

GENERALIZED GEOLOGIC MAP OF KNOX COUNTY, TENNESSEE, WITH MINERAL RESOURCES, MINERAL INDUSTRIES, AND CAVES.

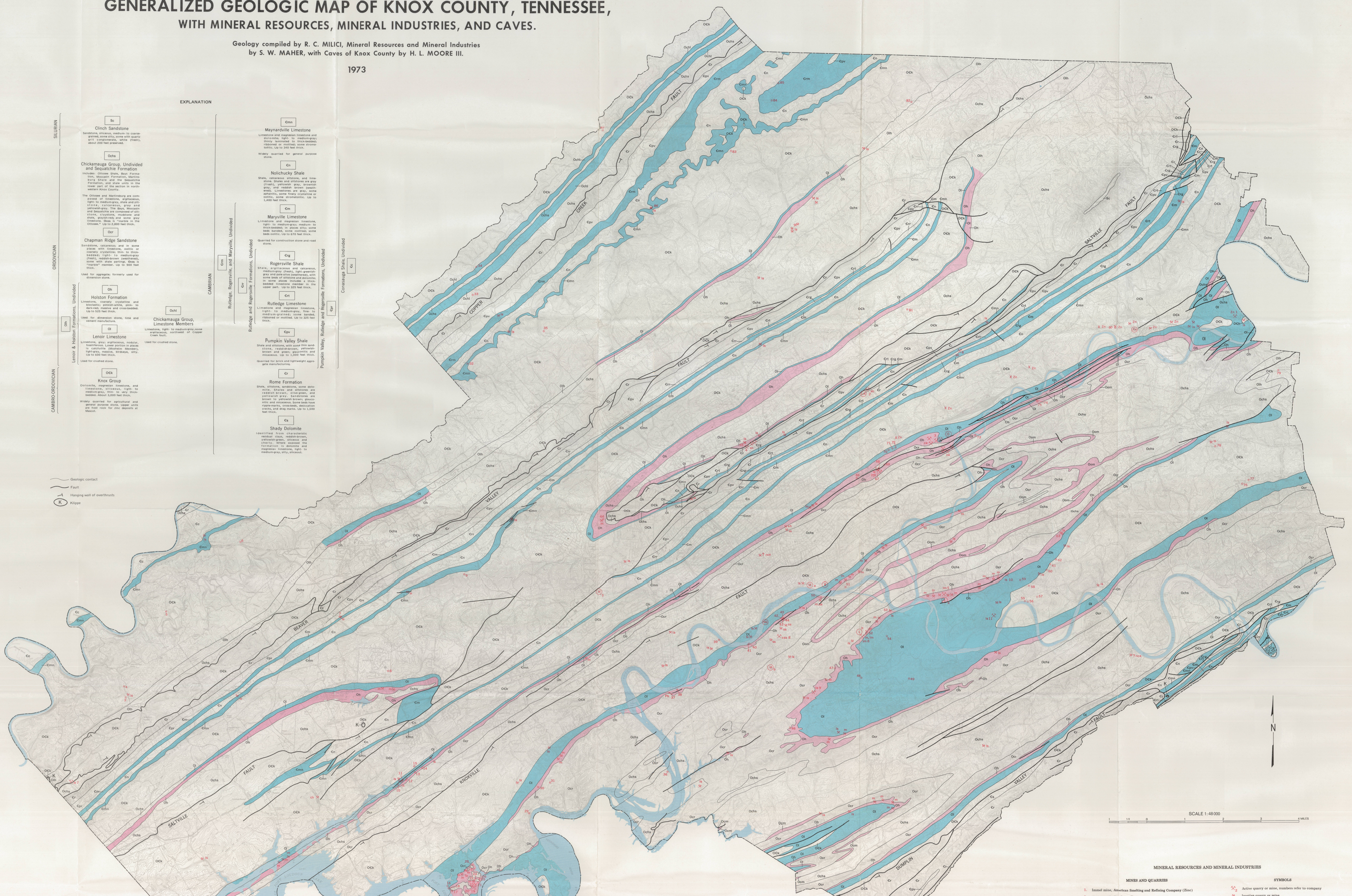
Geology compiled by R. C. MILICI, Mineral Resources and Mineral Industries
by S. W. MAHER, with Caves of Knox County by H. L. MOORE III.

1973

EXPLANATION

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| <p>SILURIAN</p> <p>Os
Ochlocknee Sandstone
Sandstone, limestone, medium to coarse grained, micaceous, light to medium gray, thin bedded, with quartz and chert nodules, and chert nodules. Occasional fossiliferous. Thickness, 200 to 300 feet.</p> <p>Ochs
Chickamauga Group, Undivided and Sequatchie Formation
Includes Chickamauga, Sequatchie, and the Sequatchie Formation, and chert nodules in the lower part of the section in northwestern Knox County.</p> <p>The Chickamauga and Sequatchie are composed of limestone, shale, and sandstone, light to medium gray, thin bedded, with quartz nodules, and chert nodules. The Sequatchie and Sequatchie are composed of sandstone, shale, and limestone, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 200 to 300 feet.</p> <p>Ocr
Chapman Ridge Sandstone
Sandstone, calcareous, and in some places micaceous, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for aggregate, primarily used for dimension stone.</p> <p>Och
Holston Formation
Limestone, gray, crystalline, and micaceous, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for dimension stone, lime, and cement manufacture.</p> <p>Och
Chickamauga Group, Limestone Members
Limestone, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for crushed stone.</p> <p>Ocl
Lenoir Limestone
Limestone, gray, crystalline, regular bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for crushed stone.</p> <p>Ock
Knox Group
Dolomite, gray, crystalline, and micaceous, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for aggregate, primarily used for dimension stone.</p> | <p>ORDOVICIAN</p> <p>Om
Maynardville Limestone
Limestone and calcareous sandstone and dolomite, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for general purpose stone.</p> <p>On
Nolichucky Shale
Shale, calcareous, and micaceous, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for aggregate, primarily used for dimension stone.</p> <p>Oml
Maryville Limestone
Limestone and calcareous sandstone and dolomite, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for general purpose stone.</p> <p>Omg
Rogersville Shale
Shale, argillaceous and calcareous, medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for aggregate, primarily used for dimension stone.</p> <p>Omr
Rutledge Limestone
Limestone and calcareous sandstone and dolomite, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for general purpose stone.</p> <p>Oms
Pumpkin Valley Shale
Shale and sandstone, with some thin bedded limestone, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for aggregate, primarily used for dimension stone.</p> <p>Omt
Rome Formation
Shale, limestone, sandstone, some dolomite, micaceous, light to medium gray, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for aggregate, primarily used for dimension stone.</p> <p>Oms
Shady Dolomite
Dolomite, gray, crystalline, and micaceous, thin bedded, with quartz nodules, and chert nodules. Thickness, 100 to 200 feet.</p> <p>Use for aggregate, primarily used for dimension stone.</p> | <p>CAMBRIAN</p> <p>Co
Conasauga Shale, Undivided</p> <p>Cr
Rutledge and Rogersville Formations, Undivided</p> <p>Cs
Pumpkin Valley, Rutledge and Rogersville Formations, Undivided</p> |
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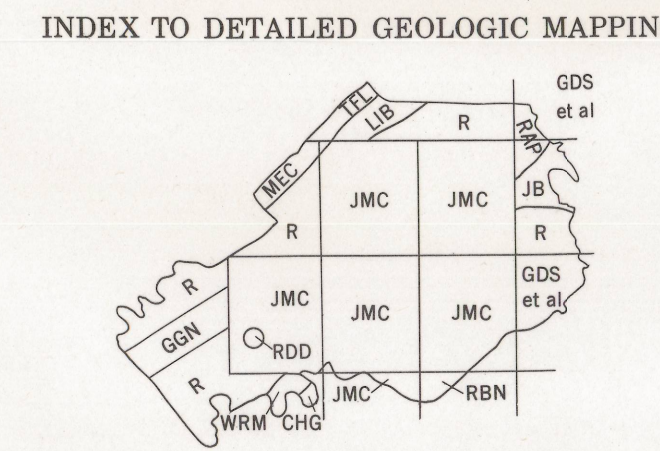
- Geologic contact
- Fault
- Hanging wall of overthrust
- Klippe



CAVES

Roman numerals indicate contiguous groups.

<p>WEST</p> <p>I 1 - Balfour Bluff Cave 2 - Little Saltwater Bluff Cave</p> <p>II 3 - Christian Cave 4 - Lower Creek Cave 5 - Low Rock Cave</p> <p>III 6 - Caverns of the Ridge 7 - Bull Camp Quarry Cave 8 - Cedar Bluff Cave 9 - Round Cave</p> <p>IV 10 - Head Piton Cave 11 - Three Hole Cave 12 - Fox Root Cave 13 - Rabbit Hole/Ten Mile Pit 14 - Shovel Cave 15 - Wagon Wheel Cave</p> <p>V 16 - Sleeping Bay Cave 17 - Kellar Bluff Cave I 18 - Kellar Bluff Cave II 19 - Sleeping Hole Cave 20 - Kellar Bend Cave 21 - Balfour Bluff Cave 22 - Balfour Bluff Pit I 23 - Balfour Bluff Pit II</p>	<p>VI 24 - Labyrinth Cave 25 - Labyrinth Cave 26 - Labyrinth Cave 27 - Bone Quarry Cave 28 - Bone Quarry Cave 29 - Bone Quarry Cave 30 - Bone Quarry Cave 31 - Bone Quarry Cave 32 - Bone Quarry Cave 33 - Bone Quarry Cave 34 - Bone Quarry Cave 35 - Bone Quarry Cave 36 - Bone Quarry Cave 37 - Bone Quarry Cave 38 - Bone Quarry Cave 39 - Bone Quarry Cave 40 - Bone Quarry Cave 41 - Bone Quarry Cave 42 - Bone Quarry Cave 43 - Bone Quarry Cave 44 - Bone Quarry Cave 45 - Bone Quarry Cave 46 - Bone Quarry Cave 47 - Bone Quarry Cave 48 - Bone Quarry Cave 49 - Bone Quarry Cave 50 - Bone Quarry Cave 51 - Bone Quarry Cave 52 - Bone Quarry Cave 53 - Bone Quarry Cave 54 - Bone Quarry Cave 55 - Bone Quarry Cave 56 - Bone Quarry Cave 57 - Bone Quarry Cave 58 - Bone Quarry Cave 59 - Bone Quarry Cave 60 - Bone Quarry Cave 61 - Bone Quarry Cave 62 - Bone Quarry Cave 63 - Bone Quarry Cave 64 - Bone Quarry Cave 65 - Bone Quarry Cave 66 - Bone Quarry Cave 67 - Bone Quarry Cave 68 - Bone Quarry Cave 69 - Bone Quarry Cave 70 - Bone Quarry Cave 71 - Bone Quarry Cave 72 - Bone Quarry Cave 73 - Bone Quarry Cave 74 - Bone Quarry Cave 75 - Bone Quarry Cave 76 - Bone Quarry Cave 77 - Bone Quarry Cave 78 - Bone Quarry Cave 79 - Bone Quarry Cave 80 - Bone Quarry Cave 81 - Bone Quarry Cave 82 - Bone Quarry Cave 83 - Bone Quarry Cave 84 - Bone Quarry Cave 85 - Bone Quarry Cave 86 - Bone Quarry Cave 87 - Bone Quarry Cave 88 - Bone Quarry Cave 89 - Bone Quarry Cave 90 - Bone Quarry Cave 91 - Bone Quarry Cave 92 - Bone Quarry Cave 93 - Bone Quarry Cave 94 - Bone Quarry Cave 95 - Bone Quarry Cave 96 - Bone Quarry Cave 97 - Bone Quarry Cave 98 - Bone Quarry Cave 99 - Bone Quarry Cave 100 - Bone Quarry Cave</p>	<p>SOUTH</p> <p>VII 96 - Small Cave 97 - Small Cave 98 - Small Cave 99 - Small Cave 100 - Small Cave 101 - Small Cave 102 - Small Cave 103 - Small Cave 104 - Small Cave 105 - Small Cave 106 - Small Cave 107 - Small Cave 108 - Small Cave 109 - Small Cave 110 - Small Cave 111 - Small Cave 112 - Small Cave 113 - Small Cave 114 - Small Cave 115 - Small Cave 116 - Small Cave 117 - Small Cave 118 - Small Cave 119 - Small Cave 120 - Small Cave 121 - Small Cave 122 - Small Cave 123 - Small Cave 124 - Small Cave 125 - Small Cave 126 - Small Cave 127 - Small Cave 128 - Small Cave 129 - Small Cave 130 - Small Cave 131 - Small Cave 132 - Small Cave 133 - Small Cave 134 - Small Cave 135 - Small Cave 136 - Small Cave 137 - Small Cave 138 - Small Cave 139 - Small Cave 140 - Small Cave 141 - Small Cave 142 - Small Cave 143 - Small Cave 144 - Small Cave 145 - Small Cave 146 - Small Cave 147 - Small Cave 148 - Small Cave 149 - Small Cave 150 - Small Cave</p>	<p>NORTH</p> <p>XI 50 - Island House Ave. Caves 51 - Island House Ave. Caves 52 - Island House Ave. Caves 53 - Island House Ave. Caves 54 - Island House Ave. Caves 55 - Island House Ave. Caves 56 - Island House Ave. Caves 57 - Island House Ave. Caves 58 - Island House Ave. Caves 59 - Island House Ave. Caves 60 - Island House Ave. Caves 61 - Island House Ave. Caves 62 - Island House Ave. Caves 63 - Island House Ave. Caves 64 - Island House Ave. Caves 65 - Island House Ave. Caves 66 - Island House Ave. Caves 67 - Island House Ave. Caves 68 - Island House Ave. Caves 69 - Island House Ave. Caves 70 - Island House Ave. Caves 71 - Island House Ave. Caves 72 - Island House Ave. Caves 73 - Island House Ave. Caves 74 - Island House Ave. Caves 75 - Island House Ave. Caves 76 - Island House Ave. Caves 77 - Island House Ave. Caves 78 - Island House Ave. Caves 79 - Island House Ave. Caves 80 - Island House Ave. Caves 81 - Island House Ave. Caves 82 - Island House Ave. Caves 83 - Island House Ave. Caves 84 - Island House Ave. Caves 85 - Island House Ave. Caves 86 - Island House Ave. Caves 87 - Island House Ave. Caves 88 - Island House Ave. Caves 89 - Island House Ave. Caves 90 - Island House Ave. Caves 91 - Island House Ave. Caves 92 - Island House Ave. Caves 93 - Island House Ave. Caves 94 - Island House Ave. Caves 95 - Island House Ave. Caves 96 - Island House Ave. Caves 97 - Island House Ave. Caves 98 - Island House Ave. Caves 99 - Island House Ave. Caves 100 - Island House Ave. Caves</p>
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Geology compiled from geologic quadrangle maps by J. M. Calverton, R. B. Neuman, G. D. Swingle and others, and geologic mapping by Jack Bridge, University of Tennessee. Shows by L. I. Brown, M. E. Cassey, C. H. Gibbs, T. F. Lonsdale, W. R. Mohr, G. C. Newkirk, R. A. Palmer, and H. D. Davis; and reconnaissance of unmapped areas—R. Map preparation and editing by Robert A. Miller and Phyllis M. Gorman.

SCALE 1:48,000

MINERAL RESOURCES AND MINERAL INDUSTRIES

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| <p>MINES AND QUARRIES</p> <p>1. Insect mill, American Smelting and Refining Company (Zinc)</p> <p>2. Shale pit, Shulls Corp. (Light-weight aggregate)</p> <p>3. Limestone quarry, Ideal Cement Company (Cement)</p> <p>4. Shale pit, General Shale Products Corp. (Bricks)</p> <p>5. Limestone quarry, Foothills Mineral Company (Lime)</p> <p>6. Limestone quarry, Williams Lime Company (Lime)</p> <p>7. Deas-Lee quarry, Valon Materials Co., Inc. (Crushed stone)</p> <p>8. City quarry, Valon Materials Co., Inc. (Crushed stone)</p> <p>9. Kincaid quarry, Knoxville Crushed Stone Company (Crushed stone)</p> <p>10. Marble quarry, Burkhardt Quarry and Supplies (Crushed stone)</p> <p>11. Forks of the River quarry, American Limestone Division (Crushed stone)</p> | <p>MILLS AND PLANTS</p> <p>12. Zinc mill, American Smelting and Refining Company</p> <p>13. Light-weight aggregate mill, Shulls Corporation</p> <p>14. Cement plant, Ideal Cement Company</p> <p>15. Brick plant, General Shale Products Corporation</p> <p>16. Marble mill, Tennessee Marble Company</p> <p>17. Marble mill, Caskey Marble Company</p> <p>18. Marble mill, Appalachian Marble Company</p> <p>19. Sand & Gravel plant, Knoxville Sand and Gravel Division</p> <p>20. Lime plant, Foothills Mineral Company</p> <p>21. Williams Lime Company</p> | <p>SYMBOLS</p> <p>Active quarry or mine, numbers refer to company</p> <p>Inactive quarry or mine</p> <p>Prospect</p> <p>Questionable location</p> <p>Mill or Plant</p> <p>Zinc</p> <p>Lead</p> <p>Limestone</p> <p>Marble</p> <p>Cement</p> <p>Natural cement</p> <p>Dimension sandstone</p> <p>Shale</p> <p>Crushed sandstone</p> <p>Trass</p> <p>Chert</p> <p>Limestone units</p> <p>Marble units</p> |
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