

CORRELATIONS

The nearest interpreted well is WS-T-1-86, approximately .6 miles to the NW.

ELEVATION 90' DEPTH 174'

Electric log, gamma log, lith log and samples available.

Correlation is good between the wells with few (FIG. 1) dissimilarities. The surficial unit is thicker in T-2 (25') and contains more oxidized sands than T-1 (15'). The Yorkton FM. in T-2 is thinner (10') and lacks the white shell material, commonly found in T-1 (19'). Other dissimilarities include coarser grained sands and an appreciable deficiency of phosphate in T-2. The basal phosphatic conglomerate in T-1 ^{BEST} correlates to a coarse grained feldspathic sand with rare phosphate in T-2. This feldspathic sand contains trace amounts of pyrite and is probably a reworked Cape Fear Formation sand.

The Cape Fear Formation is nearly identical in both wells. Both wells have the top of the Cape Fear close to +50' MSL and exhibit tan, white, lt. green, hematitic and limonitic sandy clays interspersed by medium to coarse sands. A relatively thick (40' in T-2; 32' in T-1) coarse sand to fine gravel bed appears in both wells and seems to be thickening towards the SE. (CONT.)

WS-T-2-86

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Coarse sands containing trace amounts of Rose quartz appear in both wells, just above the basement contact.

Basement was penetrated in both wells (-62)T-1, (-81)T-2, and is the same lithology, quartz chlorite sericite schist, with T-1 encountering a quartz rich vein or section.

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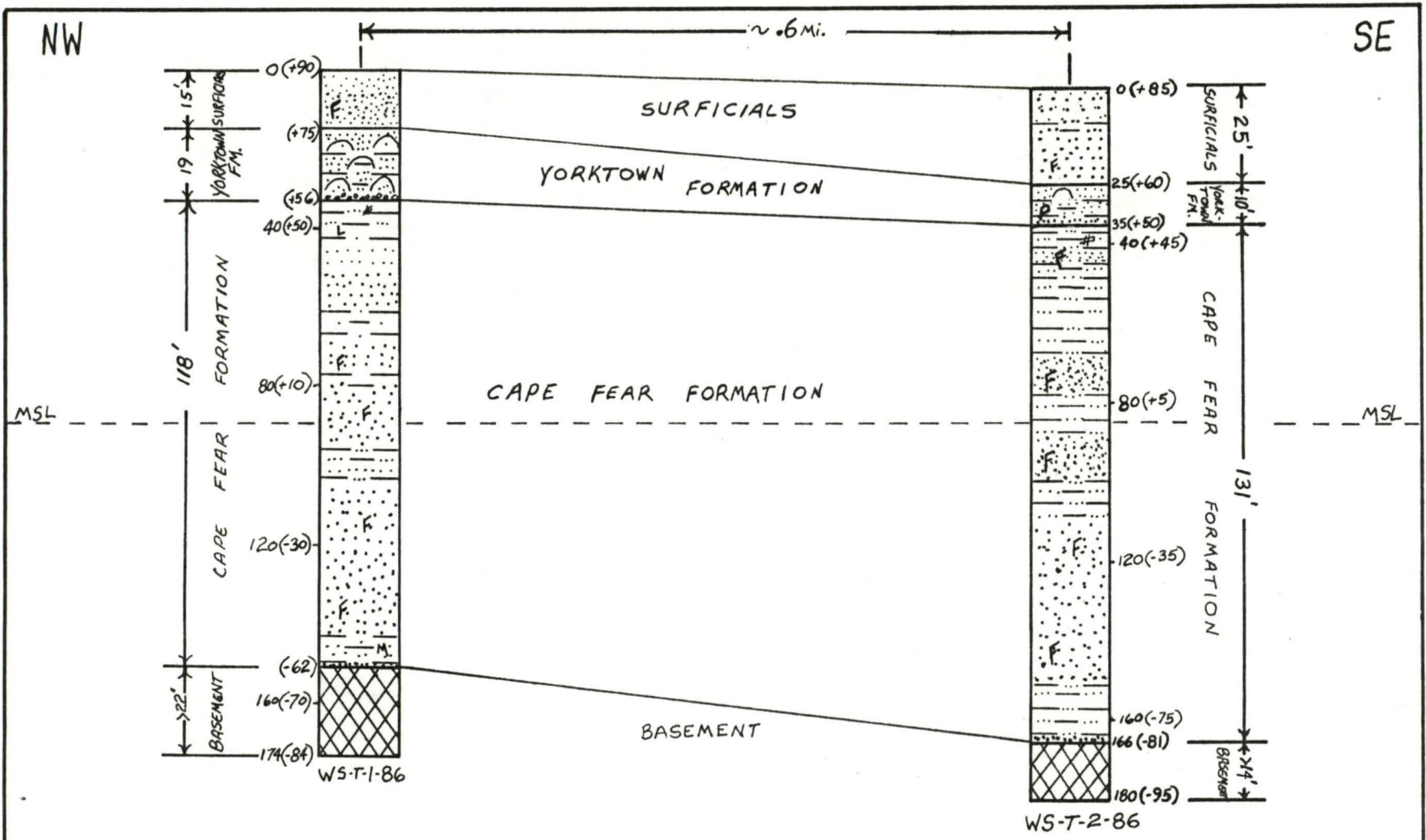
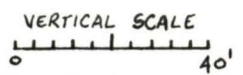


FIGURE 1 - CORRELATION DIAGRAM
 FOR WS-T-1-86 & WS-T-2-86,
 STANTONSBURG, WILSON COUNTY.
 DATUM IS MEAN SEA LEVEL



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SURFICIALS - (0-25) - consist of medium to coarse sand and feldspar. The lower 10' is highly oxidized sands.

YORKTOWN FM. - (25-35) - Rare blue/black shell fragments first appear in the 25/30 sample. On the basis that the sample depth does not match the log depth in this area, I suspect that, beginning with the 25/30 sample, the samples are approximately 5' too deep. This trend continues through the 65/70 interval after which the samples and logs pretty much agree. In addition to rare shell fragments, the Yorktown here contains trace amounts of grey silty/sandy aggregates and rare phosphate which is conglomeratic and rounded.

The 35/40 sample (30/35 log adjusted) is a clean coarse sand containing feldspar and pyrite which indicates that this may be reworked Cape Fear.

CAPE FEAR FORMATION - (35-166) - Abundant tan sandy clay, with some exhibiting red/orange mottling, appears in the 40/45 sample (35/40 log adjusted). The top of the Cape Fear is logged coincident with a gamma high and a resistivity low. Below this, white, lt. green, hematitic and limonitic sandy clays mixed with
(cont.)

Some coarse sand occur down to 110'. These sandy clays are probably interbedded along with coarse sands (66-75; 90-98). Three distinct fining upward sequences are apparent on the gamma log (94-75; 70-52 and 44-35) which would seem to indicate cyclic sedimentation.

Coarse, angular sand to fine gravel and feldspar are present from 110 - 150'. The 150-166 interval contains much coarse sand mixed with clay. Rose quartz is also present in trace amounts along the basement contact (160-165).

BASEMENT - 166 (-81) - Quartz chlorite sericite schist fragments make their first appearance in the 165/170 sample, basement was picked at 166', a gamma high.

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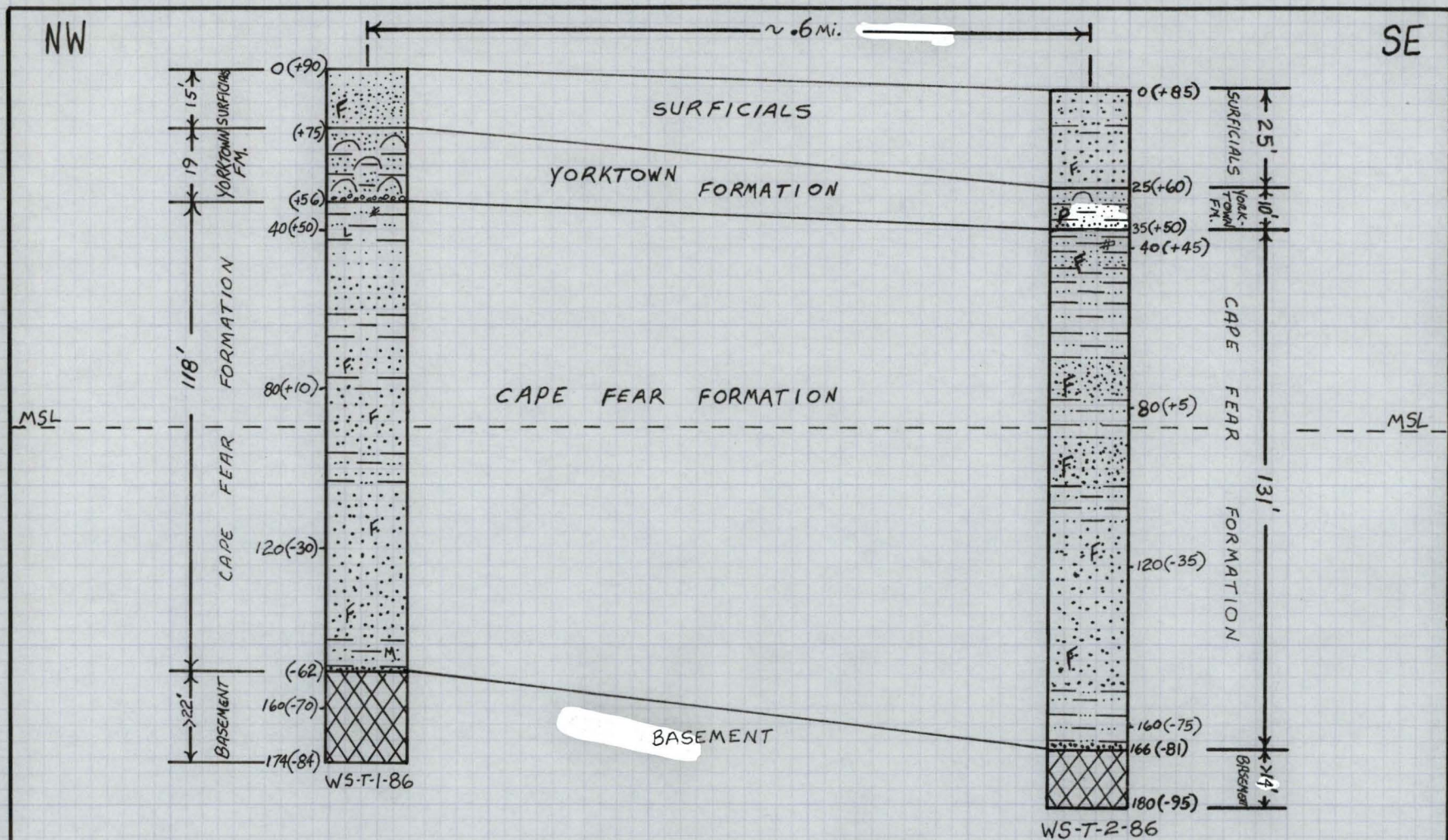
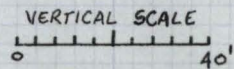


FIGURE 1 - CORRELATION DIAGRAM
 FOR WS-T-1-86 & WS-T-2-86
 STANTONSBURG, WILSON COUNTY.
 DATUM 15 MEAN SEA LEVEL

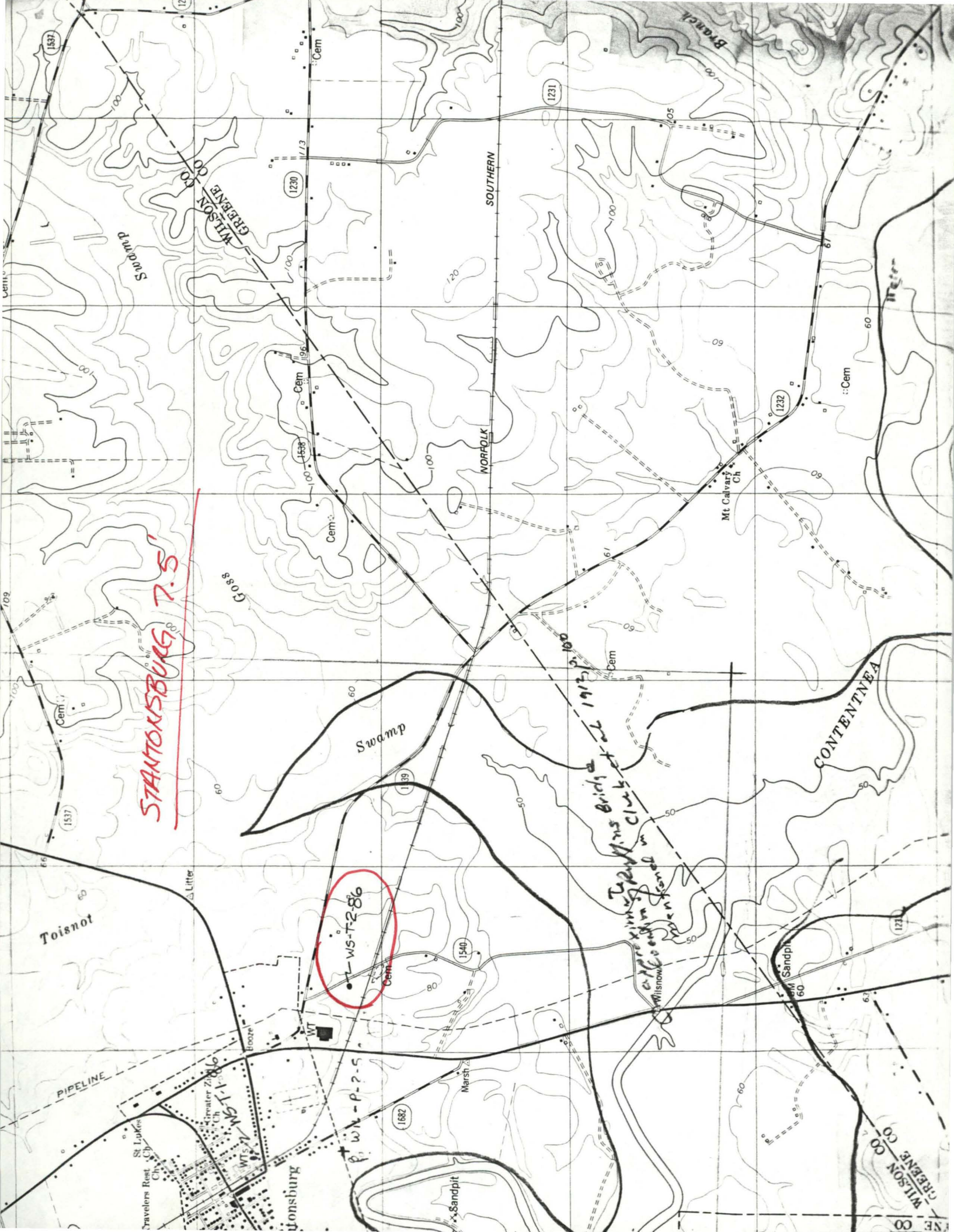


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STANTONSBURG 7.5'

WS-T-2-86

Approximate location of
Wilson's Bird Club
at 1975



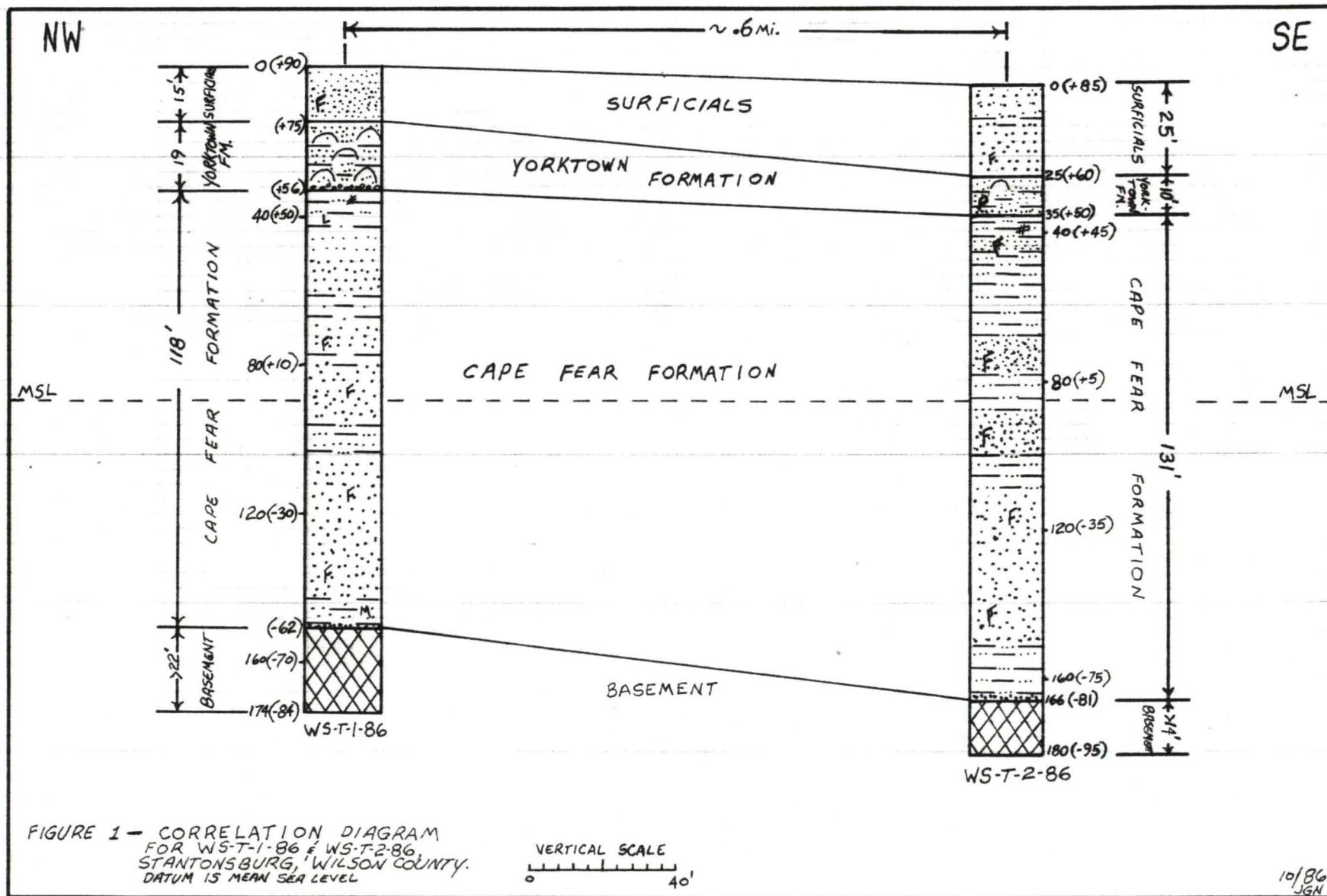
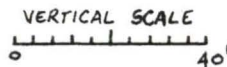


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