

ODNR Geologic Information

Glacial Geology

Groundwater Resources Map

Reconnaissance Bedrock Geology

Bedrock Topography

Preliminary Structure Contour Map of the top of the Mississippian Cuyahoga

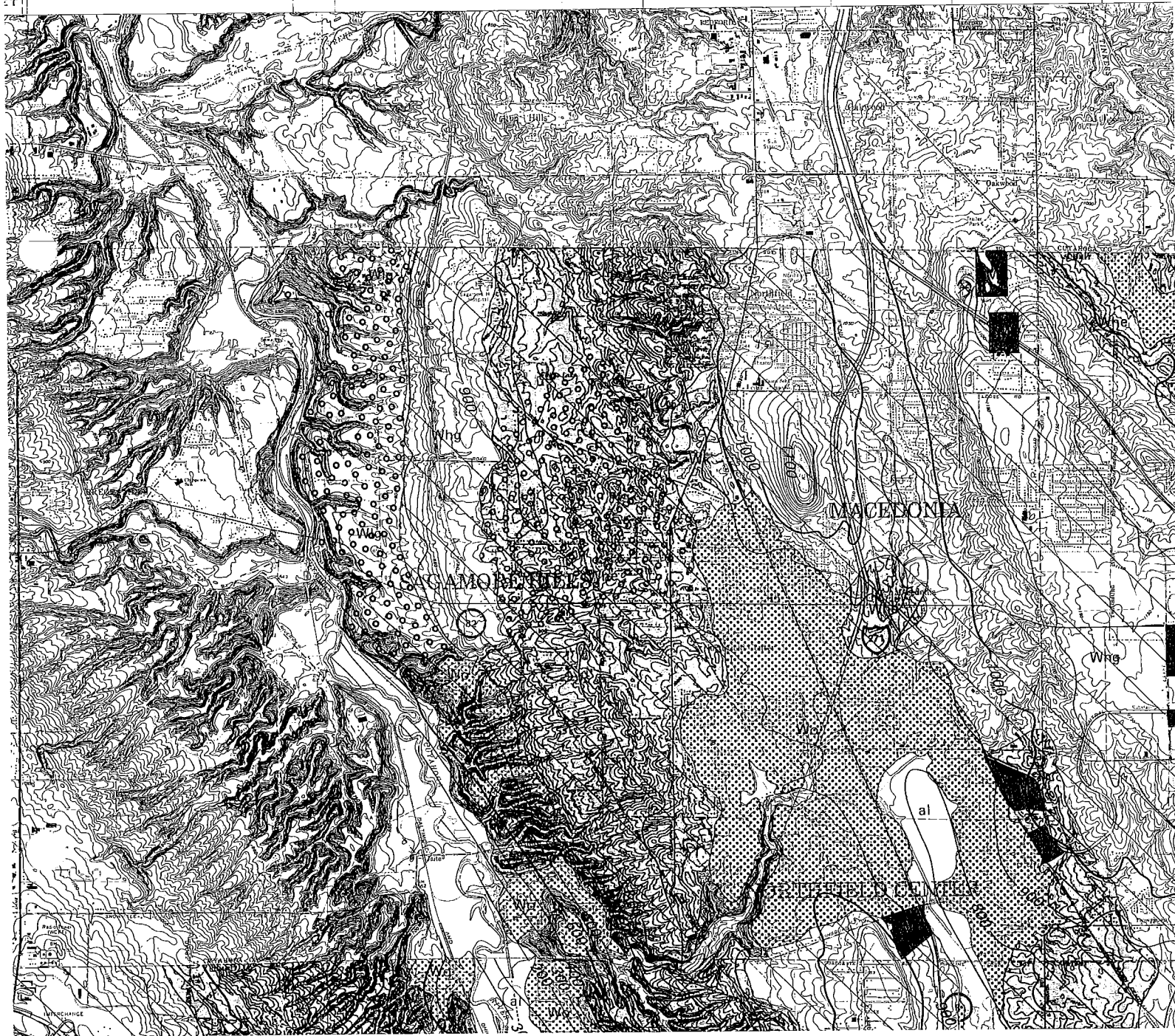
Abandoned Underground Mines

GLACIAL GEOLOGY OF SUMMIT COUNTY, OHIO

by George W. White

1984

81°30' 12,280,000



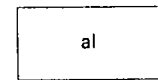
EXPLANATION



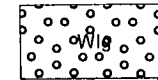
Made land. Areas of excavation or filling, where the original surface has been completely modified. Only larger areas shown. Includes chemical ponds south of Barberton



Ravines. Steep slopes and sharp ravines, in part contiguous glacial material and in part bedrock, in Cuyahoga River valley north of Akron



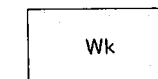
Alluvium. Silt and silty sand on floodplains. Includes some bog and marsh deposits, especially in Copley Township



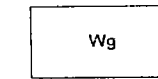
Lake Maumee gravel terrace. Small southward extension of main Lake Maumee terrace in Cuyahoga County; grades southward into outwash at a higher level



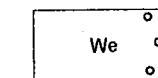
Outwash and lacustrine deposits. Generally fine sand, silt, and clay in interstratified meltwater-stream valley trains, outwash plains, and lacustrine plains, commonly as terrace remnants. Coarser material in dissected valley-train terraces in Tuscarawas River valley south of Barberton. May include organic materials in low depressions



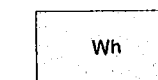
Kames and kame terraces. Gravel and sand in knolls and irregular to level high terraces. May contain included till masses. Overlain by till in places, especially in eastern and northern part of county



Ground moraine. Mainly till, generally thin, forming gently undulating topography on upland surfaces. Bedrock may be very close to or at surface



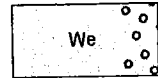
End moraine. Clay till and silty clay till, overlying sandy till or gravel, in more or less linear belts of hummocky topography. Gravelly part shown by overprint



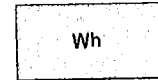
Hummocky topography without linear trend. Mainly sandy till in irregular patches and along valley sides, with knolls or marked undulations. Generally in area of Mogadore Till in

QUATERNARY

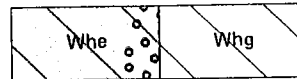
Ground moraine. Mainly till, generally thin, forming gently undulating topography on upland surfaces. Bedrock may be very close to or at surface



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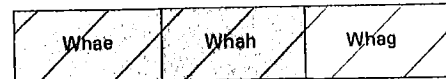


Hummocky topography without linear trend. Mainly sandy till in irregular patches and along valley sides, with knolls or marked undulations. Generally in area of Mogadore Till in central and southern Summit County



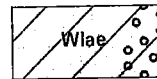
Hiram Till
(all lobes)

Clayey till, generally thin, not everywhere present; at surface in northern Summit County



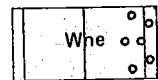
Hayesville Till
(Killbuck lobe)

Silty till, very thin, in discontinuous small patches in western Summit County; much of surface material may be Mogadore Till



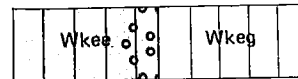
Lavery Till
(Cuyahoga and Grand River lobes)

Clayey-silty till, generally thin, at surface in small area in northern Stow Township; present beneath Hiram Till in northern Summit County



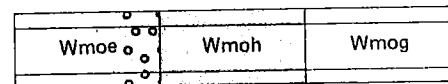
Navarre Till
(Killbuck lobe)

Sandy till, generally thin, present in narrow belt in southern Franklin and Green Townships



Kent Till
(Cuyahoga and Grand River lobes)

Sandy till, generally thin, at surface in easternmost Summit County; present beneath later tills in northern half of county



Mogadore Till
(Cuyahoga lobe)

Coarse sandy till, generally greater than 15 feet thick, at surface in southern-central Summit County; present beneath later tills in northern part of county

QUATERNARY

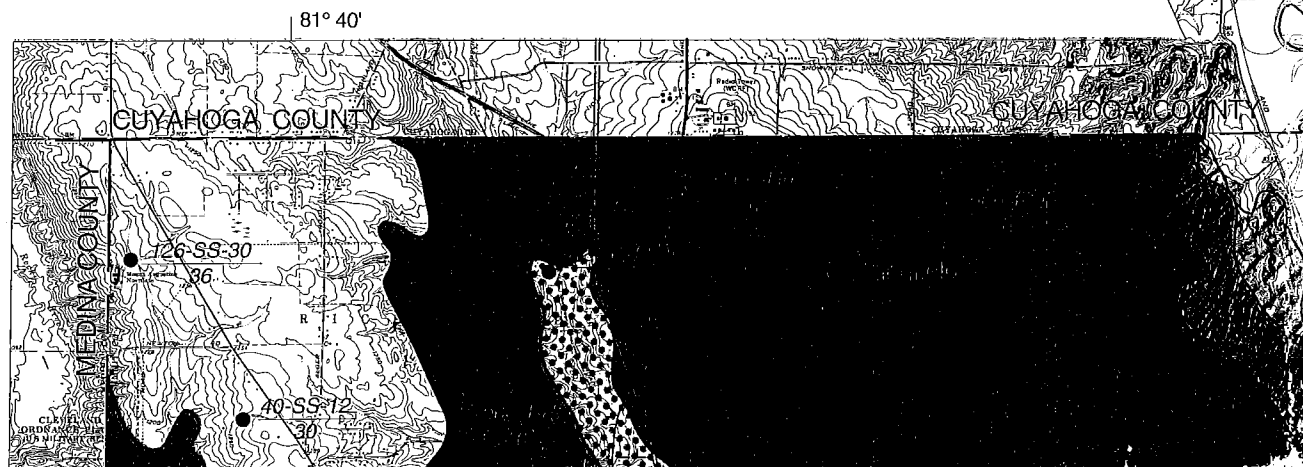
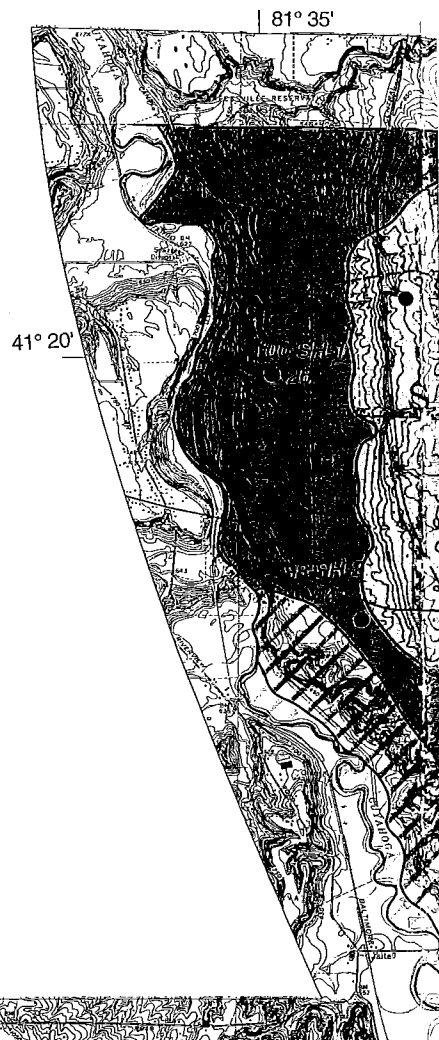
— — — — — Boundary of deposit, *dashed where inferred*

— — — — — Till boundary, *dashed where inferred*

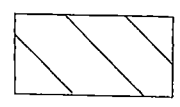
— 500 — Contour on bedrock surface, *contour interval 100 feet*

Ground Water Resources of SUMMIT COUNTY

by
James J. Schmidt
after Smith, R.C., 1952

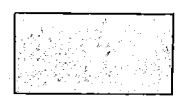


than 100 feet beneath the land surface. Drilled wells yield as much as 50 gallons per minute. Greater yields, in excess of 250 gallons per minute, may be available during short periods of intermittent pumping.

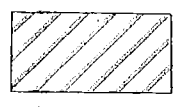


Ground water obtained from sandstone and shale in the Pottsville formation. Yields of 3 to 10 gallons per minute, adequate for farm and domestic use, are available at depths of less than 95 feet. The Sharon conglomerate member is more than 100 feet beneath the surface, and yields as much as 50 gallons per minute.

AREAS IN WHICH YIELDS OF LESS THAN 25 GALLONS PER MINUTE CAN BE DEVELOPED



Ground water obtained from the Berea sandstone. Drilled wells yield 5 to 20 gallons per minute.

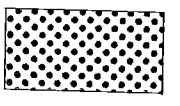


Buried valley beneath Little Cuyahoga and Cuyahoga Rivers. Farm and domestic (3 to 5 gallons per minute) supplies may be available from dug or drilled wells at depths of less than 50 feet. Physical characteristics of the glacial deposits at depths greater than 200 feet are unknown. However, wells developed near Jaite have reported yields of more than 400 gallons per minute, which may be indicative that large ground water supplies may be available.

AREAS IN WHICH YIELDS OF LESS THAN 10 GALLONS PER MINUTE CAN BE DEVELOPED

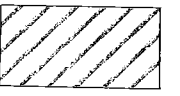


Ground water obtained from sandstone and shale of the Cuyahoga group. Drilled wells yield 3 to 10 gallons per minute.

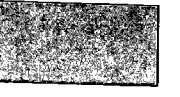


Ground water obtained from thin, not extensive, sand and gravel deposits interbedded with thick clayey till. Wells must be drilled below the level of the adjacent drainage to obtain 3 to 10 gallons per minute. If sand and/or gravel deposits are not encountered wells are developed in the underlying bedrock to obtain private domestic supplies.

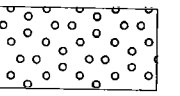
AREAS IN WHICH YIELDS SELDOM EXCEED 3 GALLONS PER MINUTE



Fine sand, silt, lacustrine clay and very thick clayey till deposited near surface of shale bedrock. Although some thin deposits of sand and gravel may be present, yields are minimal, dry wells are not uncommon, and cisterns and storage may be necessary to maintain domestic requirements.



Ohio and Bedford shale form bedrock surface. Drilled wells seldom yield more than 1 gallon per minute from weathered bedrock surface.



Areas in which ground water contains a large amount of salt, therefore not suitable for consumptive purposes. Caution should be exercised in the construction of bedrock wells within the immediate vicinity of salt wells, as well as disposal pits south of Barberton.

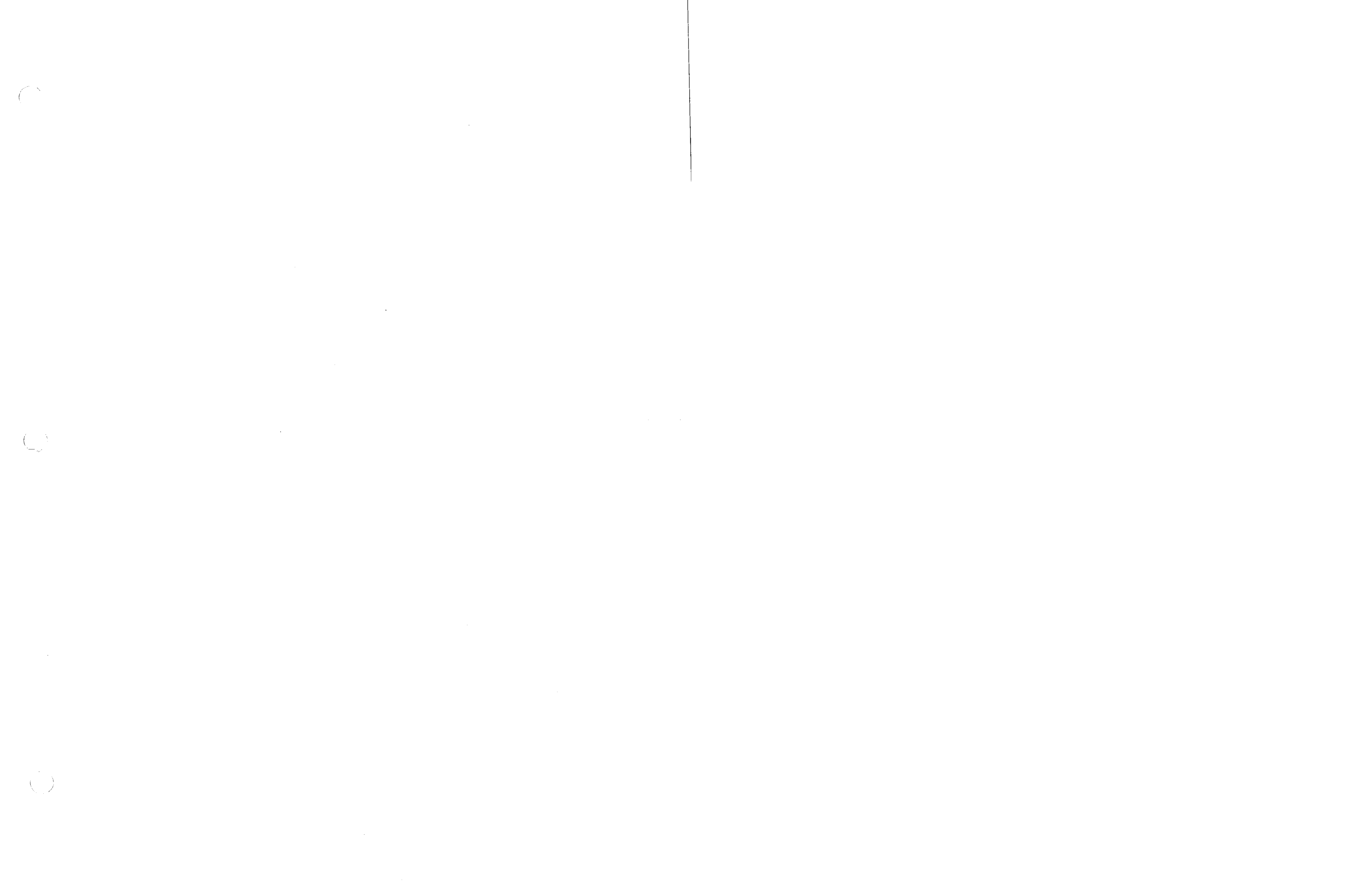
*Excessive sodium noted.

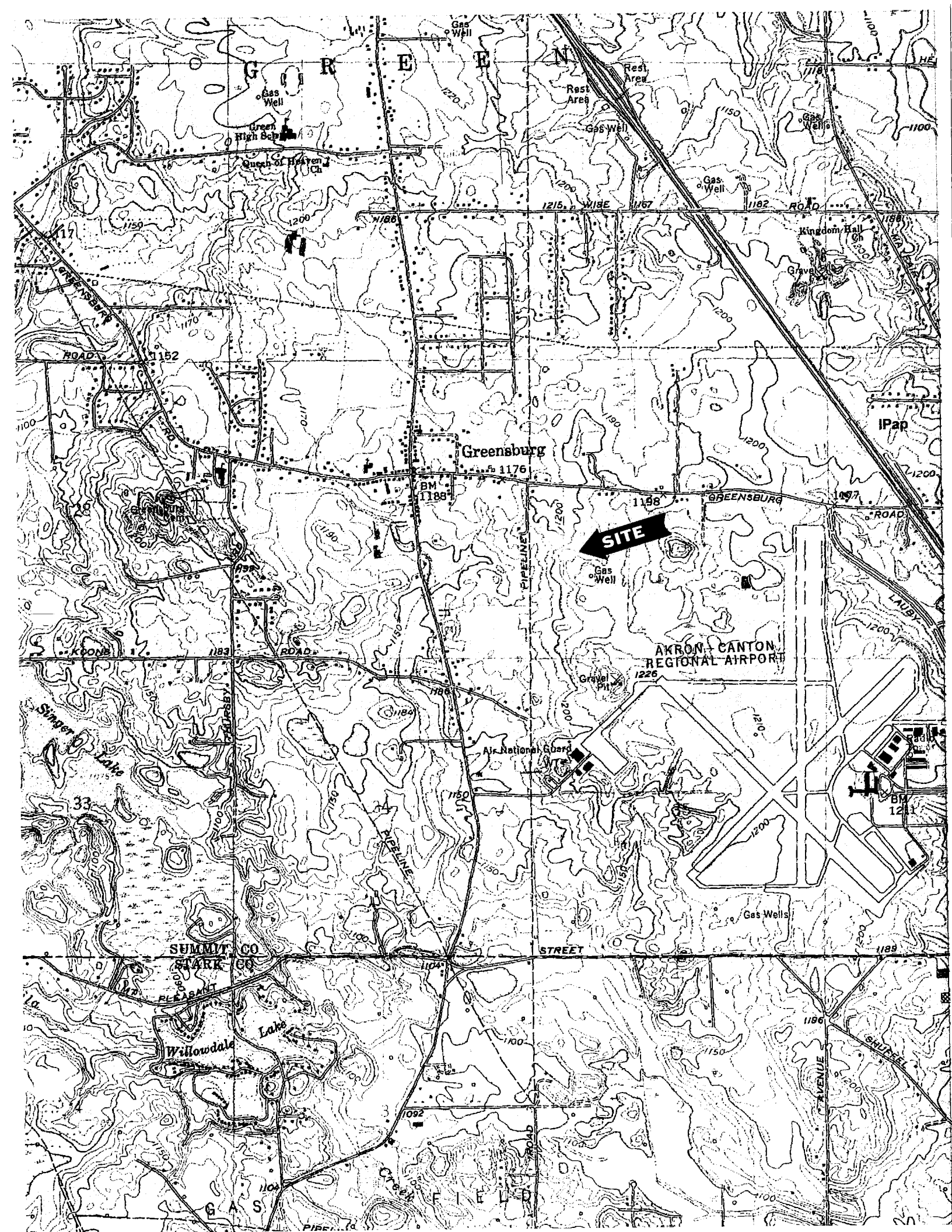
41° 10'

41° 05'

Well Site Symbols

WELL INFORMATION





RECONNAISSANCE BEDROCK GEOLOGY OF THE NORTH CANTON, OHIO, QUADRANGLE

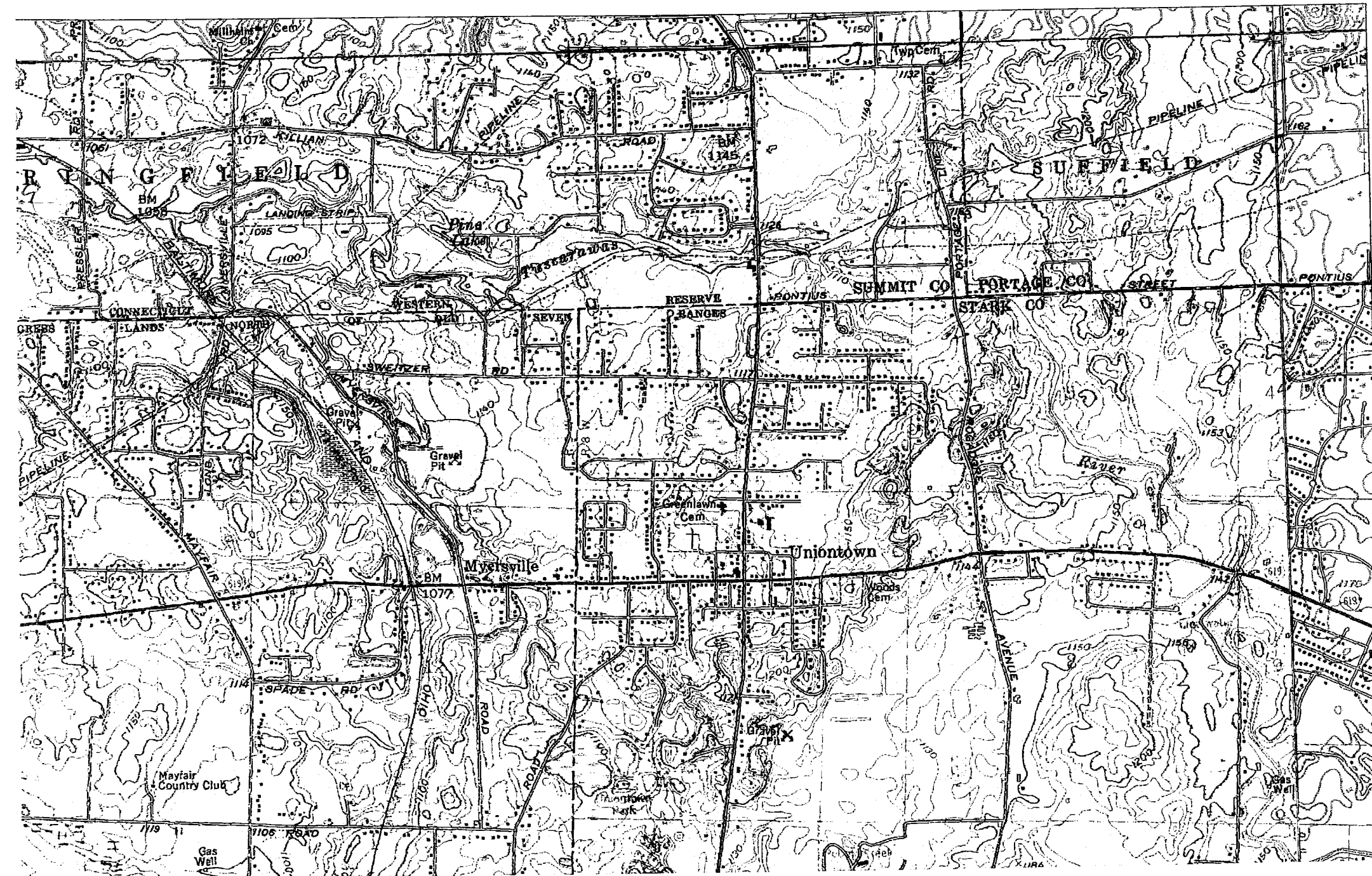
by
Swinford, E.M.

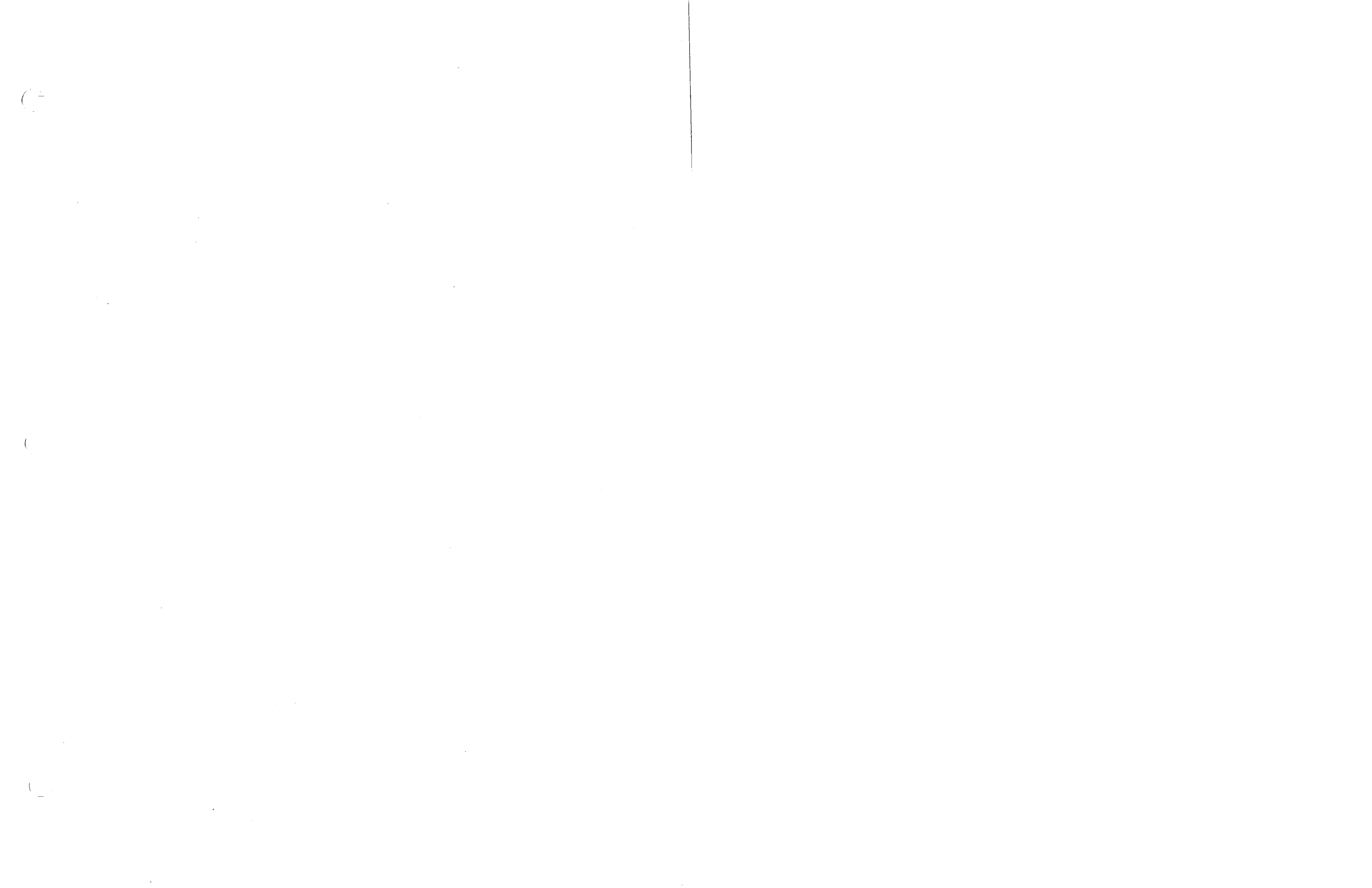
0812230W
410000N

EXPLANATION

IPap: ALLEGHENY AND POTTSVILLE GROUPS UNDIVIDED

Mc: CUYAHOGA FORMATION





BEDROCK TOPOGRAPHY OF THE NORTH CANTON, OHIO, QUADRANGLE

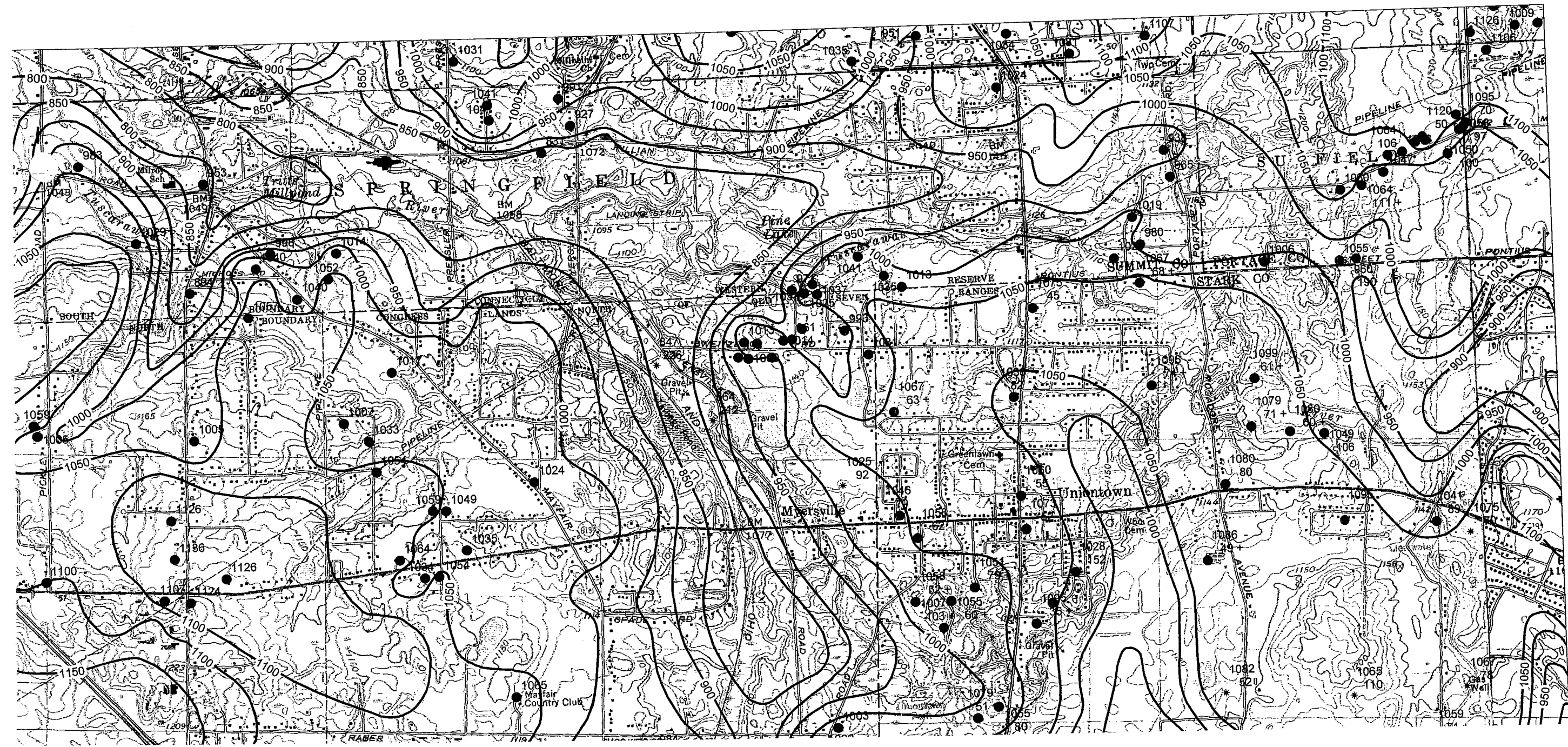
by
Vorbau, K.E.

OHIO DIVISION OF GEOLOGICAL SURVEY

Map North Canton

Revised 02/2002

0812230W
410000N



PRELIMINARY STRUCTURE CONTOUR MAP OF THE TOP OF THE MISSISSIPPIAN CUYAHOGA FORMATION OF THE NORTH CANTON, OHIO, QUADRANGLE

by
Swinford, E.M.

OHIO DIVISION OF GEOLOGICAL SURVEY

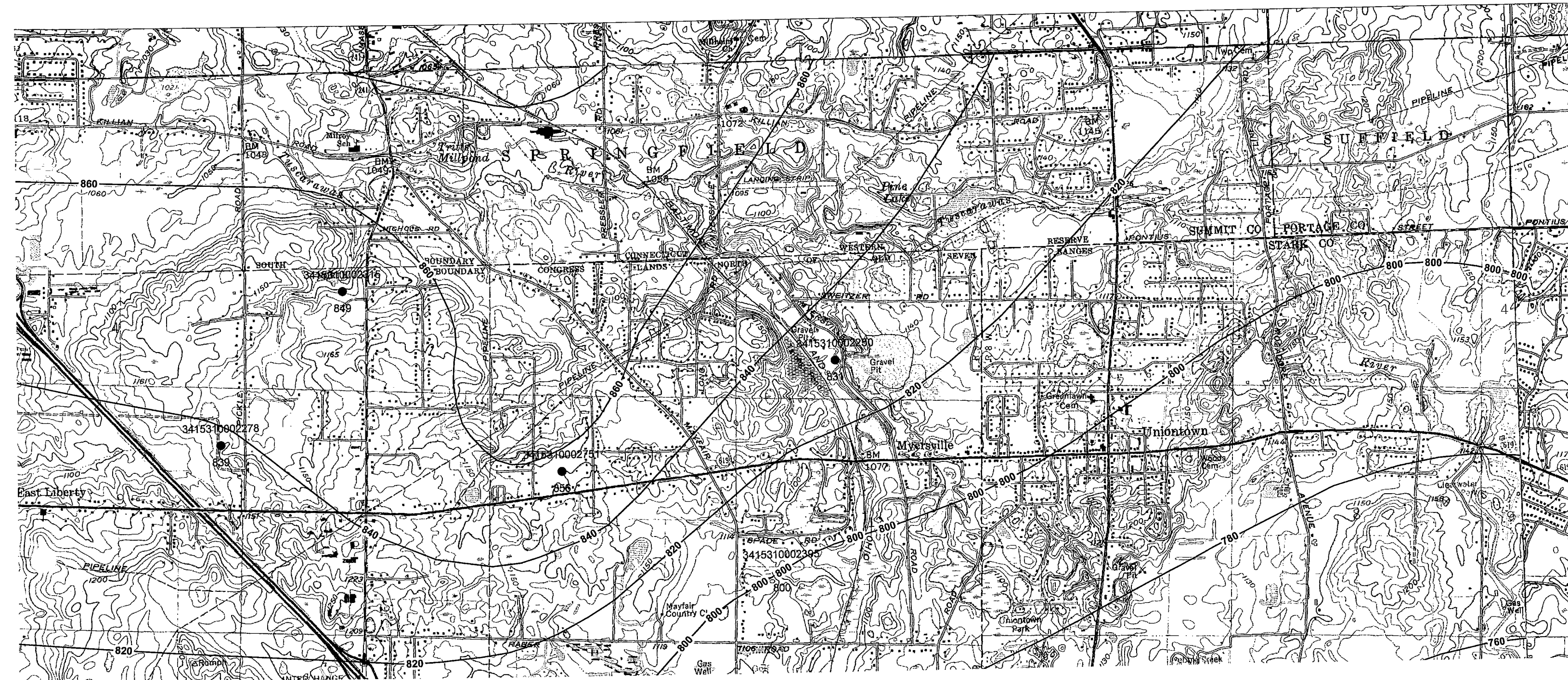
Map North Canton

20 foot Contour Interval

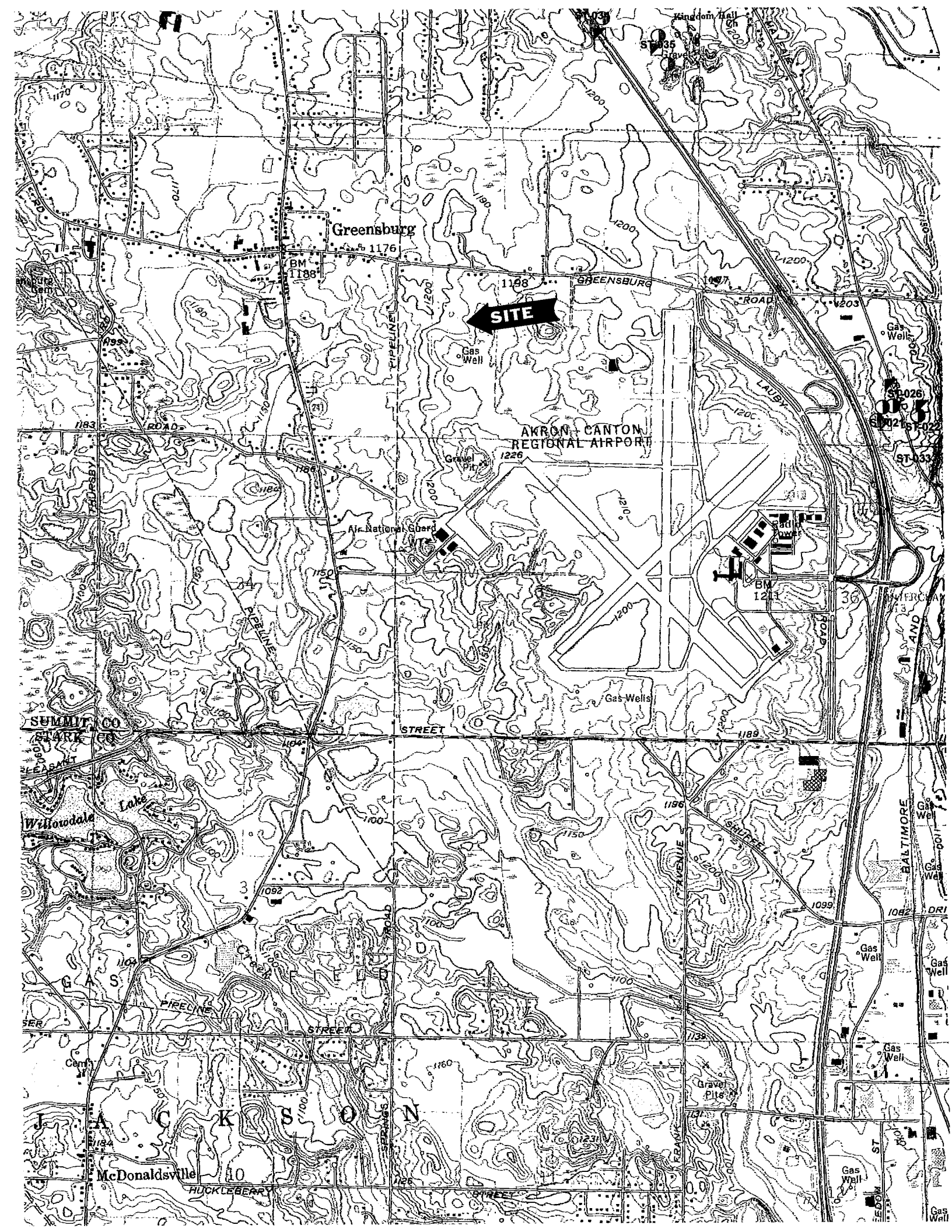
Revised 1996

081223C
41000

Director
Geological Resources
Geological Survey
Chief







ABANDONED UNDERGROUND MINES IN THE NORTH CANTON, OHIO, QUADRANGLE

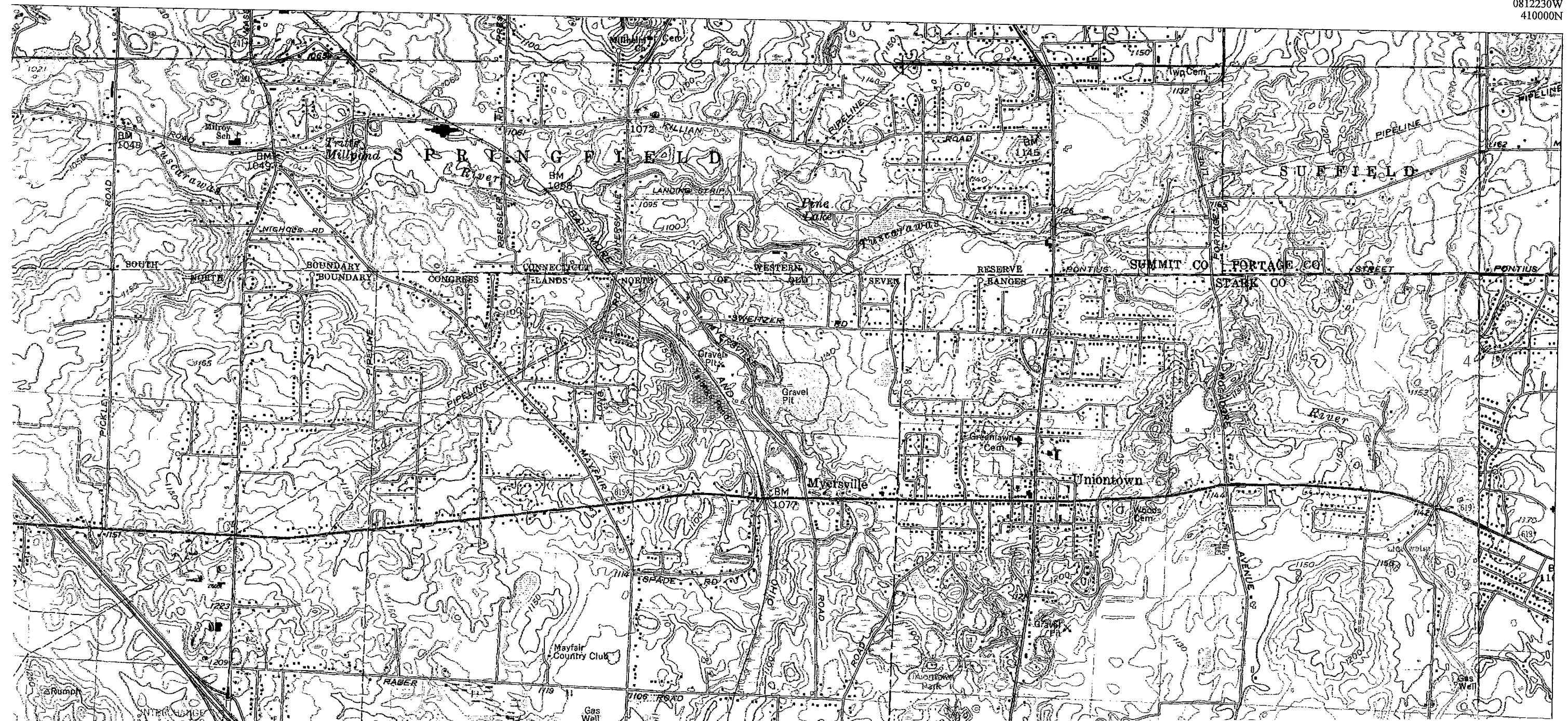
by
DeLong, R.M.

OHIO DIVISION OF GEOLOGICAL SURVEY

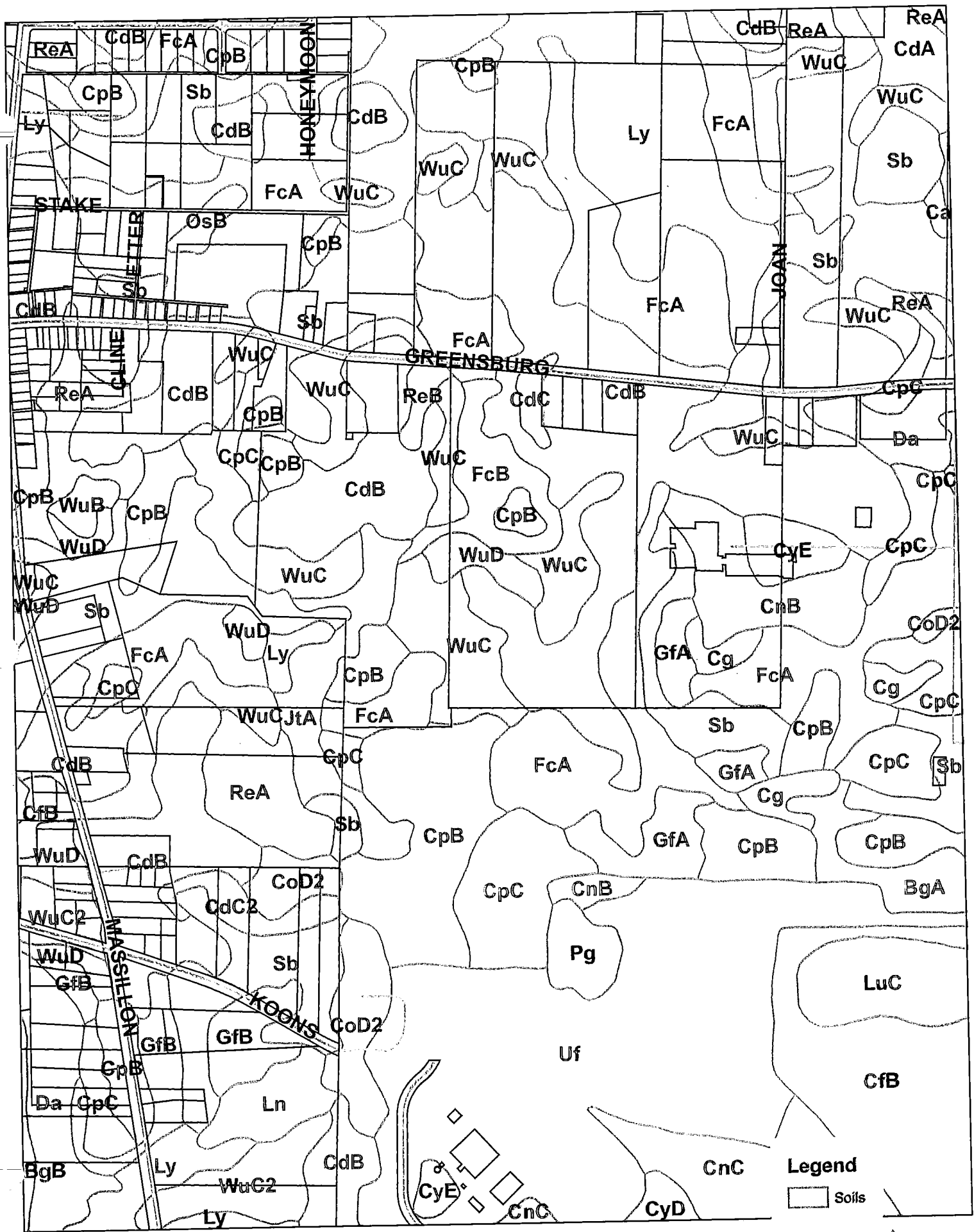
Map North Canton

Revised 1983

0812230W
410000N



USDA Soil Conservation Service Soil Map





2 295 000 FEET

23

24

26

25

Greensburg

AKRON - CANTON AIRPORT

36

RR COUNTY

(Joins inset sheet 31)

USDI FWS National Wetland Inventory Map



Legend

- Drainage
- ▨ Wetlands
- ▧ 100 Year Floodplain



