

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

TO ACCOMPANY MAP MR-17

ASBESTOS IN THE UNITED STATES

(Exclusive of Alaska and Hawaii)

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Introduction

The asbestos deposits in the United States (exclusive of Alaska and Hawaii) are shown on the accompanying map. The principal mineralogic types of asbestos (chrysotile and amphibole) are indicated by the shape of symbols, and the relative importance of the deposit is indicated by the size of symbols.

The text lists localities by State by numbers that are keyed to the map. Localities are distinguished by name of mine, prospect, or geographic area; their coordinates are given to the nearest minute of latitude and longitude. Geologic relations of each occurrence, if known, are characterized briefly. The text and map were compiled from published and unpublished information, and at least one reference is given for each locality if reports on it have been published.

Chrysotile asbestos, a variety of serpentine, occurs chiefly in serpentinized peridotite and is distributed in the United States in two principal belts, the eastern extending from Maine to Alabama, and the western extending from Washington to California, where numerous masses of ultramafic rocks were intruded in Paleozoic and Mesozoic time, respectively. Domestic production from deposits of this type has not been large compared with that of Canada from the extensively developed deposits in Quebec, Ontario, and British Columbia. The principal mine in the United States is located at Belvidere Mountain, Vt. Minor amounts of asbestos have been produced from other deposits in these belts and from scattered occurrences of chrysotile elsewhere in a number of States between them. Increased exploration and development activity for short-fiber chrysotile has recently been reported in California.

Chrysotile also occurs in bedded limestone, metamorphosed close to intrusions of diabase. The principal occurrences of this type are in Arizona, where small quantities of long-fiber, low-iron chrysotile have been mined from numerous small deposits.

Several species of amphibole occur in fibrous forms; in the United States only anthophyllite and tremolite are known to have commercial importance. As both the anthophyllite and tremolite occur in ultramafic rocks, associated greenstone, and amphibolite, the overall distribution of amphibole asbestos in the United States is like that of chrysotile. The deposits are generally small and erratic in distribution.

Locality Index

Locality	Lat. N.	Long. W.
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ALABAMA

Tallapoosa County

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|---|--------|--------|
| 1. Dadeville area. Short-fiber amphibole asbestos associated with basic intrusive rocks. Maynard and others, 1923; Pallister, 1955. | 32°54' | 85°44' |
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ARIZONA

All asbestos deposits are chrysotile in serpentine veins in metamorphosed limestone. General reference: Stewart, 1955.

Coconino County

- | | | |
|---------------------------------------|--------|---------|
| 1. Bass deposits. Diller, 1908, 1914. | 36°15' | 112°23' |
| 2. Hance deposits. Pratt, 1905. | 36°03' | 111°58' |

Gila County

- | | | |
|---|--------|---------|
| 3. Ash Creek prospects. | 33°58' | 110°55' |
| 4. Maxwell-Wright mines. | 33°59' | 110°53' |
| 5. Wilson Creek-Walnut Creek mines and prospects. | 34°00' | 110°51' |
| 6. Sloane Creek group. | 34°00' | 110°48' |
| 7. Rock House group. | 33°57' | 110°48' |
| 8. Lucky Strike-Pueblo-Reynolds Falls mines. | 33°51' | 110°55' |
| 9. American Ores mine. | 33°46' | 110°57' |
| 10. Miami-Globe groups. | 33°45' | 110°56' |
| 11. Regal mines. | 33°47' | 110°36' |
| 12. Salt River Draw mines. | 33°51' | 110°34' |
| 13. Horse Shoe mine. | 33°49' | 110°30' |
| 14. Canadian-Phillips-Emsco-Pine Top mines. | 33°47' | 110°32' |
| 15. Chrysotile mines. | 33°44' | 110°34' |
| 16. K & M mine. | 33°48' | 110°22' |
| 17. Bear Canyon mine. | 33°32' | 110°20' |

Locality Index (cont'd.)

ARIZONA (cont'd.)

Gila County (cont'd.)

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|--------------------------------|----------------|
| 18. Metate mine. | 33°25' 110°36' |
| 19. Hayes Mountains prospects. | 33°15' 110°38' |

Pinal County

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|----------------------------|----------------|
| 20. Pinto Creek prospects. | 33°26' 111°04' |
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CALIFORNIA

Siskiyou County

- | | |
|--|----------------|
| 1. Murray prospect. Asbestos of unknown variety. Averill, 1935. | 41°55' 123°09' |
| 2. Cady prospect. Asbestos of unknown variety. Wiebelt and Smith, 1959. | 41°44' 122°44' |
| 3. Chamberlain (Burns Ranch) prospect. Brittle chrysotile asbestos in serpentine. Wiebelt and Smith, 1959. | 41°29' 122°34' |
| 4. North View prospect. Chrysotile asbestos. | 41°25' 122°29' |
| 5. Shasta View (Sylvester) prospect. Narrow veins of chrysotile asbestos in serpentine. Wiebelt and Smith, 1959. | 41°24' 122°27' |
| 6. Mount Eddy deposit. Chrysotile asbestos in peridotite. Wiebelt and Smith, 1959. | 41°19' 122°28' |
| 7. Johnson deposit. Type of asbestos is unknown. Averill, 1935. | 41°19' 122°29' |
| 8. Calethia group. Chrysotile asbestos in serpentine. Wiebelt and Smith, 1959. | 41°17' 122°26' |
| 9. Keystone (Scott River) asbestos claims. Chrysotile asbestos in serpentine. Wiebelt and Smith, 1959. | 41°15' 122°52' |

Shasta County

- | | |
|--|----------------|
| 10. Stock prospect. Chrysotile-bearing rock with minor amounts of amphibole asbestos in serpentine. Wiebelt and Smith, 1959. | 41°06' 122°26' |
| 11. Sylvester (Loma Blanca) Amphibole-Asbestos mine. Tremolite asbestos in serpentine. Wiebelt and Smith, 1959; Rice, 1957. | 41°06' 122°23' |
| 12. Hanegan prospects. Chrysotile asbestos. Averill, 1939. | 41°05' 122°30' |
| 13. Asbestos Empress (Blas) claims. Chrysotile asbestos in serpentine and peridotite. Wiebelt and Smith, 1959. | 41°03' 122°28' |

CALIFORNIA (cont'd.)

Trinity County

General reference: Wiebelt and Smith, 1959.

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|---|----------------|
| 14. White Cloud prospect. Weathered amphibole asbestos. | 41°10' 122°30' |
| 15. Tamarack Lake (Trinity Asbestos) claims. Chrysotile asbestos in serpentine. | 41°06' 122°28' |
| 16. Jones Brothers mine. Anthophyllite asbestos in serpentine. | 41°05' 122°43' |
| 17. Red Mountain deposit. Chrysotile asbestos in serpentine. | 40°03' 123°13' |

Lake County

All deposits are chrysotile asbestos in serpentine.

General reference: Brice, 1953.

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|---|----------------|
| 18. Copsey and Jones prospect. Wiebelt and Smith, 1959. | 38°51' 122°40' |
| 19. Marylyne prospect. | 38°55' 122°30' |

Napa County

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| 20. Kohler and Chase mine. Short-fiber chrysotile asbestos in serpentine. Wiebelt and Smith, 1959. | 38°29' 122°11' |
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Contra Costa County

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|---|----------------|
| 21. Mt. Diablo district claims. Asbestos of unknown variety in serpentine. Wiebelt and Smith, 1959. | 37°57' 121°49' |
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Alameda County

- | | |
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| 22. John D. Hoff Asbestos Company. Short-fiber asbestos of unknown variety in serpentine. Wiebelt and Smith, 1959. | 37°48' 122°09' |
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Plumas County

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|---|----------------|
| 23. Asbestos Nos. 1, 2, and 3. Amphibole asbestos. Logan, 1943. | 40°00' 121°09' |
| 24. Spring Garden Tunnel. Amphibole asbestos in sheared "greenstone". | 39°52' 120°46' |

Sierra County

Slip-fiber amphibole asbestos in schist and serpentine. General reference: Wiebelt and Smith, 1959.

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|---------------------------------|----------------|
| 25. Lloyd and Milward claims. | 39°39' 120°40' |
| 26. W. W. Casserly prospect. | 39°33' 120°54' |
| 27. Lloyd and Milward prospect. | 39°33' 120°38' |

Locality Index (cont'd.)

CALIFORNIA (cont'd.)

Nevada County

28. Sierra (Stark) Asbestos deposit. Cross-fiber chrysotile in ultra-basic intrusion of Jurassic age. Wiebelt and Smith, 1959. 39°22' 120°49'
29. Rolph Ranch prospect. Logan, 1941. 39°09' 120°58'

Yuba County

General reference: O'Brien, 1952.

30. Kingbird. Very small seams of asbestos of unknown variety in serpentine. 39°33' 121°08'
31. Mount Hope prospect. Small seams of asbestos of unknown variety along a serpentine-slate contact. 39°31' 121°13'
32. Galena Hill. Small seams of asbestos of unknown variety in serpentine. 39°28' 121°03'

Placer County

33. Monumental Hill. Chrysotile asbestos. Logan, 1927. 39°17' 120°35'
34. Sullivan prospect. Short-fiber chrysotile asbestos in serpentine. Logan, 1927. 39°14' 120°48'
35. Morgan deposits. Anthophyllite in serpentine. Wiebelt and Smith, 1959. 39°12' 120°47'
36. Iowa Hill deposits (Blue Wing & Dewey claims). White slip-fiber tremolite. Wiebelt and Smith, 1959. 39°06' 120°51'

El Dorado County

37. French Hill claim. Asbestos of unknown variety. Clark and Carlson, 1956; Wiebelt and Smith, 1959. 38°56' 120°55'
38. Contraband (El Dorado) mine. Chrysotile (?) asbestos. Clark and Carlson, 1956; Wiebelt and Smith, 1959. 38°52' 120°49'

Amador County

Deposits are the amphibole asbestos type.
General reference: Wiebelt and Smith, 1959.

39. Mace Ranch prospect. 38°22' 120°54'
40. George Thomas prospect. 38°20' 120°45'

Calaveras County

41. Neugebauer. Veinlets of chrysotile asbestos associated with a chromite deposit in a schistose 38°14' 120°48'

CALIFORNIA (cont'd.)

Calaveras County (cont'd.)

serpentinized saxonite. Cater, 1948.

42. Nuland and Nuner prospect. Asbestos occurrence of unknown variety. Wiebelt and Smith, 1959. 38°13' 120°41'
43. Mountain Ranch area. Chrysotile asbestos veinlets in serpentine. Wiebelt and Smith, 1959. 38°14' 120°30'
44. Murphy area. Veins and veinlets of slip-fiber tremolite or actinolite. Wiebelt and Smith, 1959. 38°08' 120°30'
45. Turner and Lloyd prospect. Short-fiber chrysotile asbestos. Wiebelt and Smith, 1959. 38°01' 120°38'
46. Voorhies (American Asbestos) serpentine. Cross-fiber chrysotile in serpentinized saxonite. Wiebelt and Smith, 1959. 37°56' 120°33'

Tuolumne County

Chrysotile asbestos seams in serpentine.
General reference: Wiebelt and Smith, 1959.

47. Premier (Rawhide) Asbestos mine. 37°57' 120°27'
48. Ashley prospect. 37°47' 120°17'

Madera County

49. Deep Canyon claim. Amphibole asbestos. Logan, 1950. 37°19' 119°45'

Fresno County

50. Ross-Garcia. Short-fiber asbestos of unknown variety. Logan and others, 1951. 36°16' 120°34'

San Benito County

All deposits are chrysotile asbestos in sheared serpentine.

51. San Benito (Long Ryan) Asbestos Company. Laizure, 1926. 36°22' 120°46'
52. Simas Asbestos property. Averill, 1947. 36°20' 120°43'
53. Condor. California Department of Natural Resources, Division of Mines, 1957. 36°21' 120°36'

Monterey County

54. Burro prospects. Chrysotile asbestos veins in serpentine. Laizure, 1925. 35°52' 121°17'

Inyo County

55. Huntley Industrial Minerals, Inc. 36°49' 117°27'

Locality Index (cont'd.)

CALIFORNIA (cont'd.)

Inyo County (cont'd.)

Amphibole asbestos. Norman and Stewart, 1951.

56. Indian Camp (Goldbelt Springs). Cross-fiber chrysotile asbestos veins in serpentinized limestone. Bowles, 1955; Rice, 1957. 36°37' 117°31'
57. McIlroy. Slip-fiber tremolite in a fault zone in limestone and dolomite. Norman and Stewart, 1951. 36°31' 117°55'

Kern County

58. Sunshine (Jawbone Canyon). Chrysotile asbestos in serpentine. Tucker, 1929. 35°20' 118°09'
59. San Emigdio deposit. Amphibole asbestos in serpentine. Tucker, 1929; Tucker and others, 1949. 34°49' 119°09'

Los Angeles County

60. Fiber Queen. Short fiber chrysotile asbestos along a shear zone in chloritized shale. Gay and Hoffman, 1954. 34°20' 118°27'

San Bernardino County

61. Cronese deposit. Amphibole and chrysotile (?) asbestos in dolomitic limestone. Tucker and Sampson, 1931. 35°07' 116°00'
62. Golconda (Hicks, Fleetfoot, Conda, Fireproof, or Scorpion). Cross- and slip-fiber tremolite asbestos in quartz schist. Bowen, 1954. 34°49' 117°15'

Riverside County

General reference: Tucker and Sampson, 1945.

63. Perris deposit. Amphibole asbestos in a shear zone in granite. 33°46' 117°16'
64. Percival mine. Veins of slip-fiber tremolite in schist. 33°37' 116°29'
65. Serpentine Hill. Narrow seams of amphibole asbestos. 33°36' 116°26'
66. Dunn deposit. Amphibole asbestos in belt of serpentine schist. 33°36' 116°29'

CONNECTICUT

Litchfield County

1. Satan's Kingdom deposit. A large vein of pyrophyllite. Pearre, 1957; Schairer, 1931. 41°51' 72°59'

New Haven County

2. Maltby Lakes. Slip- and cross- 41°18' 72°59'

CONNECTICUT (cont'd.)

New Haven County (cont'd.)

fiber chrysotile in serpentinite. Schairer, 1931.

GEORGIA

General reference: Hopkins, 1914.

Rabun County

1. Pine Mountain area (Laurel Creek, Hicks and Pig Pen Mountain). Long-fiber anthophyllite asbestos associated with peridotite (dunite). Hunter, 1941. 34°57' 83°11'
2. Mill Creek area. Anthophyllite asbestos in harzburgite. 34°59' 83°18'
3. Dillard area prospects. Amphibole asbestos in serpentinized dunite. 34°59' 83°25'
4. Andrew Gennett property. Mass-fiber amphibole asbestos. 34°53' 83°20'
5. Burton mine. Chrysotile asbestos in peridotite. Bowles, 1955. 34°51' 83°35'

Habersham County

6. Mack Mountain deposit. Anthophyllite asbestos associated with talcose and chloritic schist. Bowles, 1955. 34°45' 83°36'
7. Hollywood mine. Mass-fiber anthophyllite asbestos associated with peridotite and pyroxenite. Bowles, 1955; Reifsnider, 1925. 34°39' 83°27'
8. Sautee Creek (Berrong). Mass-fiber amphibole asbestos associated with massive serpentine rock. 34°42' 83°38'

White County

9. Sall Mountain-Calhoun mines. Mass-fiber anthophyllite asbestos in biotite-granite gneiss. Bowles, 1955. 39°40' 83°41'
10. Cleveland mine. Talcose asbestos near contact of granite gneiss with schists and hornblende gneiss. Bowles, 1955. 34°37' 83°45'

Barrow County

11. Arnold mine. Cross- and mass-fiber amphibole asbestos. Bowles, 1955. 33°58' 83°35'

Coweta County

12. Moreland area. Cross-fiber amphibole asbestos associated with biotite granite and hornblende gneiss. Bowles, 1955. 33°17' 84°46'

Locality Index (cont'd.)

GEORGIA (cont'd.)

Meriwether County

13. Luthersville (Camp property). 33°12' 84°45'
Cross- and slip-fiber amphibole asbestos in talcose rock associated with granite or granite gneiss. Bowles, 1955.

Troup County

14. Bryan property near West Point. 32°53' 84°55'
Cross-fiber amphibole asbestos veins in talcose rock probably derived from peridotite. Bowles, 1955.

IDAHO

General reference: Anderson, 1930.

Clearwater County

Slip-fiber anthophyllite asbestos in altered harzburgite.

1. Teakean. 46°33' 116°20'
2. Orofino Creek. 46°29' 116°02'

Idaho County

3. Kamiah mine. Brittle mass-fiber anthophyllite asbestos in altered dunite. Anderson, 1931. 46°13' 115°50'
4. Blacktail. Woodlike slip-fiber anthophyllite in narrow seams. 45°54' 115°57'

MAINE

Somerset County

1. Spencer area. Slip- and cross-fiber chrysotile in serpentine. Bowles, 1955; Wing, 1951. 45°21' 70°14'

Hancock County

2. Deer Isle deposits. Chrysotile asbestos in serpentinite. Maine Geological Survey, 1957; Wing, 1951. 44°16' 68°40'

MARYLAND

General reference: Bangs, 1946.

Harford County

Slip-fiber tremolite associated with basic igneous rocks.

1. Dublin area. 39°39' 76°17'
2. Jenkins and Neikirk mines. 39°42' 76°24'
3. Slade farm. 39°42' 76°26'
4. Durham farm. 39°39' 76°29'
5. Coopstown area. 39°35' 76°27'

MARYLAND (cont'd.)

Baltimore County

6. Parkton area. Low quality amphibole asbestos. 39°40' 76°41'
7. Powhatan area. Tremolite asbestos. 39°20' 76°44'
8. Bok Asbestos mine. Slip-fiber anthophyllite. 39°19' 76°47'
9. Alberton mine. Anthophyllite asbestos. 39°20' 76°49'

MASSACHUSETTS

Berkshire County

1. North Mountain area. Chrysotile asbestos veins in large body of ultramafic rock. Herz, 1958. 42°32' 73°10'
2. Hinsdale mine. Amphibole asbestos. Pearre, 1956. 42°27' 73°09'

Hampshire County

3. Pelham quarry. Fibrous anthophyllite veins in large block of saxonite enclosed in granite gneiss. Emerson, 1898, 1917; Pearre, 1956. 42°21' 72°27'

MONTANA

General reference: Perry, 1948.

Lincoln County

1. Libby (Rainy Creek). Brittle tremolite asbestos associated with vermiculite in dikelike masses in pyroxenite. 48°27' 115°25'

Gallatin County

2. Karst Resort. Woodlike fiber anthophyllite in altered peridotite dikes in Precambrian schist and gneiss. 45°21' 111°11'

Madison County

3. Cliff Lake (Montbestos, Little Mile Creek). Chrysotile asbestos in limestone similar to Arizona deposits. 44°46' 111°25'

NEW YORK

General references: Luedke and others, 1959; Newland, 1921.

Warren County

Chrysotile asbestos veins in serpentinized zones in dolomite. General reference: Bowles, 1955.

1. Brant Lake prospect. 43°45' 73°39'
2. Thurman prospect. 43°31' 73°55'

Locality Index (cont'd.)

NEW YORK (cont'd.)

Putnam County

3. Cold Spring area. Chrysotile asbestos veins in serpentized zones in dolomite. 41°26' 73°55'

Richmond County

4. Staten Island. Slip- and cross-fiber chrysotile in serpentinite. 40°35' 74°09'

NORTH CAROLINA

Ashe County

1. Todd area. Chrysotile asbestos associated with ultramafic igneous rocks. Bowles, 1955; Pratt and Lewis, 1905. 36°20' 81°35'

Watauga County

2. Rich Mountain deposit. Chrysotile asbestos associated with ultramafic igneous rocks. Pratt and Lewis, 1905. 36°14' 81°44'

Wilkes County

3. North Wilkesboro area. Chrysotile asbestos associated with ultramafic igneous rocks. Pratt and Lewis, 1905. 36°11' 81°09'

Avery County

4. Frank area (Squirrel Creek). Slip-fiber anthophyllite asbestos in serpentized dunite. Bowles, 1955; Hunter, 1941; Murdock, 1950; Pratt and Lewis, 1905. 36°04' 82°00'

Mitchell County

5. Bakersville. Seams of chrysotile asbestos in dunite. Bowles, 1955; Hunter, 1941. 36°00' 82°08'

Yancey County

6. Green Mountain. Anthophyllite asbestos. Murdock, 1950. 35°59' 82°15'
7. Cane River deposit. Mass-fiber anthophyllite asbestos. Bowles, 1955. 35°54' 82°24'
8. Bluerock-New Dale mines. Anthophyllite asbestos probably derived from altered dunite. Bowles, 1955; Hunter, 1941; Murdock, 1950; Norton, 1943. 35°53' 82°11'

Transylvania County

9. Brevard area. Anthophyllite asbestos. Bowles, 1955. 35°16' 82°45'

NORTH CAROLINA (cont'd.)

Jackson County

10. Sapphire ("Asbestos mine"). Chrysotile asbestos in a large mass of enstatite. Pratt and Lewis, 1905. 35°07' 83°00'
11. Glenville area. Chrysotile asbestos in peridotite. Pratt and Lewis, 1905. 35°11' 83°09'

Macon County

12. Nantahala area. Anthophyllite asbestos. Bowles, 1955. 35°14' 83°38'
13. Norton dunite. Anthophyllite asbestos associated with chlorite in an amphibolite. Hopkins, 1914; Hunter, 1941. 35°00' 83°22'

OREGON

Grant County

1. Oregon asbestos mine. Chrysotile asbestos veins in serpentine. Oregon Department of Geology and Mineral Industries, 1941. 44°27' 119°03'
2. Stithem. Short cross-fiber chrysotile asbestos in serpentinite. Bowles, 1955. 44°36' 118°39'

Baker County

2. Pine Creek prospects. Harsh weak slip- and cross-fiber anthophyllite asbestos along shear zones in schists and greenstones. Moore, 1937. 44°33' 117°55'
4. Bald Mountain. Anthophyllite asbestos. Gilluly, 1937. 44°31' 117°48'
5. West Fork. Chrysotile asbestos. Gilluly, 1937. 44°40' 117°44'

Josephine County

6. L. E. J. Slip-fiber tremolite asbestos in dunite. 42°22' 123°25'

Jackson County

General reference: Staples, 1942.

7. Graves Creek. 42°39' 123°12'
8. Liberty. Iron-free tremolite asbestos. 42°38' 122°59'

PENNSYLVANIA

Delaware County

1. Media area (Village Green, Rockdale, and Smedley) mines. Unknown variety of asbestos associated with untramafic igneous rocks. 39°53' 75°23'

Locality Index (cont'd.)

RHODE ISLAND

Providence County

1. Beacon Pole Hill deposit, Crocidolite asbestos, Bowles, 1955; Quinn and others, 1949. 41°58' 71°28'

SOUTH CAROLINA

Spartanburg County

General reference: Sloan, 1908.

1. Landrum area. Unknown variety of asbestos in dikes of pyroxenite altered to amphibolite. 34°54' 81°54'
2. Enoree area. Unknown variety of asbestos in magnesian rocks. 34°39' 81°55'

Pickens County

3. Pickens area. Asbestos of unknown variety formed by alteration of magnesian rock in aphanitic hornblende slates. 34°54' 82°43'
4. Woodall Mountain (Hagood property). Asbestos of unknown variety in narrow belt of partly metamorphosed rock in aphanitic hornblende slate. 34°53' 82°49'

Oconee County

5. Ramsay place. Asbestos of unknown variety in partly metamorphosed amphibolite. 34°46' 82°52'

Anderson County

6. Anderson area. Asbestos of unknown variety in amphibolite. 34°26' 82°45'

Newberry County

7. Saluda Old Town. Asbestos of unknown variety in basic igneous rock. 34°13' 81°52'

TEXAS

General reference: Dietrich and Lonadale, 1958.

Llano County

1. Rode. Long brittle fibers of tremolite asbestos in vein in shear zone between hornblende and mica-quartz schist. 30°30' 98°56'
2. Crab Apple Creek. Small deposit of tremolite (?) asbestos. 30°30' 98°46'
3. Oxford. Small deposit of amphibole asbestos. 30°37' 98°42'

Blanco County

4. Coal Creek. Several small deposits of tremolite asbestos in serpentine. Small veinlets of

TEXAS (cont'd.)

Blanco County (cont'd.)

chrysotile in some localities.

VERMONT

Orleans County

General references: Chidester and others, 1951; Pearre and Calkins, 1957.

1. East Hill prospect. Cross- and slip-fiber chrysotile asbestos in serpentinite. 44°56' 72°23'
2. Westfield prospects. Slip- and cross-fiber chrysotile in serpentinite. 44°53' 72°25'
3. Lowell prospects. Slip- and cross-fiber chrysotile in serpentinite and relatively unserpentinized dunite and peridotite. 44°49' 72°27'

Lamoille and Orleans Counties

4. Ruberoid-Belvidere Mountain area. Slip- and cross-fiber chrysotile in serpentinite and relatively unserpentinized dunite and peridotite. Bain, 1942; Chidester and others, 1951; Marsters, 1904, 1905; Pearre and Calkins, 1957. 44°46' 72°32'

Washington County

5. Barnes Hill locality. Slip- and cross-fiber chrysotile in serpentinite. Chidester and others, 1952. 44°24' 72°41'
6. Mad River locality. Slip- and cross-fiber chrysotile in serpentinite. Chidester and others, 1951. 44°14' 72°48'

Windsor County

7. Ludlow area. Slip- and cross-fiber chrysotile in serpentinite and relatively unserpentinized dunite and peridotite. Chidester and others, 1951. 43°23' 72°39'

Windham County

8. Dover area. Slip- and cross-fiber chrysotile in serpentinite and relatively unserpentinized dunite and peridotite. Chidester and others, 1951. 42°58' 72°46'

VIRGINIA

Clarke County

1. Boyce deposits. Asbestos of unknown variety associated with ultramafic rocks. Bowles, 1955. 39°03' 78°04'

Locality Index (cont'd.)

VIRGINIA (cont'd.)

Fairfax County

2. Centerville area. Asbestiform anthophyllite occurring with tremolite. Dietrich, 1955. 38°50' 77°24'

Amelia County

3. Chula-Mattox Station area. Amphibole asbestos. Dietrich, 1953. 37°24' 77°57'

Bedford County

4. Bedford area. Slip-fiber anthophyllite asbestos in veinlike masses associated with hornblende and olivine. Bowles, 1955; Dietrich, 1953, 1955. 37°10' 79°30'

Franklin County

5. Rockymount mine. Slip-fiber amphibole asbestos. Bowles, 1955; Dietrich, 1953. 36°58' 79°50'

Floyd County

6. Floyd area. Asbestiform anthophyllite. Dietrich, 1955. 36°53' 80°17'

Henry County

General reference: Dietrich, 1955.

7. Axton. Asbestiform anthophyllite. 36°39' 79°42'
8. Ridgeway. Fine white asbestiform anthophyllite. 36°36' 79°50'

WASHINGTON

General reference: Valentine, 1949.

Whatcom County

1. Twin Sisters. Veinlets of cross-fiber chrysotile asbestos in serpentine. 48°41' 121°58'

Skagit County

2. Scott. Silky fibers of amphibole asbestos. 48°35' 122°10'
3. Burlington. Fibrous soapstone with some amphibole asbestos in shear zones cutting greenstone. 48°29' 122°20'
4. Lyman. Long-fibered asbestos of unknown variety. 48°32' 122°02'

Snohomish County

5. Clear Creek. Talcose asbestos in serpentine dike. 48°07' 121°38'
6. Florence Rae prospect. Cross-fiber asbestos of unknown variety in veins in peridotite. 47°59' 121°30'
7. Mackinaw prospect. Slip-fiber 47°59' 121°26'

WASHINGTON (cont'd.)

Snohomish County (cont'd.)

asbestos of unknown variety in serpentine.

Chelan County

8. Chumstick Mountain. Anthophyllite asbestos in biotite gneiss. 47°38' 120°37'
9. Peshastin Creek. Veinlets of cross-fiber asbestos in serpentine. 47°24' 120°41'

Okanogan County

10. Alta Lake. Lenses of short-fiber amphibole asbestos. 48°01' 119°58'

Stevens County

11. Laurier. White asbestos of unknown variety in serpentine. 48°58' 118°12'
12. Stranger Creek. Tremolite asbestos in dolomite. 48°25' 118°02'
13. Boundary Butte. Tremolite asbestos in dolomite. 47°59' 118°10'

Pend Oreille County

14. Coffin prospect. Chrysotile asbestos veinlets in diopside and serpentine. 48°47' 117°30'

WISCONSIN

Marinette County

1. Herriman prospect. Cross-fiber chrysotile asbestos veins in peridotite. Bowles, 1955. 45°35' 87°50'

WYOMING

General reference: Beckwith, 1939.

Teton County

1. Berry Creek (Brown Bear). Slip-fiber chrysotile and amphibole asbestos. 44°01' 110°49'

Washakie County

2. Canyon Creek. Small amounts of brittle-fiber amphibole asbestos and talc in a sequence of metamorphic rocks. 44°06' 107°08'

Fremont County

3. Fire King asbestos deposit. Cross-fiber chrysotile veins in serpentine in chlorite schist adjacent to granite intrusions. 42°33' 108°45'
4. Beaver Creek. Cross-fiber chrysotile veins in serpentine. 42°33' 108°21'

Locality Index (cont'd.)

WYOMING (cont'd.)

Natrona County

5. Casper Mountain area. Cross-fiber chrysotile veins in serpentine. 42°44' 106°19'
6. Smith Creek area. Cross-fiber chrysotile veins in serpentine cut by metadiabase dikes and surrounded by granite gneiss. 42°38' 106°14'
7. Green Hill. Small amount of harsh fiber chrysotile in serpentine. 42°38' 106°09'

Converse County

8. Koch. Amphibole asbestos in serpentinite. 42°39' 106°03'

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