

Asbestos Minerals Sites – Initial Screening

Conducted by North Carolina Division of Waste Management,
in cooperation with US EPA Region IV and North Carolina
Division of Public Health, Health Hazards Control Unit

A. SITE INFORMATION Site Number: NC-50			
Historical Name	Todd Ultramafic Body		
Latitude / Longitude	36.32956N -81.58063W		
State, County, nearest City/Town	North Carolina, Ashe, Todd		
Site Type	<input type="checkbox"/> Mine	<input type="checkbox"/> Prospect	<input checked="" type="checkbox"/> Occurrence
Mineral reported	<input type="checkbox"/> chrysotile	<input type="checkbox"/> crocidolite	<input type="checkbox"/> tremolite
	<input type="checkbox"/> amosite	<input checked="" type="checkbox"/> anthophyllite	<input type="checkbox"/> actinolite
	<input type="checkbox"/> Other (name) _____		

B. INFORMATION SOURCES (include publication date)	Rankin and others (1972). Scotford and Williams (1983). Raymond and Abbott (1997). USGS 7.5' Topo Map: Todd 7.5' Quad (7-1-90). USGS Orthophotoquad for Todd Quad (3/25/95). Ashe Co. NCDOT road map (2005). http://www.ncdot.org/it/gis/DataDist/GISCountyMap_TIFs.html .
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C. SITE AND AREA RECONNAISSANCE	Date of Site Reconnaissance 11/3/05
1. Was the site located and a site visit completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, site could not be located (Please attach a topographic map print showing the site)
2. Is the site property developed and in use of any kind?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, site is wooded / undeveloped
3. Land use on site (check all that apply)	<input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Recreational (golf course, park, etc.) <input type="checkbox"/> Construction or clearing in progress <input type="checkbox"/> Other (please describe below)
4. Are there large areas of bare soil visible on the property?	<input type="checkbox"/> Yes (Please describe below) <input checked="" type="checkbox"/> No
5. Are there residences, apartments, stores or businesses, or day care facilities on the site, or within 200 feet of it?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown Please note which, and describe the item and its location (relative to the site) below.
6. Where is the nearest residence, place of business, or place frequented by local residents located, in relation to the site?	<input checked="" type="checkbox"/> N/A (addressed at 5 above) (Place and distance/direction to site)
7. Are any physical barriers present (fences, gates) that prevent access?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Description

D. ADDITIONAL INFORMATION

(Indicate by letter and number which topic the information supports)

A. Landscape boulders at the entrance of Elk Ridge, a residential development, contain a high percentage of asbestiform anthophyllite. This location is at the intersection of Laurel Knob Road and Highway 194. Initial analyses of samples from these boulders were performed by Ronald D. McDaniel. Confirmation analysis was performed by Stephen H. Westbrook, Asbestos Analysis and Information Service, Inc., a NVLAP accredited laboratory. These boulders are probably not in place but likely come from the Todd ultramafic body that outcrops nearby. The anthophyllite was not observed in outcrop.

B1. The anthophyllite-bearing boulders were discovered during a traverse of the Todd Ultramafic body to see if ultramafic rocks in the Ashe County area contain asbestos. No effort was made to determine the possible extent of the asbestos-bearing rocks due to time constraints.

B3. Land use in the area is mixed use, farming and residential.

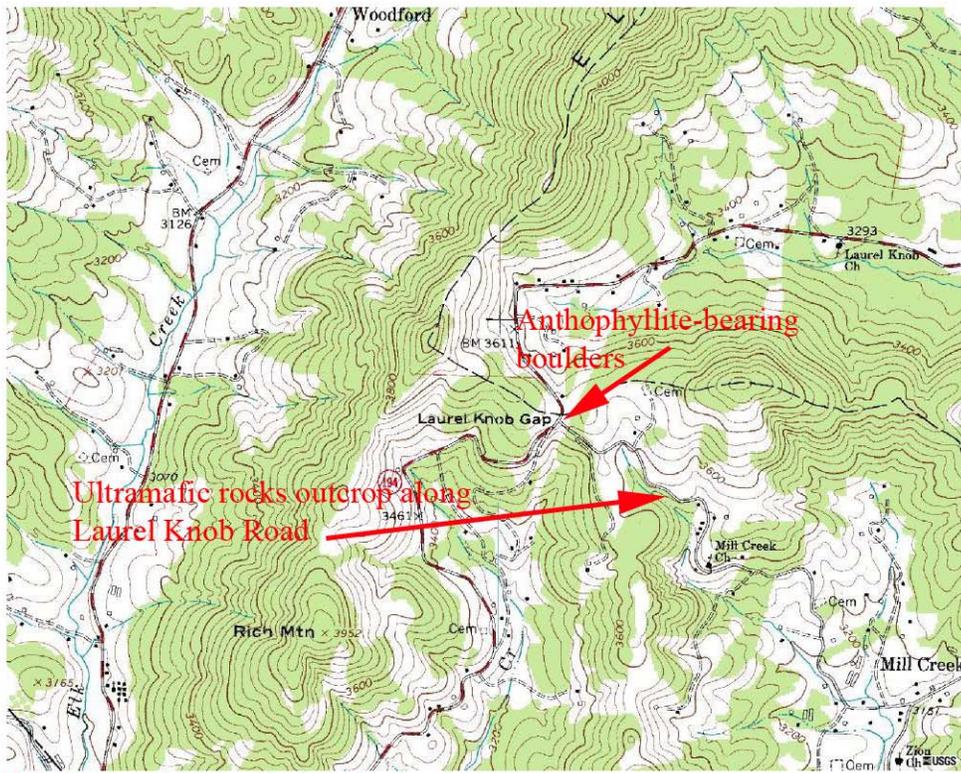
B5. It is unknown whether any residences lie in close proximity to the asbestos-bearing rocks.

Directions to the Ultramafic Body:

Boulders of anthophyllite-bearing ultramafic rock can be found at the entrance to the Elk Ridge residential Development on NC Highway 194 about 2.5 miles northeast of Todd t the intersection of Highway 194 and Laurel Knob Road. The boulders are used as part of the landscaping on both sides of the entrance.

Todd Ultramafic Body

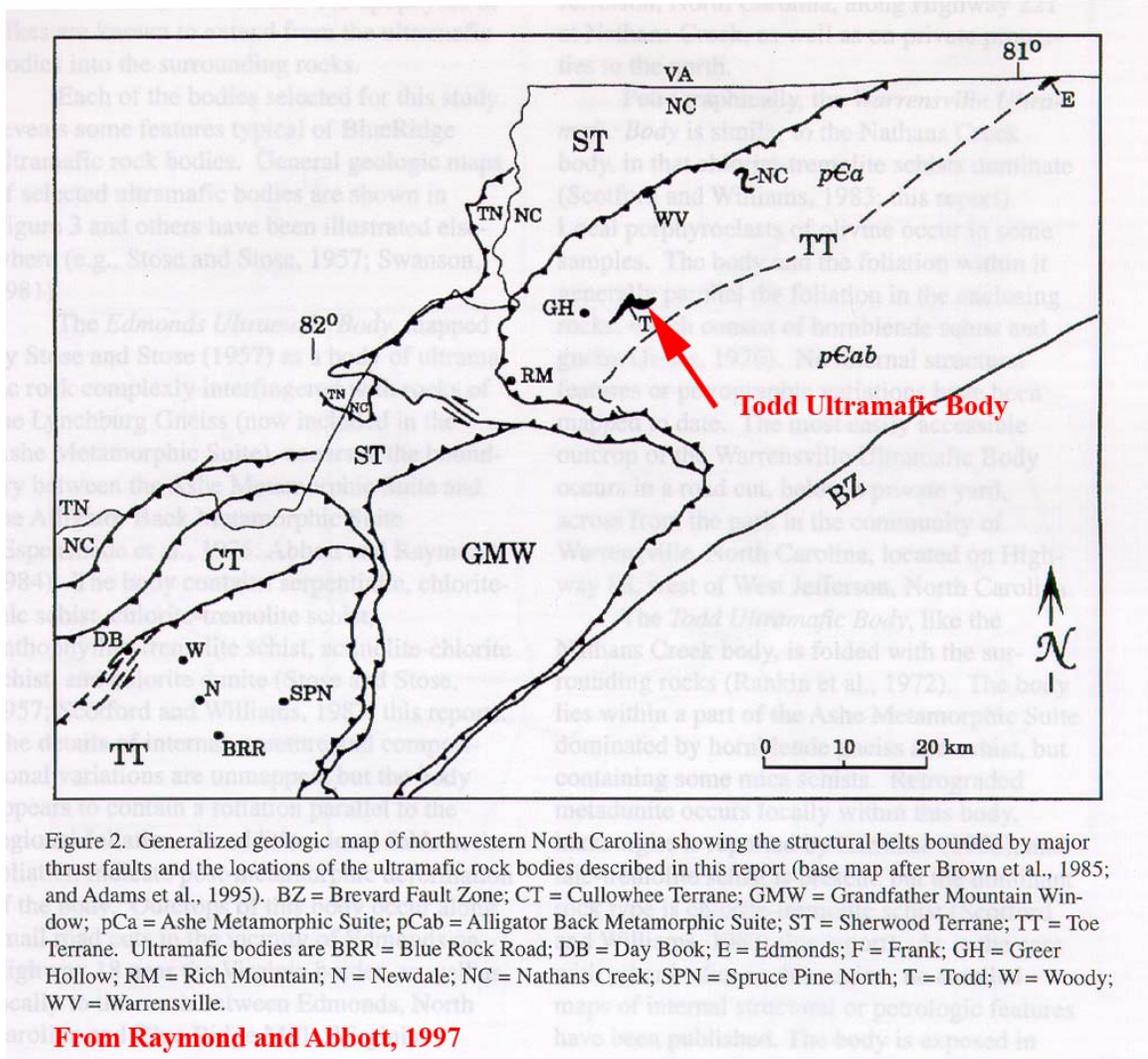
Ashe County



USGS Topographic Map: Todd 7.5' Quadrangle 7-1-66



USGS Orthophotoquad: Todd 7.5' Quadrangle 4-6-98



Spatial relationship of Ashe County ultramafic rocks to those of the Spruce Pine area.

SCOTFORD AND WILLIAMS: METAMORPHOSED ULTRAMAFIC BODIES

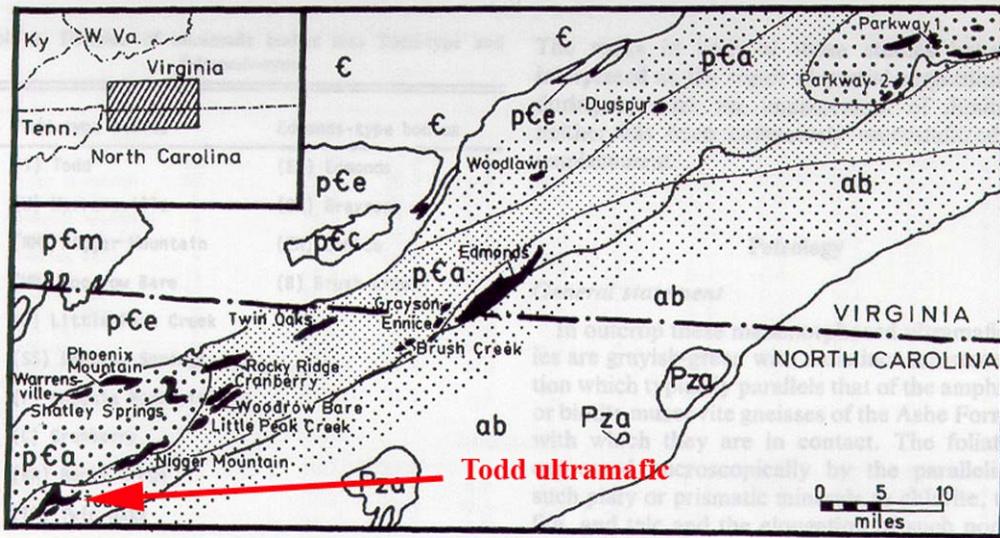


Fig. 1. Location of ultramafic bodies in eastern Blue Ridge in North Carolina and Virginia southeast of Fries fault. pεe—Elk Park Plutonic Group, pεc—Crossnor Plutonic Group, pεa—Ashe Formation, pεm—Mount Rodgers Formation, ab—Alligator Back Formation, ε—Cambrian Sediments, Pza—Spruce Pine Plutonic Group. After Rankin *et al.* (1972). The area of kyanite zone shown in the northeast corner of the map was mapped only as “Amphibolite facies” by Rankin *et al.* (1972).

After Scotford and Williams (1983, p. 79)

Twelve or more ultramafic bodies are present in Ashe County and all could contain asbestos.



These asbestos-bearing boulders are likely from the Todd ultramafic body.