Trip J

## SURFICIAL GEOLOGY OF THE INTERNATIONAL

LEAD COMPANY MCINTYRE DEVELOPMENT AT TAHAWAS, N.Y.

by

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Take Northway south to Exit 29. Turn right onto North Hudson - Newcomb Road then right (south) on Route 9. Stop at sand pit on left side of road behind gas station.

Stop 1 - Schroon Lake Quadrangle

Deltaic sands, forset beds dipping west into valley wall. Delta built into Glacial Lake Warrensburg (Miller 1925).

Water seems to have carried material into the Valley from the Blue Ridge moraine which lies about 3 miles due west.

Stop 2 - Blue Ridge Moraine

This is a narrow moraine complex blocking off the east west valley. Outwash from this moraine can be traced into the deltaic deposits of the last stop. The north side has been modified by water flow from the north indicating ice occupying the valley to the W of this spot with the main N-S valleys free of ice.

Stop 3 - Outwash gravel and Kame deposits

Water was flowing out of Niagara Brook along the north side of the Blue Ridge Moraine into Glacial Lake Warrensburg.

Stop 4 - Newcomb Quadrangle

Striated bed rock face on Highway 128, 2 miles west of Newcomb. Just west of BM 1595 and Lodo Pond.

Which way was the ice flowing past this point?

Stop 5 - Tahawus, McIntyre Development, International Lead Co.; Newcomb 15' Quad.

Excavation of the present pit area was started in 1961. In clearing the overburden from the area formerly under Sanford Lake, a multiple till section was exposed with interglacial lake sediments between two tills. Disseminated wood fragments including material identified as Pinus strobus (David Bierhorst, Dept. of Botany, Cornell Univ.) were collected by E. Muller and the section was described (Muller 1966). The wood fragments were dated at an age greater the 40,000 years (W-1520). Muller describes two tills separated by the interglacial lake deposits.

This author observed what appeared to be a third till when visiting the pit in 1966. Detailed measurement in the pit verified the existence of three till units separated by stratified sediments.

Section at Sanford Pit (as exposed in 1966)

Top

Coarse sand and gravel, oxidized in zones upper part mixed with excavation fill from Tahawas village 2 - 5' Laminated sand, silt, some gravel lenses, upper parts oxidized, well developed ripple marks cut and fill structures throughout, bedding dips 8 N. 1 - 20' Till, yellow brown oxidized moderately stoney, 1 - 25' non-calcareous very few ore pebbles. Sandy gravel, laminated sand and silt. Numerous small folds overturned to the north. In some places this layer has been so disturbed it becomes till like in texture. 41 Till, gray, moderately stoney, non-calcareous few Potsdam pebbles observed, no ore pebbles. Contact with overlying sediments marked by 8 - 15' thin silt bands. Sand, yellow brown oxidized medium to coarse changes to sandy gravel a short distance to the west. 5 - 15' Contact with underlying laminated clay not observed. Clay, brown with few pebbles and disseminated wood fragments including material identified as

Pinus strobus (David Bierhorst, Dept of Botany, Cornell Univ.) Age greater than 40,000 years (W-1520).

3 - 12'

Gravel stratified 1'

Till yellow grey moderately stoney, noncalcareous, oxidized 5'

Till, stoney, numerous ore pebbles
folded silt, sand inclusion, shear
planes dipping south 1 - 30'

Return to Plattsburgh.

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