69.3              | 12.9                           | 4.9                            |                   |                   |     | 1.0  | 1.4  |     |                               | 1.2               | 3.6              | 0.5              |  |  |      | 5.5  |               |       | 100.3                                                           | Duck Creek. The Duck Creek Brick<br>Co. 1'-6' gvl over 11' clay. Lake<br>clay.                                                                                                                                      |
| Bn       | 3    | 24 | 20E |    |    |    | 3     | 271  | 47.0              | 8.5                            | 3.2                            |                   |                   |     | 14.3 | 6.3  |     |                               | 1.0               | 2.7              | 0.4              |  |  |      | 16.6 |               |       | 99.9                                                            | Same                                                                                                                                                                                                                |
| Bn       | 30   | 24 | 21E |    |    |    | 3     | 271  | 48.4              | 12.5                           | 5.4                            |                   |                   |     | 10.9 | 4.8  | tr  |                               | 0.7               | 3.9              | 0.4              |  |  |      | 13.0 |               |       | 100.0                                                           | Green Bay. Green Bay Brick Co.<br>2' sand, over 7' red clay, over 4'<br>red & blue clay over 5' blue clay.                                                                                                          |
| Bn       | 30   | 24 | 21E |    |    |    | 3     | 272  | 44.2              | 10.8                           | 3.3                            |                   |                   |     | 14.1 | 5.9  |     |                               | 0.7               | 3.1              | 0.3              |  |  |      | 17.3 |               |       | 99.8                                                            | Same                                                                                                                                                                                                                |
| Bn       | 14   | 23 | 20E |    |    |    | 3     | 272  | 43.4              | 10.8                           | 3.6                            |                   |                   |     | 13.7 | 5.9  | tr  |                               | 0.9               | 3.2              | 0.4              |  |  |      | 18.1 |               |       | 100.0                                                           | Green Bay. The William Finnegan<br>Brick Co.                                                                                                                                                                        |
| Bn       | 14   | 23 | 20E |    |    |    | 3     | 272  | 60.0              | 16.3                           | 7.1                            |                   |                   |     | 1.0  | 2.0  |     |                               | 1.0               | 4.2              | 0.6              |  |  |      | 8.2  |               |       | 100.4                                                           | Same                                                                                                                                                                                                                |
| Bt       |      |    |     |    |    |    | Files |      | 58.5              | 15.0                           | 7.9                            |                   |                   |     | 5.3  | 3.4  |     |                               |                   |                  |                  |  |  |      | 7.9  |               |       |                                                                 | Near Grantsburg. Lake clay.                                                                                                                                                                                         |
| Bt       |      |    |     |    |    |    | Files |      | 64.8              | 15.5                           | 4.9                            |                   |                   |     | 4.2  | 4.0  |     |                               |                   |                  |                  |  |  |      | 6.0  |               |       |                                                                 | Same                                                                                                                                                                                                                |
| Ca       | 22   | 19 | 18E |    | NE | SE | 1     | 158  | 39.4              | 15.7                           | 4.6                            |                   |                   |     | 11.3 | 9.5  |     |                               |                   |                  |                  |  |  |      | 17.7 | 3.2           |       | 98.0                                                            | Maquoketa Shale pit 2 mi. N of<br>Stockbridge on lake. 33 1/2' / 58'<br>below top.                                                                                                                                  |
| Ca       | 22   | 19 | 18E |    | NE | SE | 1     | 158  | 31.9              | 14.6                           | 4.4                            |                   |                   |     | 14.2 | 11.4 |     |                               |                   |                  |                  |  |  |      | 21.8 | 2.8           |       | 98.3                                                            | Same, 11' / 22' below top.                                                                                                                                                                                          |
| Ca       | 22   | 19 | 18E |    | NE | SE | 1     | 158  | 26.1              | 11.5                           | 3.4                            |                   |                   |     | 17.5 | 13.3 |     |                               |                   |                  |                  |  |  |      | 26.2 | 2.5           |       | 98.0                                                            | Same, upper 11'.                                                                                                                                                                                                    |
| Ca       | 11   | 19 | 18E |    | SW | NE | 1     | 158  | 40.1              | 19.5                           | 5.9                            |                   |                   |     | 8.9  | 7.9  |     |                               |                   |                  |                  |  |  |      | 15.5 | 3.1           |       | 97.8                                                            | 42' Maquoketa Shale in pit 2 mi.<br>S. of High Cliff.                                                                                                                                                               |
| Ca       | 11   | 19 | 18E |    | SW | NE | 1     | 158  | 38.0              | 13.5                           | 4.9                            |                   |                   |     | 10.2 | 10.2 |     |                               |                   |                  |                  |  |  |      | 17.2 | 2.8           |       | 94.0                                                            | Same, ground sample.                                                                                                                                                                                                |
| Ch       | 8    | 28 | 8W  |    |    |    | 3     | 270  | 71.8              | 13.7                           | 3.6                            |                   |                   |     | 1.2  | 1.2  | tr  |                               | 1.2               | 2.3              | 0.5              |  |  |      | 5.0  |               |       | 100.5                                                           | Chippewa Falls. J.B. Theriault<br>pit. 4' to 8' thick. Glacial clay.                                                                                                                                                |
| Ch       | 8    | 28 | 8W  |    |    |    | 3     | 271  | 74.4              | 11.8                           | 4.4                            |                   |                   |     | 1.1  | 0.7  | tr  |                               | 1.2               | 2.1              | 0.5              |  |  |      | 3.5  |               |       | 99.7                                                            | Same.                                                                                                                                                                                                               |
| Co       | 32   | 13 | 9E  |    |    |    | 3     | 273  | 43.4              | 6.8                            | 1.3                            |                   |                   |     | 15.5 | 9.6  |     |                               | 1.0               | 1.6              | 0.2              |  |  |      | 20.8 |               |       | 100.2                                                           | Portage. A.P. Drinker. W. part<br>of city. 21' thick.                                                                                                                                                               |
| Co       | 32   | 13 | 9E  |    |    |    | 3     | 273  | 38.1              | 8.7                            | 1.2                            |                   |                   |     | 16.3 | 10.0 |     |                               | 0.7               | 1.6              | 0.3              |  |  |      | 23.1 |               |       | 99.8                                                            | Same.                                                                                                                                                                                                               |
| Dn       | 26   | 7  | 9E  |    |    |    | 3     | 149  | 75.8              | 11.1                           | 3.5                            | 2.5               | 0.2               | 0.3 | 0.4  |      |     |                               | 1.4               | 1.7              |                  |  |  |      | 2.2  | 1.5           |       |                                                                 | 4' surface blue clay from<br>Stephens Brick Plant 3 mi. W. of<br>Madison on C.M&StP R.R. 4' blue<br>clay, 4' sand, 13' pink clay, 7' blue<br>clay                                                                   |
| Dn       |      |    |     |    |    |    | 5     | 236  | 75.8              | 11.1                           | 3.5                            | 2.5               | 0.2               | 0.3 | 0.4  |      |     |                               | 1.4               | 1.7              |                  |  |  |      | 2.2  | 1.5           | 99.6  | Madison clay.                                                   |                                                                                                                                                                                                                     |

| LOCATION |      |    |     |               |               |               | REF   |      | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |      |      |     |                               |                   |                  |                  |  |  |  |              |               | REMARKS |                                                                                |                                                                                             |
|----------|------|----|-----|---------------|---------------|---------------|-------|------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|------|-----|-------------------------------|-------------------|------------------|------------------|--|--|--|--------------|---------------|---------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | #     | Page | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO  | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  |  | Loss<br>Ign. | Mois-<br>ture | Total   | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                |                                                                                             |
| Dn       | 17   | 7  | 9E  |               |               | SE            | 5     | 623  | 75.8              | 11.1                           | 3.5                            |                   |                   | 0.3 | 1.8  | 0.1  |     |                               | 0.4               | 1.1              |                  |  |  |  |              | 1.5           | 2.2     | 99.6                                                                           | 1 mi. W. of Univ. of Wis. campus<br>pit in valley of Mil. St.P.R.R.                         |
| Dg       | 1    | 9  | 16E | NE            | NE            | NE            | 1     | 159  | 28.0              | 10.3                           | 5.5                            |                   |                   |     | 17.2 | 12.2 |     |                               |                   |                  |                  |  |  |  |              | 27.4          | 2.2     | 100.4                                                                          | 10' Maquoketa Shale. Stream cut<br>450' paces S. & 100 paces W.<br>NE c.                    |
| Dg       | 6    | 9  | 17E |               | C             | NW            | 1     | 159  | 28.7              | 7.7                            | 3.5                            |                   |                   |     | 17.6 | 12.3 |     |                               |                   |                  |                  |  |  |  |              | 27.1          | 2.0     | 96.8                                                                           | 3' Maquoketa Shale. Bore hole<br>150 paces S. & 100 paces E. of<br>E. $\frac{1}{4}$ center. |
| Dg       | 14   | 12 | 15E |               |               |               | 1     | 160  | 55.8              | 15.7                           | 4.0                            |                   |                   |     | 6.9  | 5.0  |     |                               |                   |                  |                  |  |  |  |              | 11.0          | 2.8     | 98.4                                                                           | Marsh clay from depth $4\frac{1}{2}'/14\frac{1}{2}'$ ,<br>bore hole 550 paces W. of sec.C.  |
| Dg       | 14   | 12 | 15E |               |               |               | 1     | 160  | 56.1              | 15.5                           | 3.4                            |                   |                   |     | 8.4  | 4.6  |     |                               |                   |                  |                  |  |  |  |              | 11.3          | 3.0     | 99.5                                                                           | Marsh clay from depth $4'/14'$ ,<br>bore hole 360 paces W. of sec.C.                        |
| Dg       | 12   | 13 | 15E |               |               |               | 1     | 160  | 45.7              | 15.3                           | 5.1                            |                   |                   |     | 9.0  | 7.3  |     |                               |                   |                  |                  |  |  |  |              | 14.4          | 3.2     | 96.8                                                                           | Marsh clay from depth $5'/15'$ ,<br>0.4 mi. S. of NW sec.cor.                               |
| Dg       |      | 11 | 16E |               |               |               | 2     | 144  | 30.9              | 8.0                            | 9.1                            |                   |                   |     | 17.3 | 4.8  |     |                               | 0.4               | 3.8              | 0.1              |  |  |  | 25.3         |               | 99.6    | Near Iron Ridge (Upper 6' of<br>Maquoketa Shale beneath Neds<br>Iron Ore.)     |                                                                                             |
| Dg       | 5    | 11 | 14E |               |               |               | 3     | 270  | 49.3              | 9.3                            | 3.4                            |                   |                   |     | 11.9 | 7.5  | tr  |                               | 0.8               | 1.5              | 0.3              |  |  |  | 16.3         |               | 100.2   | Beaver Dam. Beaver Dam Brick<br>Works. 7' blue clay at surface.                |                                                                                             |
| Dg       | 31   | 12 | 16E |               |               |               | 3     | 272  | 36.7              | 8.4                            | 3.2                            |                   |                   |     | 16.7 | 9.9  |     |                               | 0.6               | 2.6              | 0.4              |  |  |  | 21.4         |               | 99.9    | Horicon. J.M. Pluck.                                                           |                                                                                             |
| Dg       | 31   | 12 | 16E |               |               |               | 3     | 272  | 74.1              | 11.8                           | 4.5                            |                   |                   |     | 1.0  | 0.9  |     |                               | 0.4               | 2.6              | 0.6              |  |  |  | 4.6          |               | 100.4   | Horicon. J.M. Pluck                                                            |                                                                                             |
| Dg       |      |    |     |               |               |               | Files |      | 56.0              | 10.0                           |                                |                   |                   | 2.7 | 9.9  | 7.1  |     |                               |                   |                  |                  |  |  |  |              | 14.3          |         |                                                                                | Ruedebusch clay, Mayville Brick<br>Co.                                                      |
| Dg       |      |    |     |               |               |               | Files |      | 66.5              | 11.8                           |                                |                   |                   | 3.2 | 4.4  | 2.2  |     |                               |                   |                  |                  |  |  |  |              | 12.0          |         |                                                                                | Mayville Clay (#1).                                                                         |
| Dg       |      |    |     |               |               |               | Files |      | 65.5              | 14.2                           |                                |                   |                   | 3.4 | 3.0  | 5.0  |     |                               |                   |                  |                  |  |  |  |              | 8.0           |         |                                                                                | Mayville Clay (#1).                                                                         |
| Dg       |      |    |     |               |               |               | Files |      | 68.4              | 14.2                           |                                |                   |                   | 3.1 | 2.6  | 2.8  |     |                               |                   |                  |                  |  |  |  |              | 9.0           |         |                                                                                | Mayville Clay, Ore bed, upper.                                                              |
| Dg       |      |    |     |               |               |               | Files |      | 66.8              | 14.6                           |                                |                   |                   | 3.1 | 3.6  | 2.8  |     |                               |                   |                  |                  |  |  |  |              | 9.3           |         |                                                                                | Same, middle.                                                                               |
| Dg       |      |    |     |               |               |               | Files |      | 40.4              | 11.1                           |                                |                   |                   | 4.1 | 12.5 | 9.3  |     |                               |                   |                  |                  |  |  |  |              | 22.7          |         |                                                                                | Same, lower.                                                                                |
| Dg       |      |    |     |               |               |               | Files |      | 21.5              | 9.9                            |                                |                   |                   | 5.4 | 18.8 | 13.9 |     |                               |                   |                  |                  |  |  |  |              | 30.5          |         |                                                                                | Clay from Northwestern Iron Co.'s<br>mine at Mayville (?) Maq. Shale.                       |
| Dg       |      |    |     |               |               |               | Files |      | 30.6              | 14.4                           |                                |                   |                   | 7.7 | 12.9 | 10.6 |     |                               |                   |                  |                  |  |  |  |              | 23.9          |         |                                                                                | Same.                                                                                       |
| Ds       |      | 47 | 14W |               |               |               | 2     | 103  | 44.4              | 9.8                            | 3.3                            |                   |                   |     | 14.5 | 6.4  |     |                               | 1.3               | 1.1              | tr               |  |  |  | 18.7         |               | 99.5    | Outcrop 2 mi. N. of Dedham which<br>is 10 mi. SW Superior on Namadje<br>River. |                                                                                             |
| Ds       |      | 49 | 13W |               |               |               | 2     | 167  | 54.4              | 13.4                           | 8.0                            |                   |                   |     | 3.5  | 1.2  |     |                               | 1.5               | 2.2              | 0.1              |  |  |  | 16.2         |               | 100.4   | New Superior. Red clay with<br>lime pebbles.                                   |                                                                                             |
| Ds       |      | 48 | 15W |               |               |               | 3     | 241  | 58.2              | 18.8                           | 7.9                            |                   |                   |     | 0.6  | 3.9  | tr  |                               | 0.1               | 3.8              | 0.6              |  |  |  |              | 6.2           | 100.0   | At Fond du Lac. $8'/10'$ thick<br>laminated shale.                             |                                                                                             |

| LOCATION |      |    |     |    |    |    | REF   |      | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |     |     |     |                               |                   |                  |                  |  |  |  |      |      |               | REMARKS                                                                                 |                                                                 |
|----------|------|----|-----|----|----|----|-------|------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|-----|-----|-----|-------------------------------|-------------------|------------------|------------------|--|--|--|------|------|---------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 41 | 41 | 41 | #     | Page | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO | MgO | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  |  | Loss | Ign. | Mois-<br>ture | Total                                                                                   | Nearest village, type<br>of deposit, thickness,<br>extent, etc. |
| Ds       |      |    |     |    |    |    | 3     | 274  | 58.2              | 18.8                           | 7.9                            |                   |                   |     | 0.6 | 3.9 | tr  |                               | 0.1               | 3.8              | 0.8              |  |  |  | 8.2  |      | 100.0         | Superior. Undeveloped.                                                                  |                                                                 |
| Du       |      | 28 | 13W |    |    |    | 2     | 161  | 59.3              | 15.1                           | 10.8                           |                   |                   |     | 3.0 | 0.1 |     |                               | 1.6               | 2.0              | 0.1              |  |  |  | 8.2  |      | 100.3         | Near Tramway from 16' bank. 4'<br>sand over 11' clay.                                   |                                                                 |
| Du       |      | 28 | 13W |    |    |    | 2     | 162  | 65.5              | 11.4                           | 6.4                            |                   |                   |     | 2.1 | 1.6 |     |                               | 1.0               | 3.5              | 0.1              |  |  |  | 8.3  |      | 99.8          | Near Menomonie. Wis. Pressed Briol<br>Co. 5' overburden & 50' clay.                     |                                                                 |
| Du       |      | 28 | 13W |    |    |    | 2     | 162  | 60.2              | 14.5                           | 8.7                            |                   |                   |     | 2.8 | 2.4 |     |                               | 0.5               | 4.5              | tr               |  |  |  | 6.7  |      | 100.5         | Near Menominee. Excelsior Brick<br>Co., lower blue clay. 5' over-<br>burden & 50' clay. |                                                                 |
| Du       | 18   | 28 | 13W |    |    |    | 3     | 271  | 64.4              | 13.9                           | 5.0                            |                   |                   |     | 2.8 | 2.2 | tr  |                               | 1.5               | 2.9              | 0.4              |  |  |  | 7.4  |      | 100.4         | Tramway. E. Tramway Brick Co.<br>4' sand over 22' clay. Glacial<br>clay.                |                                                                 |
| Du       | 18   | 28 | 13W |    |    |    | 3     | 271  | 60.3              | 14.0                           | 6.8                            |                   |                   |     | 2.8 | 2.7 | tr  |                               | 1.5               | 3.6              | 0.6              |  |  |  | 7.7  |      | 100.0         | Same                                                                                    |                                                                 |
| Du       | 18   | 28 | 13W |    |    |    | 3     | 271  | 58.9              | 12.4                           | 9.2                            |                   |                   |     | 2.9 | 3.2 | 0.2 |                               | 1.0               | 3.3              | 0.6              |  |  |  | 8.7  |      | 100.4         | Same                                                                                    |                                                                 |
| Du       | 18   | 28 | 13W |    |    |    | 3     | 271  | 61.0              | 15.6                           | 5.1                            |                   |                   |     | 3.2 | 2.5 | tr  |                               | 1.3               | 3.3              | 0.5              |  |  |  | 7.6  |      | 100.2         | Same                                                                                    |                                                                 |
| Du       | 27   | 28 | 13W |    |    |    | 3     | 272  | 65.4              | 13.5                           | 5.4                            |                   |                   |     | 3.0 | 2.2 | tr  |                               | 1.5               | 3.4              | 0.6              |  |  |  | 4.7  |      | 99.8          | Menomonie. Wis. Red Pressed<br>Brick Co. 8' gravel over 36'<br>clay.                    |                                                                 |
| Du       | 27   | 28 | 13W |    |    |    | 3     | 272  | 64.5              | 13.1                           | 5.8                            |                   |                   |     | 2.7 | 1.9 | tr  |                               | 1.2               | 4.1              | 0.5              |  |  |  | 6.2  |      | 100.0         | Same                                                                                    |                                                                 |
| Du       | 27   | 28 | 13W |    |    |    | 3     | 273  | 63.4              | 14.0                           | 6.4                            |                   |                   |     | 2.6 | 2.2 | tr  |                               | 1.0               | 3.5              | 0.5              |  |  |  | 6.8  |      | 100.4         | Same                                                                                    |                                                                 |
| Du       |      |    |     |    |    |    | Files |      | 65.4              | 13.5                           | 5.4                            |                   |                   |     | 3.0 | 2.2 |     |                               |                   |                  |                  |  |  |  | 4.7  |      |               |                                                                                         | Menomonie. Lake clay.                                           |
| Du       |      |    |     |    |    |    | Files |      | 64.5              | 13.1                           | 5.8                            |                   |                   |     | 2.3 | 1.9 |     |                               |                   |                  |                  |  |  |  | 6.2  |      |               |                                                                                         | Same                                                            |
| Du       |      |    |     |    |    |    | Files |      | 63.4              | 14.0                           | 6.4                            |                   |                   |     | 2.6 | 2.2 |     |                               |                   |                  |                  |  |  |  | 6.8  |      |               |                                                                                         | Same                                                            |
| EC       | 21   | 27 | 8W  |    |    | NE | 2     | 127  | 46.1              | 34.3                           | 3.3                            |                   |                   |     | 0.5 | 0.2 |     |                               | 0.6               | 3.3              | 0.1              |  |  |  | 11.8 |      | 100.0         | 6 mi. E. Eau Claire. Whitish<br>clay beneath sandstone.                                 |                                                                 |
| EC       |      |    |     |    |    |    | 3     | 271  | 75.7              | 12.2                           | 2.6                            |                   |                   |     | 0.8 | 0.7 | 0   |                               | 1.5               | 3.1              | 0                |  |  |  | 3.8  |      | 100.3         | Eau Claire. Geo. T. Thompson,<br>Undeveloped.                                           |                                                                 |
| EC       |      |    |     |    |    |    | 3     | 271  | 49.9              | 27.1                           | 4.4                            |                   |                   |     | 0.5 | 2.1 | 0.3 |                               | 0.5               | 5.3              | 0                |  |  |  | 9.4  |      | 99.8          | Same                                                                                    |                                                                 |
| EC       |      |    |     |    |    |    | 3     | 271  | 57.3              | 21.6                           | 5.6                            |                   |                   |     | 0.9 | 2.7 | 0.2 |                               | 0.6               | 6.1              | 0                |  |  |  | 5.2  |      | 100.2         | Same                                                                                    |                                                                 |
| EC       |      |    |     |    |    |    | 3     | 271  | 51.5              | 20.5                           | 8.1                            |                   |                   |     | 0.9 | 4.0 | tr  |                               | 0.7               | 6.9              | 0.3              |  |  |  | 7.2  |      | 100.0         | Eau Claire. Geo. T. Thompson,<br>Undeveloped.                                           |                                                                 |
| EC       |      |    |     |    |    |    | 3     | 271  | 47.0              | 35.3                           | 3.0                            |                   |                   |     | 0   | 0.3 |     |                               | 0.3               | 0.6              | 0.3              |  |  |  | 3.1  |      | 99.9          | Same                                                                                    |                                                                 |
| Fe       | 35   | 40 | 18E |    |    |    | Files |      | 64.6              | 29.8                           | 1.0                            |                   |                   |     | 0.2 | 0.1 |     |                               | - 0.4 -           |                  |                  |  |  |  | 4.7  |      |               |                                                                                         | Commonwealth fire clay.<br>F. L. Coventry.                      |

| LOCATION |      |    |     |     |     | REF |       | CHEMICAL ANALYSIS |      |       |       |       |       |     |      |      |     |      |      |      |      |  |  |  |        | REMARKS |       |       |       |                                                                               |
|----------|------|----|-----|-----|-----|-----|-------|-------------------|------|-------|-------|-------|-------|-----|------|------|-----|------|------|------|------|--|--|--|--------|---------|-------|-------|-------|-------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 1/4 | 1/4 | 1/4 | #     | Page              | SiO2 | Al2O3 | Fe2O3 | CaCO3 | MgCO3 | FeO | CaO  | MgO  | MnO | P2O5 | Na2O | K2O  | TiO2 |  |  |  | Loss   | Ign.    | Mois- | ture  | Total | Nearest village, type of deposit, thickness, extent, etc.                     |
| Fe       | 35   | 40 | 18E |     |     |     | Files |                   | 74.0 | 25.7  |       |       |       |     |      |      |     |      |      |      |      |  |  |  |        |         |       |       |       | Commonwealth fire clay. F.J. Asncom.                                          |
| Fe       | 35   | 40 | 18E |     |     |     | Files |                   | 60.0 | 29.1  | 0.9   |       |       |     | 0.2  | 0.1  |     |      |      |      |      |  |  |  |        | 9.9     |       |       |       | Commonwealth fire clay. Union Rolling Mill Co., Cleveland.                    |
| Fe       | 35   | 40 | 18E |     |     |     | Files |                   | 62.0 | 27.9  | 0.8   |       |       |     | 0.1  | 0.1  |     |      |      |      |      |  |  |  |        | 9.1     |       |       |       | Same                                                                          |
| FL       | 30   | 15 | 17E |     |     |     | 1     | 161               | 44.8 | 16.4  | 6.1   |       |       |     | 9.2  | 7.7  |     |      |      |      |      |  |  |  |        | 13.6    | 4.2   | 98.8  |       | Dry lake clay from depth 1'/10', 15 paces S. of NW sec. cor.                  |
| FL       | 31   | 15 | 17E |     |     |     | 1     | 161               | 62.7 | 19.2  | 5.5   |       |       |     | 3.5  | 3.2  |     |      |      |      |      |  |  |  |        | 6.4     | 4.4   | 100.5 |       | Dry lake clay from depth 1'/3', 100 yds N. of sec. C.                         |
| FL       | 31   | 15 | 17E |     |     |     | 1     | 161               | 45.7 | 23.0  | 5.0   |       |       |     | 8.7  | 6.3  |     |      |      |      |      |  |  |  |        | 12.2    | 3.8   | 100.5 |       | Wet lake clay from depth 3'/14', 100 yds. N. of sec. C.                       |
| FL       | 8    | 15 | 17E |     |     | SE  | 1     | 161               | 42.6 | 12.0  | 4.9   |       |       |     | 12.5 | 7.9  |     |      |      |      |      |  |  |  |        | 17.2    | 2.8   | 97.1  |       | Dry lake clay from depth 1 1/2'/8 1/2'.                                       |
| FL       | 14   | 14 | 16E |     | SE  | SW  | 1     | 161               | 46.1 | 13.9  | 4.2   |       |       |     | 8.3  | 8.3  |     |      |      |      |      |  |  |  |        | 13.6    | 3.3   | 94.3  |       | Maquoketa Shale from Oakfield Brick & Tile Co. pit.                           |
| FL       | 13   | 14 | 16E |     |     |     | 3     | 273               | 35.9 | 11.8  | 4.1   |       |       |     | 12.4 | 9.9  | 0.1 |      | 1.2  | 2.5  | 0.3  |  |  |  |        | 22.1    |       | 100.3 |       | Oakfield. Frenzel Bros. 1 mi. N. of town in Maquoketa Shale.                  |
| FL       | 13   | 14 | 16E |     |     |     | 3     | 273               | 31.7 | 9.2   | 3.8   |       |       |     | 15.4 | 10.9 | 0.3 |      | 0.7  | 2.7  | 0.3  |  |  |  |        | 25.2    |       | 100.0 |       | Same.                                                                         |
| Gr       | 34   | 3  | 3W  |     |     |     | 1     | 162               | 48.9 | 12.0  | 14.5  |       |       |     | 4.8  | 1.5  |     |      |      | 6.4  |      |  |  |  |        | 11.2    |       | 100.6 |       | Decorah Fm. 12*/20' below top of exposure at Potosi Station                   |
| Gr       | 33   | 3  | 4W  |     |     |     | 1     | 162               | 49.1 | 8.5   | 17.2  |       |       |     | 6.2  | 1.4  |     |      |      | 3.6  |      |  |  |  |        | 12.6    |       | 100.2 |       | Decorah Fm. 12'/17 1/2' below top of exposure near McCartney.                 |
| Gr       |      | 3  | 1W  |     |     |     | 2     | 174               | 59.8 | 18.1  | 2.3   |       |       |     | 1.8  | 0.7  |     |      | 0.7  | 10.3 | 0.1  |  |  |  |        | 6.6     |       | 100.6 |       | Near Plattville. Clay underlying the Oil Rock of the Capitola Mine. 3' thick. |
| Gr       |      | 3  | 1W  |     |     |     | 2     | 174               | 60.4 | 18.2  | 4.1   |       |       |     | 0.4  | 0.1  |     |      | 1.4  | 9.8  | 0.1  |  |  |  |        | 6.0     |       | 100.4 |       | Same.                                                                         |
| Gr       | 15   | 3  | 1W  |     |     |     | 3     | 273               | 70.5 | 13.3  | 4.2   |       |       |     | 0.8  | 1.1  | tr  |      | 1.2  | 1.8  | 0.5  |  |  |  |        | 7.0     |       | 100.4 |       | Platteville. John Grindell. 5'/10' thick.                                     |
| Gr       | 15   | 3  | 1W  |     |     |     | 3     | 273               | 70.8 | 12.9  | 4.5   |       |       |     | 1.0  | 0.9  | tr  |      | 1.5  | 2.3  | 0.5  |  |  |  |        | 5.9     |       | 100.2 |       | Same.                                                                         |
| Gr       |      |    |     |     |     |     | 4     | 306               |      |       |       |       |       |     |      |      |     |      |      |      |      |  |  |  | C 43.6 |         | 0.3   |       |       | Near Shullsburg.                                                              |
| Gr       | 22   | 4  | 4W  |     |     | NW  | 5     | 673               | 17.0 | 3.6   | 1.5   | 42.1  | 34.6  |     |      |      |     |      |      |      |      |  |  |  |        | 1.3     |       | 100.1 |       | Calcareous shales (L. Maq.) from Grant County.                                |
| Ir       | 6    | 45 | 2E  |     |     | NW  | 1     | 162               | 53.4 | 19.6  | 11.4  |       |       | 5.4 | 0.4  | 1.6  |     |      | 2.6  | 1.7  |      |  |  |  |        |         | 4.1   | 100.2 |       | Tyler Slate.                                                                  |
| Ir       | 1    | 45 | 1E  |     |     | NE  | 1     | 162               | 52.6 | 20.8  | 12.2  |       |       | 4.1 | 0.3  | 1.3  |     |      | 0.4  | 4.9  |      |  |  |  |        |         | 3.4   | 99.9  |       | Tyler Slate.                                                                  |
| Ja       | 21   | 22 | 3W  |     |     |     | 1     | 163               | 70.3 | 18.1  | 1.7   |       |       |     |      | 0.9  |     |      | 0.8  | 2.9  |      |  |  |  |        |         | 5.3   | 99.9  |       | Altered Precambrian Schist. Halcyon Pressed Brick Works, NE Black River Falls |

| LOCATION |      |    |    |    |    |    | REF |      | CHEMICAL ANALYSIS |       |       |       |       |     |      |     |     |      |      |     |      |  |  |       |      |      |               |                                 | REMARKS                                                                              |
|----------|------|----|----|----|----|----|-----|------|-------------------|-------|-------|-------|-------|-----|------|-----|-----|------|------|-----|------|--|--|-------|------|------|---------------|---------------------------------|--------------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R. | 41 | 41 | 41 | #   | Page | SiO2              | Al2O3 | Fe2O3 | CaCO3 | MgCO3 | FeO | CaO  | MgO | MnO | P2O5 | Na2O | K2O | TiO2 |  |  | P 2 0 | Loss | Ign. | Mois-<br>ture | Total                           | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                      |
| Ja       | 21   | 22 | 3W |    |    |    | 1   | 163  | 72.3              | 16.1  | 0.4   |       |       |     | 0.3  | 1.5 |     |      | 0.4  | 5.2 |      |  |  |       |      |      | 3.7           | 99.8                            | Altered Precambrian Schist.<br>Halcyon Pressed Brick Works, NE<br>Black River Falls. |
| Ja       | 21   | 22 | 3W |    |    |    | 1   | 163  | 55.9              | 19.6  | 9.2   |       |       |     | 1.1  | 3.7 |     |      | 0.3  | 3.9 |      |  |  |       |      |      | 6.2           | 99.9                            | Same as above. Altered Schist.                                                       |
| Ja       | 21   | 22 | 3W |    |    |    | 1   | 163  | 65.5              | 16.3  | 4.0   |       |       |     | 1.7  | 3.1 |     |      | 0.3  | 3.9 |      |  |  |       |      |      | 4.4           | 99.9                            | Same as above. Altered Schist.                                                       |
| Ja       | 21   | 22 | 3W |    |    |    | 1   | 163  | 68.0              | 17.3  | 2.3   |       |       |     | 0.7  | 2.1 |     |      | 0.4  | 5.8 |      |  |  |       |      |      | 3.9           | 100.3                           | Same as above. Altered Schist.                                                       |
| Ja       | 21   | 22 | 3W |    |    |    | 1   | 163  | 60.4              | 19.7  | 6.2   |       |       |     | 0.4  | 2.2 |     |      | 4.0  | 1.9 | 0.1  |  |  |       |      |      | 5.6           | 100.6                           | Same as above. Altered Schist.                                                       |
| Ja       | 21   | 22 | 3W |    |    |    | 1   | 163  | 59.9              | 18.1  | 10.0  |       |       |     | 0.3  | 3.1 |     |      | 0.5  | 3.7 |      |  |  |       |      |      | 4.4           | 100.1                           | Altered Precambrian Schist<br>exposed in Halls Creek near<br>Halcyon Brick Plant.    |
| Ja       | 21   | 22 | 3W |    |    |    | 1   | 163  | 50.2              | 17.9  | 12.3  |       |       |     | 0.6  | 6.9 |     |      | 0.6  | 3.1 |      |  |  |       |      |      | 7.2           | 99.9                            | Same as above. Altered Schist.                                                       |
| Ja       | 25   | 23 | 4W |    | NW | NW | 1   | 163  | 63.2              | 18.0  | 4.6   |       |       |     | 0.2  | 1.1 |     |      | 9.1  | 0.6 | 0.1  |  |  |       | 3.6  |      |               | 100.5                           | Eau Claire Shale, near Merrillan.                                                    |
| Ja       | 25   | 23 | 4W |    | NW | NW | 1   | 163  | 40.1              | 11.9  | 4.0   |       |       |     | 10.3 | 7.2 |     |      | 0.9  | 2.7 | 0.8  |  |  |       |      |      | 18.0          | 99.8                            | Eau Claire Fm(?) from Robert<br>Dunlap farm near Merrillan.                          |
| Ja       | 25   | 23 | 4W |    | NW | NW | 1   | 163  | 62.6              | 17.4  | 5.9   |       |       |     |      | 1.2 |     |      | 0.5  | 8.1 | 0.3  |  |  |       |      |      | 4.2           | 100.2                           | Eau Claire Fm(?), same as above.                                                     |
| Ja       | 32   | 19 | 6W |    | NW | NW | 1   | 163  | 55.9              | 22.9  | 4.7   |       |       |     | 0.9  | 2.2 |     |      |      |     |      |  |  |       | 3.5  | 2.8  | 92.3          | Eau Claire Fm. near North Bend. |                                                                                      |
| Ja       |      | 22 | 3W |    |    |    | 2   | 111  | 60.4              | 19.7  | 6.2   |       |       |     | 0.4  | 2.2 |     |      | 1.9  | 4.0 | 0.1  |  |  |       |      | 5.7  |               | 100.6                           | Near Halcyon. Altered Schist.                                                        |
| Ja       | 25   | 23 | 4W |    | NW | NW | 2   | 112  | 63.2              | 18.0  | 4.6   |       |       |     | 0.2  | 1.1 |     |      | 0.6  | 9.1 | 0.1  |  |  |       | 3.6  |      |               | 100.5                           | Near Merrillan. Test pit on<br>Davidsonfarm. Clay in Eau Claire<br>Fm.               |
| Ja       | 18   | 22 | 3W |    |    |    | 3   | 222  | 70.3              | 18.1  | 1.7   |       |       |     | --   | 0.9 |     |      | 0.8  | 2.9 |      |  |  | 0.1   |      |      | 5.3           | 99.9                            | From brick plant at Halcyon.<br>Altered Schist, 10'/12' thick.                       |
| Ja       | 18   | 22 | 3W |    |    |    | 3   | 222  | 72.3              | 16.1  | 0.4   |       |       |     | 0.3  | 1.5 |     |      | 0.4  | 5.2 |      |  |  | tr    |      |      | 3.7           | 99.8                            | Same as above.                                                                       |
| Ja       | 18   | 22 | 3W |    |    |    | 3   | 222  | 55.9              | 19.6  | 9.2   |       |       |     | 1.1  | 3.7 |     |      | 0.3  | 3.9 |      |  |  | 0.1   |      |      | 6.2           | 100.0                           | Same as above.                                                                       |
| Ja       | 18   | 22 | 3W |    |    |    | 3   | 222  | 65.5              | 16.3  | 4.0   |       |       |     | 1.7  | 3.1 |     |      | 0.3  | 3.9 |      |  |  | 0.6   |      |      | 4.4           | 99.9                            | Same                                                                                 |
| Ja       | 18   | 22 | 3W |    |    |    | 3   | 222  | 68.0              | 17.3  | 2.3   |       |       |     | 0.7  | 2.1 |     |      | 0.4  | 5.8 |      |  |  | tr    |      |      | 3.9           | 100.3                           | Same                                                                                 |
| Ja       |      |    |    |    |    |    | 3   | 222  | 59.9              | 18.1  | 10.0  |       |       |     | 0.3  | 3.1 | tr  |      | 0.5  | 3.7 |      |  |  |       |      |      | 4.4           | 100.1                           | Outcrop on Hall's Creek near<br>Halcyon Brick Plant.                                 |
| Ja       |      |    |    |    |    |    | 3   | 222  | 50.2              | 17.9  | 12.3  |       |       |     | 0.6  | 6.9 | 0.6 |      | 0.6  | 3.1 |      |  |  |       |      |      | 7.2           | 99.9                            | Same                                                                                 |
| Ja       | 20   | 21 | 4W |    |    |    | 3   | 222  | 61.2              | 14.0  | 4.7   |       |       |     | 3.8  | 2.0 | 0.8 |      | 1.3  | 3.4 | 0.4  |  |  |       |      |      | 9.1           | 99.9                            | River outcrop below Black<br>River Falls, 6'/30' thick.                              |

| LOCATION |      |    |     |    |    |    | REF |      | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |      |      |     |                               |                   |                  |                  |  |  |      |      |      |               |                                                                                        | REMARKS                                                                                           |  |
|----------|------|----|-----|----|----|----|-----|------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|------|-----|-------------------------------|-------------------|------------------|------------------|--|--|------|------|------|---------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--|
| Co.      | Sec. | T. | R.  | 41 | 41 | 41 | #   | Page | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO  | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  |      | Loss | Ign. | Mois-<br>ture | Total                                                                                  | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                                   |  |
| Ja       |      |    |     |    |    |    | 3   | 240  | 40.1              | 11.9                           | 4.0                            |                   |                   |     | 10.3 | 7.2  |     |                               | 0.9               | 2.7              | 0.8              |  |  |      |      |      | 18.0          | 99.8                                                                                   | 3 1/8' brown clay which is either<br>alluvial or Cambrian. From<br>Robert Dunlap farm.            |  |
| Ja       |      |    |     |    |    |    | 3   | 240  | 62.6              | 17.4                           | 5.9                            |                   |                   |     | 0    | 1.2  |     |                               | 0.5               | 8.1              | 0.3              |  |  |      |      |      | 4.2           | 100.2                                                                                  | Same only blue.                                                                                   |  |
| Ja       | 18   | 22 | 3W  |    |    |    | 3   | 270  | 70.3              | 18.1                           | 1.7                            |                   |                   |     | 0    | 6.9  | 0.1 |                               | 0.8               | 2.9              | 0                |  |  |      | 5.3  |      |               | 99.9                                                                                   | Black River Falls. 9 mi. N.<br>Halcyon Brick Co. Altered Pre-<br>cambrian Schist. Over 10' thick. |  |
| Ja       |      |    |     |    |    |    | 3   | 270  | 59.9              | 18.1                           | 10.0                           |                   |                   |     | 0.3  | 3.1  | tr  |                               | 0.5               | 3.7              |                  |  |  |      | 4.4  |      |               | 100.1                                                                                  | Black River Falls. Halls Creek.<br>Undeveloped. 10'/20' thick.                                    |  |
| Ja       |      |    |     |    |    |    | 3   | 270  | 50.2              | 17.9                           | 12.3                           |                   |                   |     | 0.6  | 6.9  | 0.6 |                               | 0.6               | 3.1              | 0.8              |  |  |      | 7.2  |      |               | 99.9                                                                                   | Same                                                                                              |  |
| Ja       | 18   | 22 | 3W  |    |    |    | 3   | 270  | 72.3              | 16.1                           | 0.4                            |                   |                   |     | 0.3  | 1.5  | tr  |                               | 0.4               | 5.2              | 0                |  |  |      | 3.7  |      |               | 99.8                                                                                   | Black River Falls. Halcyon Brick<br>Co. Over 10' thick. Altered<br>Precambrian Schist.            |  |
| Ja       | 18   | 22 | 3W  |    |    |    | 3   | 270  | 55.9              | 19.6                           | 9.2                            |                   |                   |     | 1.1  | 3.7  | 0.1 |                               | 0.3               | 3.9              |                  |  |  | 6.2  |      |      | 100.0         | Black River Falls. Halcyon Brick<br>Co. Over 10' thick. Altered<br>Precambrian Schist. |                                                                                                   |  |
| Ja       | 18   | 22 | 3W  |    |    |    | 3   | 270  | 65.5              | 16.3                           | 4.0                            |                   |                   |     | 1.7  | 3.1  | 0.6 |                               | 0.3               | 3.9              | 0                |  |  | 4.4  |      |      | 99.8          | Same                                                                                   |                                                                                                   |  |
| Ja       | 18   | 22 | 3W  |    |    |    | 3   | 270  | 68.0              | 17.3                           | 2.3                            |                   |                   |     | 0.7  | 2.1  | tr  |                               | 0.4               | 5.8              | 0                |  |  | 3.9  |      |      | 100.3         | Same                                                                                   |                                                                                                   |  |
| Ja       | 18   | 22 | 3W  |    |    |    | 3   | 270  | 61.2              | 14.0                           | 4.7                            |                   |                   |     | 3.8  | 2.0  |     |                               | 1.3               | 3.4              | 0.4              |  |  | 9.1  |      |      | 99.9          | Same                                                                                   |                                                                                                   |  |
| Ja       | 14   | 23 | 4W  |    |    |    | 3   | 273  | 62.6              | 17.4                           | 5.9                            |                   |                   |     | 0    | 1.2  |     |                               | 0.5               | 8.1              | 0.3              |  |  | 4.2  |      |      | 100.2         | Merrillan. Undeveloped.                                                                |                                                                                                   |  |
| Ja       | 14   | 23 | 4W  |    |    |    | 3   | 273  | 63.0              | 18.4                           | 3.4                            |                   |                   |     | 0    | 1.0  |     |                               | 0.5               | 8.7              | 0.4              |  |  | 5.0  |      |      | 100.3         | Same                                                                                   |                                                                                                   |  |
| Je       | 10   | 5  | 14E |    |    |    | 3   | 271  | 33.5              | 9.0                            | 3.5                            |                   |                   |     | 16.3 | 9.7  | tr  |                               | 0.8               | 2.1              | 0.3              |  |  | 24.8 |      |      | 99.9          | Ft. Atkinson. Ft. Atkinson Brick<br>Mfg. Co.                                           |                                                                                                   |  |
| Je       | 10   | 5  | 14E |    |    |    | 3   | 271  | 32.7              | 8.7                            | 3.2                            |                   |                   |     | 16.9 | 9.6  | tr  |                               | 0.9               | 2.3              | 0.3              |  |  | 25.3 |      |      | 99.9          | Same                                                                                   |                                                                                                   |  |
| Je       |      |    |     |    |    |    | 3   | 272  | 46.7              | 12.5                           | 3.6                            |                   |                   |     | 10.3 | 6.6  | tr  |                               | 0.4               | 3.0              | 0.7              |  |  | 16.3 |      |      | 100.0         | Hubbleton. Undeveloped                                                                 |                                                                                                   |  |
| Je       | 8    | 8  | 15E |    |    |    | 3   | 274  | 51.9              | 8.7                            | 3.0                            |                   |                   |     | 17.1 | 10.6 | 0.2 |                               | 0.8               | 2.2              | 0.3              |  |  | 25.2 |      |      | 100.0         | Watertown. L.H. Cordes & Co.<br>25' clay.                                              |                                                                                                   |  |
| Ju       | 2    | 13 | 2E  |    |    |    | 3   | 274  | 74.9              | 12.3                           | 3.2                            |                   |                   |     | 0.7  | 0.6  | tr  |                               | 1.2               | 2.3              | 0.4              |  |  | 4.4  |      |      | 100.0         | Wonewoc. Wonewoc Red Pressed<br>Brick Co. 3' thick                                     |                                                                                                   |  |
| Ju       | 2    | 13 | 2E  |    |    |    | 3   | 274  | 73.7              | 12.7                           | 3.5                            |                   |                   |     | 0.7  | 0.8  |     |                               | 1.1               | 2.4              | 0.4              |  |  | 5.4  |      |      | 100.5         | Same                                                                                   |                                                                                                   |  |
| Ke       | 1    | 1  | 22E |    |    |    | 1   | 163  | 55.4              | 18.1                           | 5.9                            |                   |                   |     | 6.3  | 0.1  |     |                               | 1.5               | 0.5              | 0.3              |  |  | 12.3 |      |      | 100.5         | 1 1/2'/8 1/2' glacial lake clay. Craney<br>Brick Yard.                                 |                                                                                                   |  |
| Ke       |      | 1  | 23E |    |    |    | 2   | 58   | 38.6              | 8.8                            | 8.2                            |                   |                   |     | 14.0 | 6.3  |     |                               | 0.9               | 2.7              | 0.1              |  |  | 20.0 |      |      | 99.5          | Clay from W.J. Craney Yard. 7 1/2'/<br>13 1/2', L. Blue clay                           |                                                                                                   |  |
| Ke       |      | 1  | 23E |    |    |    | 2   | 58   | 55.4              | 18.1                           | 5.9                            |                   |                   |     | 6.3  | 0.1  |     |                               | 0.5               | 1.5              | 0.3              |  |  | 12.3 |      |      | 100.5         | Clay from W.J. Craney Yard.<br>1 1/2'/8 1/2' Upper red clay                            |                                                                                                   |  |

| LOCATION |      |    |     |    |    |    | REF | CHEMICAL ANALYSIS |                  |                                |                                |                   |                   |     |      |     |     |                               |                   |                  |                  |  |  |  | REMARKS |      |               |       |                                                                                       |
|----------|------|----|-----|----|----|----|-----|-------------------|------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|-----|-----|-------------------------------|-------------------|------------------|------------------|--|--|--|---------|------|---------------|-------|---------------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 41 | 41 | 41 | #   | Page              | SiO <sub>2</sub> | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  |  | Loss    | Ign. | Mois-<br>ture | Total | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                       |
| Ke       |      | 2  | 23E |    |    |    | 2   |                   | 55.4             | 18.1                           | 5.9                            |                   |                   |     | 6.3  | 0.1 |     |                               | 0.5               | 1.5              | 0.3              |  |  |  | 12.3    |      |               | 100.5 | Near Kenosha (Upper).                                                                 |
| Ke       |      | 2  | 23E |    |    |    | 2   | 173               | 38.6             | 8.8                            | 8.2                            |                   |                   |     | 14.0 | 6.3 |     |                               | 0.9               | 2.7              | 0.1              |  |  |  | 20.0    |      |               | 99.5  | Near Kenosha. U. clay at W.J. Craney Yard.                                            |
| Ke       | 18   | 1  | 21E |    |    |    | 3   | 270               | 47.0             | 12.8                           | 4.4                            |                   |                   |     | 10.2 | 6.3 |     |                               | 0.5               | 3.6              | 0.5              |  |  |  | 15.2    |      |               | 100.4 | Bristol. Bristol Tile Works, 2' gvl. over 2' clay, over 12' blue clay. Lake clay.     |
| Ke       | 18   | 1  | 21E |    |    |    | 3   | 270               | 49.8             | 11.9                           | 4.6                            |                   |                   |     | 9.3  | 5.2 |     |                               | 0.3               | 3.3              | 0.5              |  |  |  | 15.4    |      |               | 100.3 | Same                                                                                  |
| Lf       | 31   | 2  | 2E  |    |    | NE | 5   | 680               | 96.7             | 0.7                            | 1.5                            | 1.2               | 0.2               |     |      |     |     |                               |                   |                  |                  |  |  |  |         |      |               | 100.3 | Carbonaceous shales (Spechts Ferry) from Silverthorn mine.                            |
| Ln       | 33   | 35 | 6E  |    |    |    | 3   | 274               | 70.4             | 13.6                           | 5.2                            |                   |                   |     | 1.5  | 1.5 | tr  |                               | 1.4               | 2.7              | 0.4              |  |  |  | 3.4     |      |               | 100.2 | Tomahawk. Tomahawk Brick Yard. 12' clay from deposit on R.R. 8 mi. away.              |
| Ln       | 33   | 35 | 6E  |    |    |    | 3   | 274               | 69.5             | 14.7                           | 4.6                            |                   |                   |     | 1.2  | 1.6 | tr  |                               | 1.3               | 3.0              | 0.4              |  |  |  | 4.3     |      |               | 100.5 | Same.                                                                                 |
| Mn       | 19   | 19 | 24E |    |    |    | 1   | 164               | 41.7             | 11.3                           | 2.8                            |                   |                   |     | 15.4 | 3.3 |     |                               | 1.3               | 3.1              | 0.4              |  |  |  | 19.8    |      |               | 99.0  | 2 1/8' Glacial lake clay. Manitowoc Clay Products Co. pit.                            |
| Mn       |      | 19 | 24E |    |    |    | 2   | 88                | 41.7             | 11.3                           | 2.8                            |                   |                   |     | 15.4 | 3.3 |     |                               | 1.3               | 3.1              | 0.4              |  |  |  | 19.8    |      |               | 99.0  | Lake clay. Manitowoc Clay Prods. Co. Upper red clay 6'.                               |
| Mn       |      | 19 | 24E |    |    |    | 2   | 88                | 41.5             | 10.0                           | 5.0                            |                   |                   |     | 14.3 | 4.2 |     |                               | 0.6               | 4.4              | 0.1              |  |  |  | 19.5    |      |               | 99.7  | Same as above only lower blue clay 8'.                                                |
| Mn       |      | 19 | 24E |    |    |    | 2   | 88                | 39.0             | 13.6                           | 3.4                            |                   |                   |     | 14.8 | 7.3 |     |                               | 1.1               | 2.6              | 13.3             |  |  |  | 5.6     |      |               | 100.7 | Same as above but of blue clay.                                                       |
| Mr       | 20   | 28 | 9E  |    |    |    | 1   | 164               | 52.6             | 14.4                           | 16.0                           |                   |                   |     | 0.7  | 3.2 |     |                               | 0.4               | 4.9              | 0.8              |  |  |  |         |      | 6.9           | 99.7  | Brick yard at Ringle. 1 1/6' altered gneiss.                                          |
| Mr       | 20   | 28 | 9E  |    |    |    | 1   | 164               | 54.5             | 13.7                           | 16.0                           |                   |                   |     | 0.6  | 3.2 |     |                               | 0.4               | 4.6              | 1.1              |  |  |  |         |      | 6.0           | 99.9  | Altered gneiss, same as above.                                                        |
| Mr       | 20   | 28 | 9E  |    |    |    | 1   | 164               | 49.9             | 13.0                           | 20.2                           |                   |                   |     | 0.3  | 4.2 |     |                               | 0.4               | 5.7              | 0.9              |  |  |  |         |      | 6.1           | 100.1 | Altered gneiss, same as above.                                                        |
| Mr       |      | 28 | 4E  |    |    |    | 2   | 159               | 64.5             | 8.7                            | 5.4                            |                   |                   |     | 7.3  | 0.2 |     |                               | 1.4               | 1.5              | tr               |  |  |  | 11.1    |      |               | 100.1 | Near Edgar, brick yard of T. Hill at S. edge of town. Blue clay below 10'.            |
| Mr       | 14   | 28 | 9E  |    |    |    | 3   | 229               | 52.6             | 14.4                           | 16.0                           |                   |                   |     | 0.7  | 3.2 | 0.5 |                               | 0.4               | 4.9              | 0.8              |  |  |  |         |      | 6.9           | 100.2 | Ringle Brick yard. Altered granite gneiss, +6' thick-brown.                           |
| Mr       | 14   | 28 | 9E  |    |    |    | 3   | 229               | 54.5             | 13.7                           | 16.0                           |                   |                   |     | 0.6  | 3.2 | 0.3 |                               | 0.4               | 4.6              | 1.1              |  |  |  |         |      | 6.0           | 100.3 | Same only blue.                                                                       |
| Mr       | 14   | 28 | 9E  |    |    |    | 3   | 229               | 49.9             | 13.0                           | 20.2                           |                   |                   |     | 0.3  | 4.2 | 0.2 |                               | 0.4               | 5.7              | 0.9              |  |  |  |         |      | 6.1           | 100.3 | Same only blue.                                                                       |
| Mr       | 15   | 28 | 9E  |    |    |    | 3   | 273               | 52.6             | 14.4                           | 16.0                           |                   |                   |     | 0.7  | 3.2 | 0.5 |                               | 0.4               | 4.9              | 0.8              |  |  |  | 6.9     |      |               | 100.2 | Ringle. Clay Lumber Co. 3' of sand & gvl. over 5' clay over partially altered gneiss. |
| Mr       | 15   | 28 | 9E  |    |    |    | 3   | 273               | 54.5             | 13.7                           | 16.0                           |                   |                   |     | 0.6  | 3.2 | 0.3 |                               | 0.4               | 4.6              | 1.1              |  |  |  | 6.0     |      |               | 100.3 | Same                                                                                  |
| Mr       | 15   | 28 | 9E  |    |    |    | 3   | 273               | 49.3             | 13.0                           | 20.2                           |                   |                   |     | 0.3  | 4.2 | 0.2 |                               | 0.4               | 5.7              | 0.9              |  |  |  | 6.1     |      |               | 100.3 | Same                                                                                  |

| LOCATION |      |    |     |     |    |    | REF |      | CHEMICAL ANALYSIS |                                |                                |                   |                   |      |      |     |     |                               |                   |                  |                  |  |  |      |      |               |       |                                                                                                                       | REMARKS |  |
|----------|------|----|-----|-----|----|----|-----|------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|------|------|-----|-----|-------------------------------|-------------------|------------------|------------------|--|--|------|------|---------------|-------|-----------------------------------------------------------------------------------------------------------------------|---------|--|
| Co.      | Sec. | T. | R.  | 41  | 41 | 41 | #   | Page | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO  | CaO  | MgO | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  | Loss | Ign. | Mois-<br>ture | Total | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                                                       |         |  |
| Mq       | 21   | 15 | 8E  |     |    | SE | 1   | 164  | 54.5              | 13.7                           | 4.3                            |                   |                   |      | 8.7  | 6.1 |     |                               |                   |                  |                  |  |  |      | 12.2 | 2.2           | 99.5  | Marsh clay from 1'/11' depth,<br>bore hole, 415 paces N, 315 paces<br>W. SE sec. cor.                                 |         |  |
| Mq       | 21   | 15 | 8E  |     |    | SE | 1   | 164  | 43.9              | 12.6                           | 4.2                            |                   |                   |      | 12.7 | 8.2 |     |                               |                   |                  |                  |  |  |      | 17.3 | 2.3           | 98.9  | Same, 11'/17'6" depth.                                                                                                |         |  |
| Mq       | 10   | 15 | 9E  | SE  | SE | SW | 1   | 165  | 49.4              | 8.3                            | 3.6                            |                   |                   |      | 11.5 | 7.2 |     |                               |                   |                  |                  |  |  |      | 15.6 | 1.7           | 95.6  | Lake clay from 2'/12 <sup>1</sup> / <sub>2</sub> ' depth,<br>bore hole, 225 paces W. SE<br>sec. cor.                  |         |  |
| Mq       | 10   | 15 | 9E  |     |    | SE | 1   | 165  | 46.9              | 7.8                            | 3.1                            |                   |                   |      | 13.5 | 8.1 |     |                               |                   |                  |                  |  |  |      | 17.9 | 1.7           | 97.3  | Same, 12 <sup>1</sup> / <sub>2</sub> /17' depth.                                                                      |         |  |
| Mq       | 14   | 14 | 9E  |     |    | NE | 1   | 166  | 44.2              | 13.1                           | 3.3                            |                   |                   |      | 13.4 | 8.1 |     |                               |                   |                  |                  |  |  |      | 17.9 | 1.6           | 100.1 | Marsh clay from 2'/15 <sup>1</sup> / <sub>2</sub> ' depth,<br>bore hole 525 paces W. & 260<br>paces S. NE sec. cor.   |         |  |
| Mq       | 14   | 14 | 9E  |     |    | NE | 1   | 166  | 51.6              | 10.3                           | 2.4                            |                   |                   |      | 12.1 | 7.8 |     |                               |                   |                  |                  |  |  |      | 16.6 | 8.4           | 100.7 | Silt from bore hole above.                                                                                            |         |  |
| Mq       | 14   | 14 | 9E  |     |    | SW | 1   | 166  | 49.3              | 15.6                           | 4.2                            |                   |                   |      | 9.9  | 6.9 |     |                               |                   |                  |                  |  |  |      | 14.2 | 1.9           | 100.1 | Marsh clay from 2 <sup>1</sup> / <sub>2</sub> '/4' depth,<br>bore hole 600 paces S & 260 paces<br>W. of NE sec. cor.  |         |  |
| Mq       | 14   | 14 | 9E  |     |    | SW | 1   | 166  | 50.7              | 9.0                            | 3.7                            |                   |                   |      | 11.6 | 7.4 |     |                               |                   |                  |                  |  |  |      | 15.4 | 1.7           | 97.9  | Same but 6'/18' depth.                                                                                                |         |  |
| Mq       | 1    | 14 | 8E  |     |    |    | 3   | 271  | 49.6              | 10.8                           | 3.6                            |                   |                   |      | 10.0 | 6.6 | tr  |                               | 0.8               | 2.5              | 0.4              |  |  |      | 16.2 |               | 100.5 | Endeavor. Endeavor Brick Yard.<br>45' thick.                                                                          |         |  |
| Mq       | 1    | 14 | 8E  |     |    |    | 3   | 271  | 47.6              | 10.5                           | 3.8                            |                   |                   |      | 10.6 | 7.0 |     |                               | 0.7               | 2.4              | 0.4              |  |  |      | 17.1 |               | 100.0 | Same. Glacial clay.                                                                                                   |         |  |
| ML       | 14   | 7  | 22E |     |    | SW | 1   | 166  | 54.2              | 16.5                           | 9.3                            |                   |                   |      | 3.0  | 2.3 |     |                               |                   |                  |                  |  |  |      | 11.1 | 7.3           | 96.6  | Devonian Shale. Intake tunnel<br>N. end of Law Park, Milwaukee.                                                       |         |  |
| ML       | 22   | 6  | 22E | SWC | NE | SW | 1   | 167  | 42.6              | 8.1                            | 5.2                            |                   |                   |      | 17.7 | 7.3 |     |                               |                   |                  |                  |  |  |      | 18.8 | 2.8           | 99.7  | Dry lake clay, depths 1'/5 <sup>1</sup> / <sub>2</sub> ',<br>7'/8 <sup>1</sup> / <sub>2</sub> ', +10'/11', Bore hole. |         |  |
| ML       | 31   | 7  | 22E |     |    |    |     | 1    | 167               | 37.8                           | 9.1                            | 3.6               |                   |      | 22.5 | 2.8 |     |                               | 0.5               | 2.1              | 0.4              |  |  |      | 21.5 |               | 100.3 | Lake clay. Chase Brick Co. pit.                                                                                       |         |  |
| ML       |      | 7  | 22E |     |    |    |     | 2    | 71                | 37.8                           | 9.1                            | 3.6               |                   |      | 22.5 | 2.8 |     |                               | 0.5               | 2.1              | 0.4              |  |  |      | 21.5 |               | 100.3 | Glacial lake clays from city<br>of Milwaukee, Chase Brick Co.                                                         |         |  |
| ML       | ?    | 31 | 7   | 22E |    |    |     | 3    | 273               | 40.2                           | 9.1                            | 3.0               |                   |      | 14.5 | 8.3 | 0.1 |                               | 0.3               | 3.1              | 0.4              |  |  |      | 21.4 |               | 100.4 | Milwaukee. Burnham Bros.,<br>Howell Ave. yard.                                                                        |         |  |
| ML       | ?    | 31 | 7   | 22E |    |    |     | 3    | 273               | 41.6                           | 8.5                            | 3.4               |                   |      | 14.4 | 8.0 | 0.2 |                               | 0.5               | 2.9              | 0.4              |  |  |      | 20.1 |               | 100.1 | Milwaukee. Burnham Bros.<br>West yard.                                                                                |         |  |
| ML       | ?    | 31 | 7   | 22E |    |    |     | 3    | 273               | 43.8                           | 7.8                            | 2.0               |                   |      | 15.2 | 8.0 |     |                               | 0.6               | 2.4              | 0.3              |  |  |      | 19.8 |               | 100.0 | Milwaukee. Standard Brick Co.                                                                                         |         |  |
| ML       |      |    |     |     |    |    |     | 5    | 236               | 38.2                           | 9.8                            | 2.8               | 23.2              | 15.8 | 1.2  | 3.2 |     |                               | 0.7               | 2.2              |                  |  |  |      | 1.9  | 0.9           | 99.9  | Milwaukee clay.                                                                                                       |         |  |
| Mo       | 9    | 17 | 1W  |     |    |    |     | 3    | 274               | 78.4                           | 11.6                           | 3.2               |                   |      | 0.9  | 0.3 |     |                               | 0.7               | 1.1              |                  |  |  |      | 2.6  |               | 99.8  | Tomah. Tomah Brick yard.                                                                                              |         |  |
| Ou       | 36   | 21 | 18E |     |    |    |     | 3    | 272               | 42.5                           | 12.1                           | 3.9               |                   |      | 12.7 | 7.2 |     |                               | 0.6               | 3.1              | 0.4              |  |  |      | 18.0 |               | 100.4 | Lindaur & Rhode West Bank Fox<br>River. 7' overburden, 30' clay<br>Kaukauna. & sand.                                  |         |  |
| Ou       | 36   | 21 | 18E |     |    |    |     | 3    | 272               | 47.5                           | 14.4                           | 5.6               |                   |      | 8.5  | 5.7 |     |                               | 0.6               | 3.4              | 0.5              |  |  |      | 13.4 |               | 99.5  | Same.                                                                                                                 |         |  |

| LOCATION |      |    |     |     |     |     | REF    |            | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |      |     |     |                               |                   |                  |                  |  |           |      |      | REMARKS |               |                                |                                                                                                                                    |                                                                                                                                            |
|----------|------|----|-----|-----|-----|-----|--------|------------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|-----|-----|-------------------------------|-------------------|------------------|------------------|--|-----------|------|------|---------|---------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 1/4 | 1/4 | 1/4 | #      | Page       | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |           |      | Loss | Ign.    | Mois-<br>ture | Total                          | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                                                                    |                                                                                                                                            |
| Ou       |      |    |     |     |     |     | 3      | 274        | 44.0              | 10.1                           | 3.8                            |                   |                   |     | 14.5 | 5.7 | 0.2 |                               | 1.1               | 3.2              | 0.3              |  |           |      | 17.5 |         |               | 100.3                          | Shiocton. W. D. Jordan,<br>Undeveloped.                                                                                            |                                                                                                                                            |
| Oz       |      | 11 | 22E |     |     |     | 2      | 81         | 42.5              | 9.6                            | 4.1                            |                   |                   |     | 14.5 | 5.3 |     |                               | 1.0               | 2.6              | 0.1              |  |           |      | 19.5 |         |               | 99.3                           | Lake Clay from Gunther Bros. yard<br>located at NE edge at Port Wash-<br>ington at lake shore. 25' silty<br>clay. 6-15' overburden |                                                                                                                                            |
| Oz       | 19   | 11 | 22E |     |     |     | 3      | 116        | 38.5              | 10.9                           | 3.6                            |                   |                   |     | 14.0 | 7.9 | tr  |                               | 1.0               | 2.8              | 0.4              |  |           |      |      | 20.9    |               |                                |                                                                                                                                    | N. part of Port Washington. 15'-18'<br>red clay with calcareous gvl over<br>4' sand over 22' blue clay.                                    |
| Oz       | 22   | 12 | 21E |     |     |     | 3      | 271        | 36.6              | 10.2                           | 4.1                            |                   |                   |     | 14.6 | 9.6 |     |                               | 0.9               | 1.8              | 0.3              |  |           |      | 22.3 |         |               | 100.3                          | Fredonia. Carl Pekison. 7' thick.                                                                                                  |                                                                                                                                            |
| Oz       | 19   | 11 | 22E |     |     |     | 3      | 273        | 38.5              | 10.9                           | 3.6                            |                   |                   |     | 14.0 | 7.9 | tr  |                               | 1.0               | 2.8              | 0.4              |  |           |      | 20.9 |         |               | 100.1                          | Port Washington. Gottlieb Gunther<br>& Sons. 16' red clay over 4' sand<br>over 22' blue clay.                                      |                                                                                                                                            |
| Pi       | 1    | 27 | 19W |     |     |     | 1      | 167        | 62.7              | 17.0                           | 5.6                            |                   |                   |     | 2.4  | 1.8 |     |                               | 0.3               | 3.2              |                  |  |           |      |      | 6.7     |               | 99.8                           | Lake Clay. G.H. Smith Brick yard,<br>River Falls. Upper 10' of 36'.                                                                |                                                                                                                                            |
| Pi       | 1    | 27 | 19W |     |     |     | 1      | 167        | 70.0              | 14.8                           | 5.0                            |                   |                   |     | 1.0  | 1.0 |     |                               | 0.6               | 2.7              |                  |  |           |      |      | 4.5     |               | 99.7                           | Same but lower 26' of 36'.                                                                                                         |                                                                                                                                            |
| Pi       | 1    | 27 | 19W |     |     |     | 3      | 273        | 62.7              | 17.0                           | 5.6                            |                   |                   |     | 2.4  | 1.8 |     |                               | 0.3               | 3.2              | 0.6              |  |           |      | 6.7  |         |               | 100.4                          | River Falls. River Falls Brick Co<br>1 mi. S. of city. 36' thick.                                                                  |                                                                                                                                            |
| Pi       | 1    | 27 | 19W |     |     |     | 3      | 273        | 70.0              | 14.8                           | 5.0                            |                   |                   |     | 1.0  | 1.0 |     |                               | 0.6               | 2.7              | 0.6              |  |           |      | 4.5  |         |               | 100.3                          | Same                                                                                                                               |                                                                                                                                            |
| Pi       |      |    |     |     |     |     | 6<br>4 | 213<br>306 | 64.6              | 18.9                           | 4.1                            | 6.4               | 3.5               |     |      |     |     |                               |                   |                  |                  |  |           |      |      | 2.6     |               | 100.0                          | Bay City Creek. Lake clay.                                                                                                         |                                                                                                                                            |
| Pt       | 16   | 23 | 8E  |     |     |     | 1      | 167        | 63.0              | 21.6                           | 3.5                            |                   |                   |     | 0.9  | 1.0 |     |                               |                   |                  |                  |  |           |      |      | 6.0     |               | 95.9                           | Altered top Precambrian beneath<br>Cambrian Sandstone, just N. of<br>R.R. bridge.                                                  |                                                                                                                                            |
| Pt       | 30   | 24 | 8E  |     |     |     | 1      | 167        | 59.9              | 16.7                           | 7.6                            |                   |                   |     | 0.4  | 1.7 |     |                               |                   |                  |                  |  |           |      |      | 3.9     |               | 90.4                           | 8' Altered granitic Schist.<br>Stevens Point Brick & Construc-<br>tion Co.                                                         |                                                                                                                                            |
| Pt       |      | 23 | 8E  |     |     |     | 2      | 122        | 63.0              | 21.6                           | 3.5                            |                   |                   |     | 0.9  | 1.0 |     |                               |                   |                  |                  |  |           |      |      | 6.0     |               |                                |                                                                                                                                    | Near Springvale. Residual clay<br>below Cambrian Borings bank of<br>small stream on Wis. Central R.R.<br>4 mi. S. Stevens Pt. & N. of R.R. |
| Pt       |      | 24 | 8E  |     |     |     | 2      | 123        | 59.9              | 16.7                           | 7.6                            |                   |                   |     | 0.4  | 1.7 |     |                               |                   |                  |                  |  |           |      |      | 3.9     |               |                                |                                                                                                                                    | Near Stevens Point. Residual<br>dual clay from granitic schist at<br>Stevens Pt. Brick Yard 1 1/4 mi. N.<br>of town. 8' thick.             |
| Pt       |      |    |     |     |     |     | 3      | 272        | 34.3              | 13.5                           | 16.7                           |                   |                   |     | 0.5  | 5.7 | 2.0 |                               | 0.2               | 1.3              | 1.1              |  | C<br>13.9 | 10.5 |      |         | 99.6          | Junction City. Graphite works. |                                                                                                                                    |                                                                                                                                            |
| Pt       |      |    |     |     |     |     | Files  |            | 54.6              | 19.3                           | 11.7                           |                   |                   |     | 0    | 1.6 | 0   | 0                             | 1.5               | 4.8              | 0.3              |  |           |      |      | 6.2     |               | 99.8                           | Junction City.                                                                                                                     |                                                                                                                                            |
| Ra       | 21   | 4  | 23E | SW  | SW  | SW  | 1      | 168        | 39.7              | 9.3                            | 5.7                            |                   |                   |     | 19.1 | 7.4 |     |                               |                   |                  |                  |  |           |      |      | 19.6    | 2.4           | 100.8                          | Dry lake clay. Bore hole 200 yd<br>N. of SW sec. cor., 2 1/11' depth.                                                              |                                                                                                                                            |
| Ra       | 17   | 4  | 23E | C   | SE  | NE  | 1      | 168        | 42.3              | 9.8                            | 5.8                            |                   |                   |     | 18.4 | 5.3 |     |                               |                   |                  |                  |  |           |      |      | 18.6    | 3.0           | 100.2                          | Dry lake clay. +5 mi. N. of<br>Racine, 2 1/8' depth.                                                                               |                                                                                                                                            |
| Ra       | 16   | 4  | 20E |     |     | NW  | 1      | 169        | 44.0              | 11.9                           | 4.7                            |                   |                   |     | 11.0 | 6.7 |     |                               |                   |                  |                  |  |           |      |      | 16.3    | 3.3           | 99.5                           | Marsh clay. Bore hole 650 paces<br>E. of NW sec. cor., 4 1/15' depth                                                               |                                                                                                                                            |
| Ra       |      | 3  | 22E |     |     |     | 2      | 61         | 47.4              | 7.0                            | 6.7                            |                   |                   |     | 13.1 | 4.4 |     |                               | 0.7               | 1.3              | 0.1              |  |           |      | 19.1 |         |               | 99.6                           | Clay from Lake Shore Brick yard<br>N. of Racine. Approx. 2 1/10' depth.                                                            |                                                                                                                                            |
| Ra       |      | 2  | 19E |     |     |     | 2      | 63         | 41.9              | 14.3                           | 6.7                            |                   |                   |     | 9.4  | 4.8 |     |                               | 0.9               | 3.7              | 0.1              |  |           |      | 17.9 |         |               | 99.6                           | Burlington Brick & Tile Co.<br>2 1/8' depth, 2' red clay over<br>3' blue separated by 1' of sand.                                  |                                                                                                                                            |

| LOCATION |      |    |     |    |    |    | REF |      | CHEMICAL ANALYSIS |               |       |       |       |     |      |     |     |      |      |     |      |  |  |  |  | REMARKS      |               |       |                                                                                                                          |                                                                  |
|----------|------|----|-----|----|----|----|-----|------|-------------------|---------------|-------|-------|-------|-----|------|-----|-----|------|------|-----|------|--|--|--|--|--------------|---------------|-------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 41 | 41 | 41 | #   | Page | SiO2              | Al2O3         | Fe2O3 | CaCO3 | MgCO3 | FeO | CaO  | MgO | MnO | P2O5 | Na2O | K2O | TiO2 |  |  |  |  | Loss<br>Ign. | Mois-<br>ture | Total | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                                                          |                                                                  |
| Ra       |      | 3  | 19E |    |    |    | 2   | 173  | 41.7              | 14.3          | 6.7   |       |       |     | 9.4  | 4.8 |     |      | 0.9  | 3.7 | 0.1  |  |  |  |  | 17.9         |               | 99.6  | Near Burlington. Lower blue clay<br>from Burling Block & Tile Works.                                                     |                                                                  |
| Ra       | 31   | 3  | 19E |    |    |    | 3   | 270  | 43.7              | 14.4          | 4.4   |       |       |     | 10.8 | 5.2 | tr  |      | 0.4  | 3.8 | 0.4  |  |  |  |  | 17.0         |               | 100.0 | Burlington. Burlington Brick &<br>Tile Co. 2' soil over 15' clay.<br>Glacial clay.                                       |                                                                  |
| Ra       | 31   | 3  | 19E |    |    |    | 3   | 270  | 35.8              | 11.2          | 3.6   |       |       |     | 16.1 | 7.5 |     |      | 0.4  | 2.6 | 0.3  |  |  |  |  | 22.4         |               | 100.0 | Same                                                                                                                     |                                                                  |
| Ra       | 30   | 3  | 23E |    |    |    | 3   | 273  | 40.0              | 10.0          | 2.8   |       |       |     | 16.1 | 7.7 |     |      | 0.7  | 2.6 | 0.3  |  |  |  |  | 20.4         |               | 100.6 | Racine. Hilkes Bros. Brick<br>Mfg. Co.                                                                                   |                                                                  |
| Ra       | 30   | 3  | 23E |    |    |    | 3   | 273  | 52.3              | 9.4           | 2.5   |       |       |     | 10.6 | 6.7 | tr  |      | 0.9  | 2.3 | 0.3  |  |  |  |  | 15.7         |               | 100.6 | Same                                                                                                                     |                                                                  |
| Ra       | 30   | 3  | 23E |    |    |    | 3   | 274  | 44.1              | 11.9          | 4.0   |       |       |     | 10.3 | 7.2 |     |      | 0.9  | 2.7 | 0.8  |  |  |  |  | 18.0         |               | 99.8  | Wind Lake. Wind Lake Brick &<br>Tile Co. +10' thick.                                                                     |                                                                  |
| Rk       |      | 4  | 13E |    |    |    | 2   | 139  | 71.6              | 11.2          | 3.7   |       |       |     | 1.7  | 1.0 |     |      | 1.3  | 2.4 |      |  |  |  |  | 6.3          |               | 99.1  | Near Milton, 1 mi. E. of town on<br>Lima Rd. S. side of road on<br>Borden property. 12' clay in 3'<br>gravel overburden. |                                                                  |
| Rk       |      |    |     |    |    |    | 3   | 272  | 73.8              | 12.7          | 3.4   |       |       |     | 0.5  | 0.8 |     |      | 0.8  | 2.2 | 0.5  |  |  |  |  | 5.0          |               | 99.7  | Janesville. Undeveloped.                                                                                                 |                                                                  |
| SC       | 32   | 29 | 15W |    |    |    | 3   | 236  | 64.5              | 26.2          | 0.1   |       |       |     |      |     |     |      |      | 0.3 |      |  |  |  |  | 8.9          |               | 100.0 | Hersey clay pit - crude.                                                                                                 |                                                                  |
| SC       | 32   | 29 | 15W |    |    |    | 3   | 236  | 52.4              | 34.1          | 0.2   |       |       |     | 0.1  | 0.2 |     |      | 0.2  | 0.5 | 0.8  |  |  |  |  | 11.9         |               | 100.2 | Hersey clay pit - washed.                                                                                                |                                                                  |
| SC       | 36   | 29 | 17W |    |    |    | 3   | 270  | 61.9              | 18.8          | 6.1   |       |       |     | 0.5  | 1.3 | 0.2 |      | 1.2  | 2.1 | 0.6  |  |  |  |  | 7.4          |               | 100.1 | Baldwin. Undeveloped.                                                                                                    |                                                                  |
| SC       | 20   | 30 | 16W |    |    |    | 3   | 271  | 73.1              | 11.6          | 5.0   |       |       |     | 1.0  | 0.9 | 0.2 |      | 1.3  | 2.4 | 0.5  |  |  |  |  | 4.6          |               | 100.5 | Glenwood. Syme, Baldwin & Co.                                                                                            |                                                                  |
| SC       |      |    |     |    |    |    | 3   | 271  | 65.2              | 25.3          | 0.2   |       |       |     |      |     |     |      |      | 0.5 |      |  |  |  |  | 8.8          |               | 100.0 | Glenwood. Undeveloped.                                                                                                   |                                                                  |
| SC       |      |    |     |    |    |    | 3   | 272  | 59.0              | 29.6          | 0.4   |       |       |     |      | 0.1 | tr  |      | 0.3  | 0.3 |      |  |  |  |  | 10.2         |               | 100.0 | Hersey. Undeveloped.                                                                                                     |                                                                  |
| SC       | 32   | 29 | 15W |    |    |    | 3   | 272  | 64.5              | 26.2          | 0.1   |       |       |     |      |     |     |      |      | 0.3 |      |  |  |  |  | 8.9          |               | 100.0 | Hersey. Superior China Clay Co.<br>Unwashed.                                                                             |                                                                  |
| SC       | 32   | 29 | 15W |    |    |    | 3   | 272  | 52.4              | 34.1          | 0.2   |       |       |     | 0.1  | 0.1 |     |      | 0.2  | 0.5 | 0.8  |  |  |  |  | 11.9         |               | 100.2 | Same, washed.                                                                                                            |                                                                  |
| Sk       | 6    | 12 | 6E  |    |    | NW | 1   | 169  | 40.6              | 14.9          | 4.3   |       |       |     | 12.1 | 2.6 |     |      | 1.6  | 2.6 | 0.6  |  |  |  |  | 18.3         |               | 97.6  | Lake clay exposed in ravine.<br>5'/15' thick.                                                                            |                                                                  |
| Sk       | 21   | 11 | 5E  |    |    |    | 1   | 170  | 62.0              | 29.3          | tr    |       |       | 5.1 | 0.2  | 0.3 |     |      | tr   | tr  |      |  |  |  |  | 2.3          |               | 99.2  | Seeley Slate. From Illinois<br>mine near North Freedom. From<br>100' depth.                                              |                                                                  |
| Sk       | 2    | 11 | 6E  |    |    |    | 3   | 270  | 49.4              | 9.0           | 2.1   |       |       |     | 12.6 | 7.5 | tr  |      | 0.7  | 1.9 | 0.3  |  |  |  |  | 17.0         |               | 100.5 | Baraboo. John Paddock pit. 6'/<br>12' overburden, up to 35' clay.<br>Lake clay.                                          |                                                                  |
| Sk       |      |    |     |    |    |    | 5   | 516  | 53.2              | 45.1          |       |       |       |     |      |     |     |      |      |     |      |  |  |  |  |              |               |       |                                                                                                                          | Analysis of clay from veined<br>quartzite in Rock Springs gorge. |
| Sk       | 22   | 11 | 5E  |    |    | NW | 5   | 518  | 59.8              | Al&Fe<br>35.4 |       |       |       |     |      | 0.1 |     |      |      |     |      |  |  |  |  | 4.7          |               | 100.0 | Clay slate interbedded with Bar-<br>aboo Quartzite. Thin layers.                                                         |                                                                  |

| LOCATION |      |    |     |     |    |    | REF |      | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |      |      |     |                               |                   |                  |                  |  |  |      | REMARKS |               |       |                                                                                                 |
|----------|------|----|-----|-----|----|----|-----|------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|------|-----|-------------------------------|-------------------|------------------|------------------|--|--|------|---------|---------------|-------|-------------------------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R.  | 41  | 41 | 41 | #   | Page | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO  | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  | Loss | Ign.    | Mols-<br>ture | Total | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                                 |
| Sh       |      | 27 | 18E |     |    |    | 2   | 99   | 59.6              | 10.2                           | 4.7                            |                   |                   |     | 8.3  | 2.6  |     |                               | 0.8               | 2.6              | 0.1              |  |  |      | 11.1    |               | 99.9  | Analysis of brick mixture from<br>Chas. Larson pit at Shawano.<br>Upper red & lower blue clays. |
| Sh       | 1    | 26 | 15E |     |    |    | 3   | 273  | 45.8              | 9.4                            | 3.8                            |                   |                   |     | 14.9 | 5.9  | tr  |                               | 0.7               | 3.0              | 0.4              |  |  |      | 16.3    |               | 100.1 | Shawano. Shawano Brick & Tile<br>Co. 2' sand over 19' clay.                                     |
| Sh       | 1    | 26 | 15E |     |    |    | 3   | 274  | 43.6              | 11.1                           | 3.6                            |                   |                   |     | 15.1 | 5.6  | tr  |                               | 0.6               | 3.3              | 0.4              |  |  |      | 17.3    |               | 100.6 | Same                                                                                            |
| Sb       | 15   | 15 | 23E |     |    |    | 1   | 170  | 59.2              | 16.7                           | 7.7                            |                   |                   |     | 9.6  | 0.5  |     |                               | 1.9               | 2.8              | tr               |  |  |      | 10.2    |               | 100.1 | Lake clay from O. Zimbal brick<br>yard at Sheboygan.                                            |
| Sb       |      | 15 | 23E |     |    |    | 2   | 83   | 37.0              | 6.7                            | 3.6                            |                   |                   |     | 20.6 | 9.0  |     |                               | 1.1               | 1.3              | 0.1              |  |  |      | 22.2    |               | 100.5 | Lake clay, O. Zimbal Brick Co.                                                                  |
| Sb       |      | 15 | 23E |     |    |    | 2   | 173  | 59.2              | 16.7                           | 7.7                            |                   |                   |     | 1.0  | 0.5  |     |                               | 1.9               | 2.8              | tr               |  |  |      | 10.2    |               | 100.1 | At Sheboygan, thin red clay<br>from O. Zimbal Co. yard. Over-<br>lies the worked clay.          |
| Sb       | 20   | 15 | 23E |     |    |    | 3   | 274  | 36.9              | 8.8                            | 3.1                            |                   |                   |     | 16.7 | 8.7  |     |                               | 1.0               | 2.3              | 0.3              |  |  |      | 22.4    |               | 100.2 | Sheboygan. Sheboygan Brick &<br>Tile Co.                                                        |
| Sb       | 24   | 15 | 22E |     |    |    | 3   | 274  | 38.9              | 7.5                            | 2.4                            |                   |                   |     | 15.9 | 9.8  | tr  |                               | 0.9               | 2.0              | 0.3              |  |  |      | 22.3    |               | 99.9  | Sheboygan. August Zimbel & Son.<br>5' stripping, 42' clay.                                      |
| Sb       | 24   | 15 | 22E |     |    |    | 3   | 274  | 37.9              | 7.1                            | 3.6                            |                   |                   |     | 16.4 | 9.6  | tr  |                               | 0.9               | 1.9              | 0.2              |  |  |      | 22.8    |               | 100.4 | Same                                                                                            |
| Sb       | 24   | 15 | 22E |     |    |    | 3   | 274  | 36.8              | 9.4                            | 3.0                            |                   |                   |     | 16.4 | 8.8  | tr  |                               | 0.9               | 2.4              | 0.2              |  |  |      | 21.9    |               | 99.8  | Same                                                                                            |
| Ta       | 3    | 30 | 1E  |     |    |    | 1   | 170  | 45.7              | 18.9                           | 18.0                           |                   |                   |     | 0.9  | 0.3  |     |                               | 7.7               | 1.7              | tr               |  |  |      | 6.6     |               | 99.6  | Residual clay from greenstone<br>outcrop on Black River 4 mi. SW<br>Medford. 16' exposed.       |
| Ta       |      | 31 | 1E  |     |    |    | 2   | 131  | 45.7              | 18.9                           | 18.0                           |                   |                   |     | 0.9  | 0.3  |     |                               | 1.7               | 7.7              | tr               |  |  |      | 6.6     |               | 99.6  | Near Medford, 4 mi. SW along<br>Wis. River. Altered greenstone,<br>16' thick                    |
| Ta       | 23   | 32 | 1E  |     |    |    | 3   | 274  | 69.9              | 13.6                           | 5.5                            |                   |                   |     | 0.7  | 1.4  | tr  |                               | 1.8               | 2.4              | 0.8              |  |  |      | 4.4     |               | 100.3 | Whittlesey. Langenberg Brick Co.<br>10'/12' clay. Reported 25' thick.                           |
| Ta       | 23   | 32 | 1E  |     |    |    | 3   | 274  | 70.5              | 13.6                           | 4.5                            |                   |                   |     | 0.7  | 1.4  |     |                               | 1.9               | 2.4              | 1.0              |  |  |      | 4.1     |               | 100.1 | Same                                                                                            |
| Tr       |      | 21 | 9W  |     |    |    | 2   | 149  | 73.1              | 11.6                           | 4.1                            |                   |                   |     | 0.8  | 0.5  |     |                               | 2.8               | 2.3              | 0.1              |  |  |      | 5.4     |               | 100.6 | Near Arcadia. Loessial clays<br>from yard of E. & A. Pahl.                                      |
| Ve       |      | 13 | 4W  |     |    |    | 2   | 145  | 74.7              | 12.6                           | 2.8                            |                   |                   |     | 0.7  | 0.6  |     |                               | 1.1               | 2.2              | 0.6              |  |  |      | 5.3     |               | 100.5 | Near Viroqua. Brick mixture<br>from Pahl's yard. Silty loessial<br>clay.                        |
| Ve       |      | 13 | 4W  |     |    |    | 2   | 145  | 78.3              | 11.4                           | 1.8                            |                   |                   |     | 1.0  | 0.7  |     |                               | 1.3               | 1.9              | 0.5              |  |  |      | 3.1     |               | 99.9  | Near Viroqua. Brick mixture from<br>S. Foster yard. Silty loessial<br>clay.                     |
| Ve       | 31   | 13 | 4W  |     |    |    | 3   | 274  | 74.7              | 12.6                           | 2.8                            |                   |                   |     | 0.7  | 0.6  | tr  |                               | 1.1               | 2.2              | 0.6              |  |  |      | 5.3     |               | 100.5 | Viroqua. Viroqua Brick Yard.<br>3' clay.                                                        |
| Ve       | 31   | 13 | 4W  |     |    |    | 3   | 274  | 78.3              | 11.4                           | 1.8                            |                   |                   |     | 1.0  | 0.7  |     |                               | 1.3               | 1.9              | 0.5              |  |  |      | 3.1     |               | 99.9  | Same                                                                                            |
| Ww       | 4    | 4  | 15E | SWc | NE | NW | 1   | 170  | 34.8              | 10.6                           | 3.4                            |                   |                   |     | 16.5 | 10.4 |     |                               |                   |                  |                  |  |  |      | 23.1    | 2.9           | 98.8  | Lake clay located near<br>Whitewater.                                                           |
| Ww       |      | 4  | 15E |     |    |    | 2   | 55   | 32.5              | 7.3                            | 4.4                            |                   |                   |     | 18.4 | 7.2  |     |                               | 0.5               | 2.0              | 0.1              |  |  |      | 27.7    |               | 100.1 | Lake clay from Whitewater Brick<br>& Tile Co. Up to 30' available.                              |

| LOCATION |         |    |     |     |     | REF |   | CHEMICAL ANALYSIS |                  |                                |                                |                   |                   |     |      |      |     |                               |                   |                  |                  |  |  |  | REMARKS |      |               |                                                                                                      |                                                                 |
|----------|---------|----|-----|-----|-----|-----|---|-------------------|------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|------|------|-----|-------------------------------|-------------------|------------------|------------------|--|--|--|---------|------|---------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Co.      | Sec.    | T. | R.  | 1/4 | 1/4 | 1/4 | # | Page              | SiO <sub>2</sub> | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO  | MgO  | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  |  | Loss    | Ign. | Mois-<br>ture | Total                                                                                                | Nearest village, type<br>of deposit, thickness,<br>extent, etc. |
| Ww       | 18      | 2  | 18E |     |     |     | 3 | 274               | 70.2             | 14.0                           | 4.8                            |                   |                   |     | 1.2  | 1.0  |     |                               | 1.3               | 1.9              | 0.4              |  |  |  | 5.8     |      | 100.6         | Springfield. Springfield Brick<br>& Tile Co. 2' to 10' thick.                                        |                                                                 |
| Ww       | 18      | 2  | 18E |     |     |     | 3 | 274               | 75.6             | 12.2                           | 3.3                            |                   |                   |     | 1.0  | 0.8  |     |                               | 1.1               | 2.0              | 0.4              |  |  |  | 3.4     |      | 100.2         | Same                                                                                                 |                                                                 |
| Wn       | 32      | 12 | 20E |     |     | SEc | 1 | 171               | 28.3             | 7.8                            | 2.6                            |                   |                   |     | 19.1 | 12.2 |     |                               |                   |                  |                  |  |  |  | 28.1    | 1.6  | 98.2          | Dry lake clay from bore<br>hole. 3 1/2/16 1/2' depths.                                               |                                                                 |
| Wn       | 32      | 12 | 20E |     |     | SEc | 1 | 171               | 26.5             | 6.1                            | 1.7                            |                   |                   |     | 21.1 | 13.5 |     |                               |                   |                  |                  |  |  |  | 29.3    | 1.0  | 98.1          | Dry lake clay silt from bore<br>hole described above, depths<br>10 1/2/14 1/2'.                      |                                                                 |
| Wn       | 10      | 12 | 20E |     |     |     | 3 | 270               | 29.5             | 7.1                            | 2.6                            |                   |                   |     | 18.2 | 12.3 |     |                               | 0.7               | 1.8              | 0.4              |  |  |  | 27.9    |      | 100.2         | Boltonville. William Voigt pit.<br>8 1/2/12' thick. Borings indicate<br>up to 85'. Lake clay.        |                                                                 |
| Wn       | 10      | 12 | 20E |     |     |     | 3 | 270               | 29.9             | 8.0                            | 2.8                            |                   |                   |     | 17.2 | 12.2 |     |                               | 0.7               | 1.8              | 0.5              |  |  |  | 27.0    |      | 100.1         | Same                                                                                                 |                                                                 |
| Wk       | 33      | 5  | 20E |     |     | C   | 1 | 172               | 42.9             | 9.7                            | 3.7                            |                   |                   |     | 12.8 | 5.9  |     |                               |                   |                  |                  |  |  |  | 21.2    | 5.0  | 98.3          | Marsh clay about 40 yds W. of sec<br>C. Bore hole. 6 1/15' depth.                                    |                                                                 |
| Wk       | 23      | 5  | 20E |     | SE  | NE  | 1 | 172               | 37.1             | 6.9                            | 7.2                            |                   |                   |     | 14.9 | 8.1  |     |                               |                   |                  |                  |  |  |  | 20.1    | 2.1  | 94.2          | Marsh clay from boring. From 3<br>thin 1 1/2' clay bricks in a 14'<br>section.                       |                                                                 |
| Wk       | 8       | 5  | 17E | SW  | SE  | SE  | 1 | 172               | 28.3             | 7.1                            | 3.2                            |                   |                   |     | 19.0 | 11.2 |     |                               |                   |                  |                  |  |  |  | 26.8    | 1.8  | 95.7          | Marsh clay from bore hole 1/8 mi<br>W. of SEc. From depths 3 1/2/12 1/2'.                            |                                                                 |
| Wk       | 16      | 5  | 17E |     |     | NW  | 1 | 173               | 29.0             | 6.6                            | 4.4                            |                   |                   |     | 19.0 | 11.4 |     |                               |                   |                  |                  |  |  |  | 26.5    | 2.0  | 96.9          | Marsh clay from boring where<br>ridge in marsh crosses road 300<br>from W. line. 6 1/9' depth.       |                                                                 |
| Wk       | Unknown |    |     |     |     |     | 1 | 173               | 54.6             | 21.2                           | 5.8                            |                   |                   |     | 1.7  | 1.0  |     |                               |                   |                  |                  |  |  |  | 8.2     | 6.4  | 92.5          | Clay from lime plant. Source<br>unknown. Plant located in sec. 34<br>T. 6N, R. 17E.                  |                                                                 |
| Wp       |         |    |     |     |     |     | 3 | 271               | 41.7             | 2.1                            | 42.6                           |                   |                   |     | 0.8  | tr   |     |                               | 0.4               | 0.9              | 0.3              |  |  |  | 10.9    |      | 100.0         | Embarrass. Undeveloped.                                                                              |                                                                 |
| Wi       |         |    |     |     |     |     | 3 | 273               | 39.1             | 12.0                           | 5.6                            |                   |                   |     | 15.5 | 4.7  | 0.1 |                               | 1.0               | 3.1              |                  |  |  |  | 19.3    |      | 100.2         | Oshkosh. J.W. Schultz, undevelop<br>7 mi. W. Oshkosh.                                                |                                                                 |
| Wi       |         |    |     |     |     |     | 3 | 273               | 47.3             | 12.4                           | 5.4                            |                   |                   |     | 9.5  | 6.2  | 0.2 |                               | 1.4               | 3.2              |                  |  |  |  | 14.8    |      | 100.3         | Oshkosh. J.W. Schultz, undeveloped                                                                   |                                                                 |
| Wd       | 36      | 25 | 5E  |     |     |     | 1 | 173               | 53.2             | 14.9                           | 14.6                           |                   |                   |     | 1.1  | 2.5  |     |                               |                   |                  |                  |  |  |  | 8.1     |      | 94.9          | Residual clay from Hooper prop-<br>erty immediately W. of Milladore<br>& S. of R.R. 12' thick.       |                                                                 |
| Wd       | 36      | 25 | 5E  |     |     |     | 1 | 173               | 64.9             | 17.9                           | 5.4                            |                   |                   |     | 0.6  | 1.4  |     |                               |                   |                  |                  |  |  |  | 5.6     |      | 95.9          | Residual clay. Same as above.                                                                        |                                                                 |
| Wd       | 27      | 23 | 3E  |     |     |     | 1 | 173               | 46.3             | 16.2                           | 17.8                           |                   |                   |     | 2.6  | 0.8  |     |                               | 0.6               | 4.8              | 0.1              |  |  |  | 10.5    |      | 99.7          | Residual clay from Mitchell<br>property SE of Pittsville. 6 1/8'<br>thick. About 35 acres in extent. |                                                                 |
| Wd       | 18      | 22 | 6E  |     |     |     | 1 | 173               | 52.5             | 14.7                           | 18.1                           |                   |                   |     | 0.9  | 2.4  |     |                               | 0.3               | 5.5              | 1.4              |  |  |  |         | 4.7  |               | 100.5                                                                                                | Residual clay collected near<br>Wisconsin Rapids.               |
| Wd       | 18      | 22 | 6E  |     |     |     | 1 | 173               | 67.5             | 19.5                           | 2.7                            |                   |                   |     |      | 0.8  |     |                               | 0.5               | 2.5              |                  |  |  |  |         | 6.5  |               | 100.2                                                                                                | Residual clay same as above.                                    |
| Wd       | 36      | 23 | 5E  |     |     |     | 1 | 173               | 54.7             | 16.6                           | 10.3                           |                   |                   |     | 0.4  | 1.7  |     |                               | 1.7               | 6.3              | 0.1              |  |  |  | 7.9     |      | 99.6          | Residual clay from Grand Rapids<br>pressed Brick Yards. 3 mi. NW of<br>Wisconsin Rapids.             |                                                                 |
| Wd       | 18      | 22 | 6E  |     |     | SWc | 1 | 173               | 52.3             | 17.6                           | 15.9                           |                   |                   |     | 2.3  | 0.3  |     |                               | 0.2               | 0.9              | tr               |  |  |  | 10.4    |      | 99.9          | Residual clay from diorite S.<br>of Wisconsin Rapids. 8' thick.                                      |                                                                 |

| LOCATION |      |    |    |    |    |    | REF |      | CHEMICAL ANALYSIS |                                |                                |                   |                   |     |           |           |     |                               |                   |                  |                  |  |  |      |      | REMARKS       |       |                                                                                                                 |
|----------|------|----|----|----|----|----|-----|------|-------------------|--------------------------------|--------------------------------|-------------------|-------------------|-----|-----------|-----------|-----|-------------------------------|-------------------|------------------|------------------|--|--|------|------|---------------|-------|-----------------------------------------------------------------------------------------------------------------|
| Co.      | Sec. | T. | R. | 44 | 44 | 44 | #   | Page | SiO <sub>2</sub>  | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaCO <sub>3</sub> | MgCO <sub>3</sub> | FeO | CaO       | MgO       | MnO | P <sub>2</sub> O <sub>5</sub> | Na <sub>2</sub> O | K <sub>2</sub> O | TiO <sub>2</sub> |  |  | Loss | Ign. | Mois-<br>ture | Total | Nearest village, type<br>of deposit, thickness,<br>extent, etc.                                                 |
| Wd       |      | 25 | 5E |    |    |    | 2   | 90   | 52.6              | 12.6                           | 3.8                            |                   |                   |     | 12.8      | 3.2       |     |                               |                   |                  |                  |  |  |      | 12.5 |               | 97.5  | Calcareous clay 33' thick under<br>4 1/8' micaceous clay. Deposit a<br>Millsdore on N. side Wis. Cent. RR       |
| Wd       |      | 25 | 5E |    |    |    | 2   | 113  | 53.2              | 14.9                           | 14.6                           |                   |                   |     | 1.1       | 2.5       |     |                               |                   |                  |                  |  |  |      | 8.1  |               |       | Near Milladore. Bore hole +12' at<br>W. end of Hooper property S. of<br>Wis. Cent. RR. & just W. of village     |
| Wd       |      | 25 | 5E |    |    |    | 2   | 115  | 64.9              | 17.9                           | 5.4                            |                   |                   |     | 0.6       | 1.2       |     |                               |                   |                  |                  |  |  |      | 5.6  |               |       | Near Milladore. Ave. of borings<br>(101+) from E. end of Hooper<br>property.                                    |
| Wd       | 18   | 22 | 6E |    |    | SW | 2   | 116  | 52.3              | 17.6                           | 15.9                           |                   |                   |     | 2.3       | 0.3       |     |                               | 0.2               | 0.9              | tr               |  |  |      | 10.4 |               | 100.0 | Near Wisconsin Rapids. Altered<br>diomite. ±8' thick.                                                           |
| Wd       |      | 22 | 3E |    |    |    | 2   | 119  | 46.3              | 16.2                           | 17.8                           |                   |                   |     | 2.6       | 0.8       |     |                               | 0.6               | 4.8              | 0.1              |  |  |      | 10.5 |               | 99.7  | Near Pittsville. Residual clay<br>just SE of Pittsville on Dexter-<br>ville Rd. Borings 5 1/8'.                 |
| Wd       | 36   | 23 | 6E |    | SW | SW | 2   | 117  | 54.7              | 16.6                           | 10.3                           |                   |                   |     | 0.4       | 1.7       |     |                               | 1.7               | 6.3              | 0.1              |  |  |      | 7.9  |               | 99.8  | At Sigel Station 3 mi. NW Grand<br>Rapids. Residual clay 6' bank.<br>Altered diorites.                          |
| Wd       |      | 25 | 3E |    |    |    | 2   | 150  | 72.6              | 12.2                           | 5.7                            |                   |                   |     | 1.3       | 0.1       |     |                               | 1.4               | 2.5              |                  |  |  |      | 4.1  |               | 99.9  | Near Marshfield at works of Cen-<br>tral Wis. Pressed Brick Co., 3 mi.<br>N. of town. 7' thick. (30' not samp.) |
| Wd       |      | 25 | 3E |    |    |    | 2   | 152  | 75.2              | 12.2                           | 3.9                            |                   |                   |     | 1.7       | 1.0       |     |                               | 2.6               |                  |                  |  |  |      | 3.4  |               | 100.0 | Near Hewitt along Mill Creek 1<br>mi. S. of Wis. Central RR station<br>in boring.                               |
| Wd       |      |    |    |    |    |    | 3   | 225  | 52.5              | 14.7                           | 18.1                           |                   |                   |     | 0.9       | 2.4       | tr  |                               | 0.3               | 5.5              | 1.4              |  |  |      |      | 4.7           | 100.5 | Outcrop of brown clay near<br>Wisconsin Rapids.                                                                 |
| Wd       |      |    |    |    |    |    | 3   | 225  | 34.4              | 17.3                           | 23.8                           |                   |                   |     | 0.3       | 11.2      | 1.6 |                               | 0.2               | 1.9              | 0.5              |  |  |      |      | 9.1           | 100.3 | Same                                                                                                            |
| Wd       |      |    |    |    |    |    | 3   | 225  | 67.5              | 19.5                           | 2.7                            |                   |                   |     |           | 0.8       |     |                               | 0.5               | 2.5              |                  |  |  |      |      | 6.5           | 100.2 | Outcrop<br>of white clay near<br>Wisconsin Rapids.                                                              |
| Wd       |      |    |    |    |    |    | 3   | 226  | 78.8              | 13.4                           | 0.7                            |                   |                   |     | Ca<br>0.6 | Mg<br>0.1 |     |                               | Na<br>0.1         | K<br>0.4         |                  |  |  |      |      | 5.5           | 99.6  | Outcrops near Wisconsin Rapids,<br>unwashed.                                                                    |
| Wd       |      |    |    |    |    |    | 3   | 226  | 49.9              | 36.8                           | 0.7                            |                   |                   |     | Ca<br>tr  |           |     |                               | Na<br>0.1         | K<br>0.5         |                  |  |  |      |      | 11.6          | 99.7  | Outcrops at Wisconsin Rapids,<br>unwashed.                                                                      |
| Wd       | 24   | 22 | 5E |    |    |    | 3   | 226  | 70.8              | 19.0                           | 1.2                            |                   |                   |     | Ca<br>0.2 | Mg<br>tr  |     |                               | Na<br>0.1         | K<br>2.5         |                  |  |  |      |      | 5.5           | 99.4  | Lot 5                                                                                                           |
| Wd       |      |    |    |    |    |    | 3   | 226  | 70.3              | 17.7                           | 2.3                            |                   |                   |     | Ca<br>0.3 | Mg<br>1.5 |     |                               | Na<br>0.4         | K<br>1.7         |                  |  |  |      |      | 5.6           | 99.8  | Near the above.                                                                                                 |
| Wd       |      |    |    |    |    |    | 3   | 226  | 69.3              | 19.2                           | 1.8                            |                   |                   |     | Ca<br>0.4 | Mg<br>0.3 |     |                               | Na<br>2.4         | K<br>3.3         |                  |  |  |      |      | 2.7           | 99.4  | Near the above.                                                                                                 |
| Wd       | 22   | 26 | 5E |    |    |    | 3   | 226  | 54.9              | 28.9                           | 1.5                            |                   |                   |     | Ca<br>1.6 | Mg<br>1.0 |     |                               | Na<br>0.1         | K<br>2.6         | Ti<br>1.0        |  |  |      |      | 9.5           | 100.6 |                                                                                                                 |
| Wd       | 31   | 23 | 6E |    |    |    | 3   | 271  | 52.5              | 14.7                           | 18.1                           |                   |                   |     | 0.9       | 2.4       | tr  |                               | 0.3               | 5.5              | 1.4              |  |  |      | 4.7  |               | 100.5 | Grand Rapids. Scott & Alexander.<br>2' sand over 4' blue clay over 6'<br>altered schist.                        |
| Wd       | 31   | 23 | 6E |    |    |    | 3   | 271  | 34.4              | 17.3                           | 23.8                           |                   |                   |     | 0.3       | 11.2      | 1.6 |                               | 0.2               | 1.9              | 0.5              |  |  |      | 9.1  |               | 100.3 | Same.                                                                                                           |
| Wd       | 31   | 23 | 6E |    |    |    | 3   | 271  | 67.5              | 19.2                           | 2.6                            |                   |                   |     |           | 0.8       |     |                               | 0.5               | 2.5              |                  |  |  |      | 6.5  |               | 100.3 | Same.                                                                                                           |
| Wd       | 18   | 25 | 3E |    |    |    | 3   | 272  | 68.7              | 10.7                           | 3.2                            |                   |                   |     | 3.8       | 2.7       | 0.1 |                               | 1.9               | 2.1              | 0.4              |  |  |      | 6.6  |               | 100.2 | Marshfield. Central Wisconsin<br>Pressed Brick Co. ±45' clay.                                                   |

