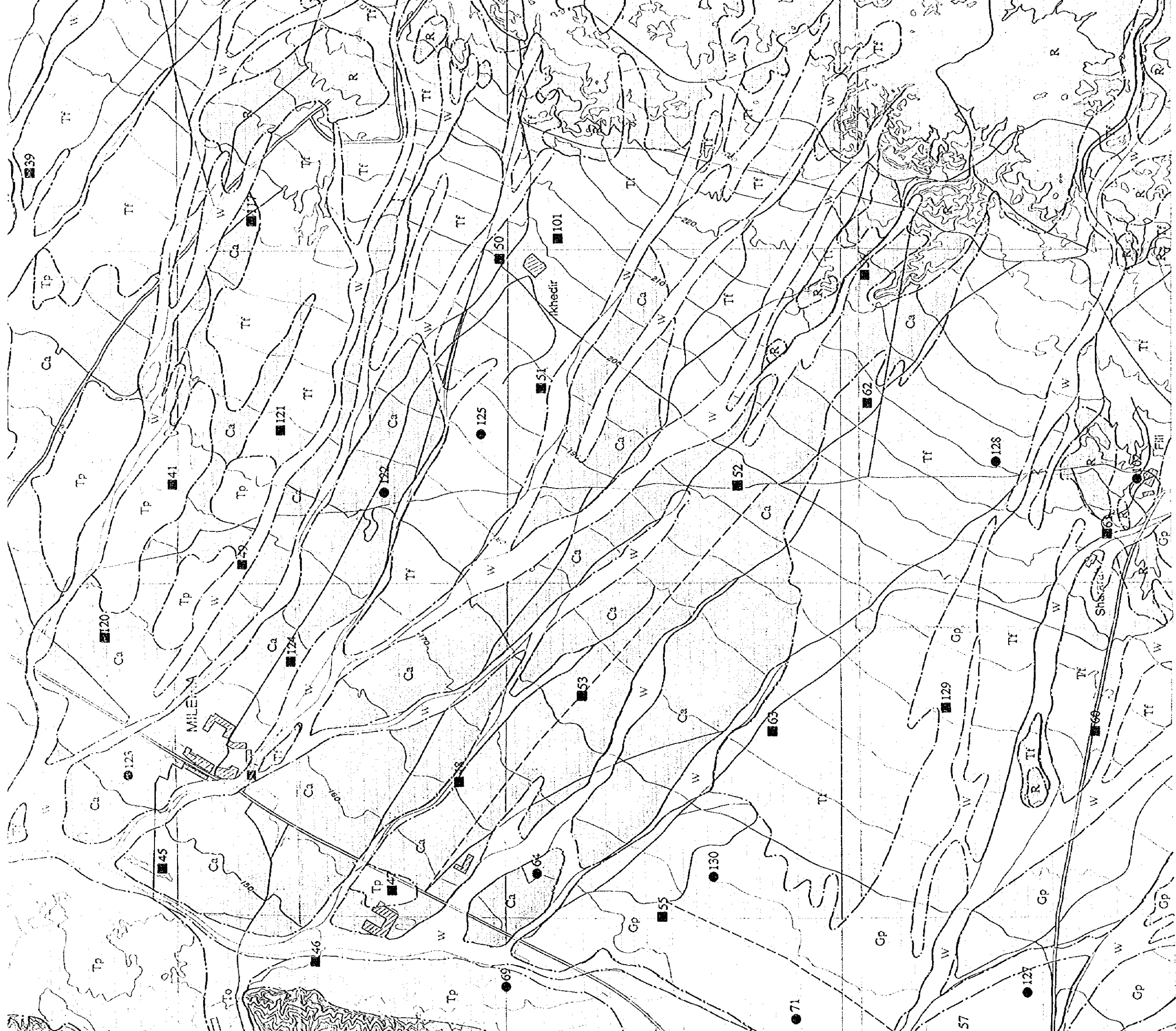
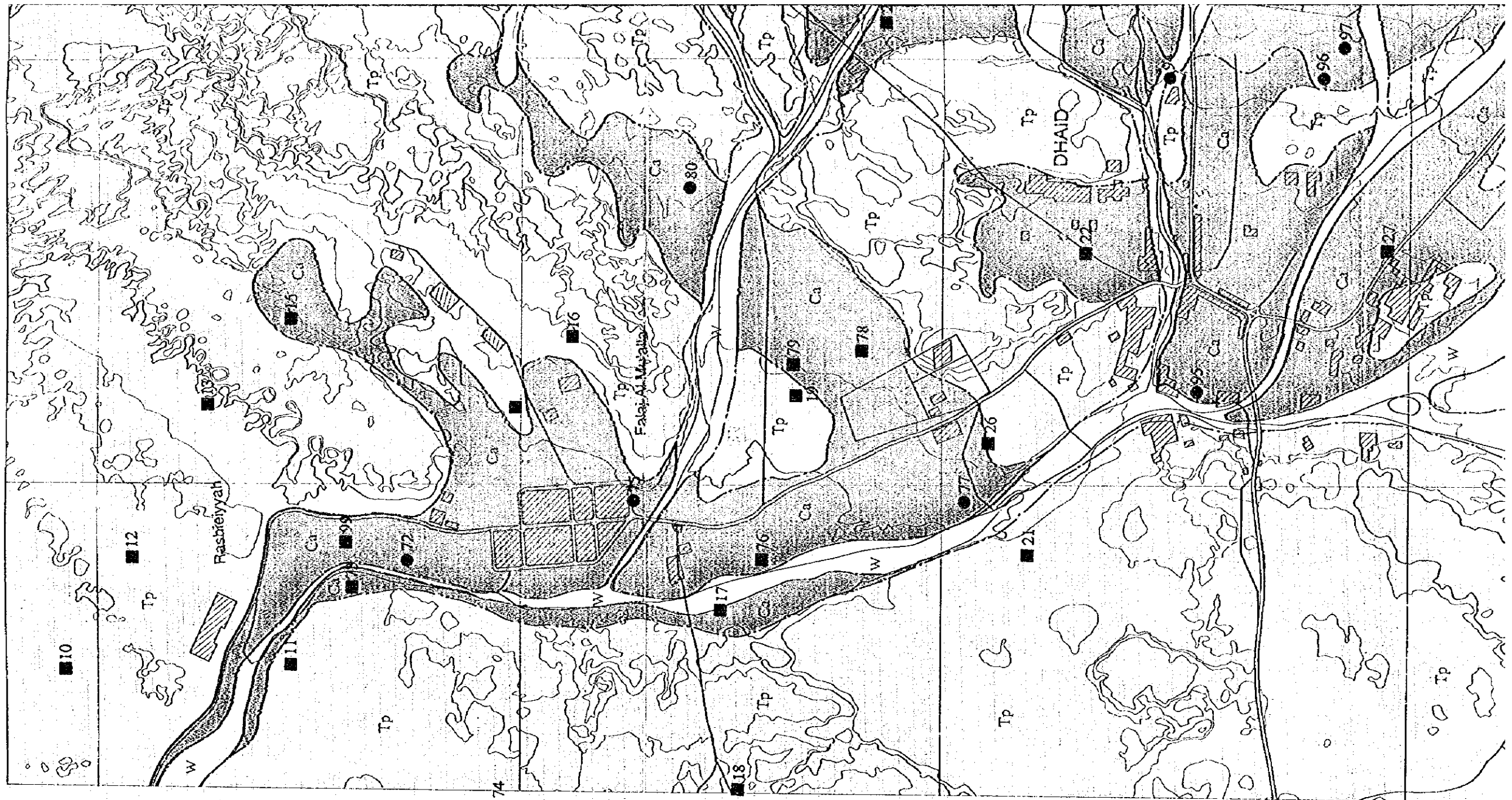


395.000

390.000

385.000





Tp

Torrripsaments-2

Soils are entisols. This map unit consists of nearly level and gently sloping soils on plains, and nearly level to strongly sloping soils on dunes. The dunes are less than two meters in height. Some are shifting sand dune. Soils have a calcareous composition and loamy in small areas. The soils are saline or moderately saline, and there is evidence of a drainage pattern. Small area has thin argillic layer.

Ti

Torrifluvents

Soils are entisols that have formed in the alluvial sediments of intermittent stream. They are subject to flooding. Most torrifluvents are stratified as a result of many layers of sediment accumulation, with each layer reflecting a period of flooding. Other torrifluvents, particularly those occurring in or near wadi channels, are stratified with contrasting textures ranging from silt loam to very gravelly sand and loamy in most areas. Torrifluvents are mostly deep, non-saline to moderately saline soils.

To

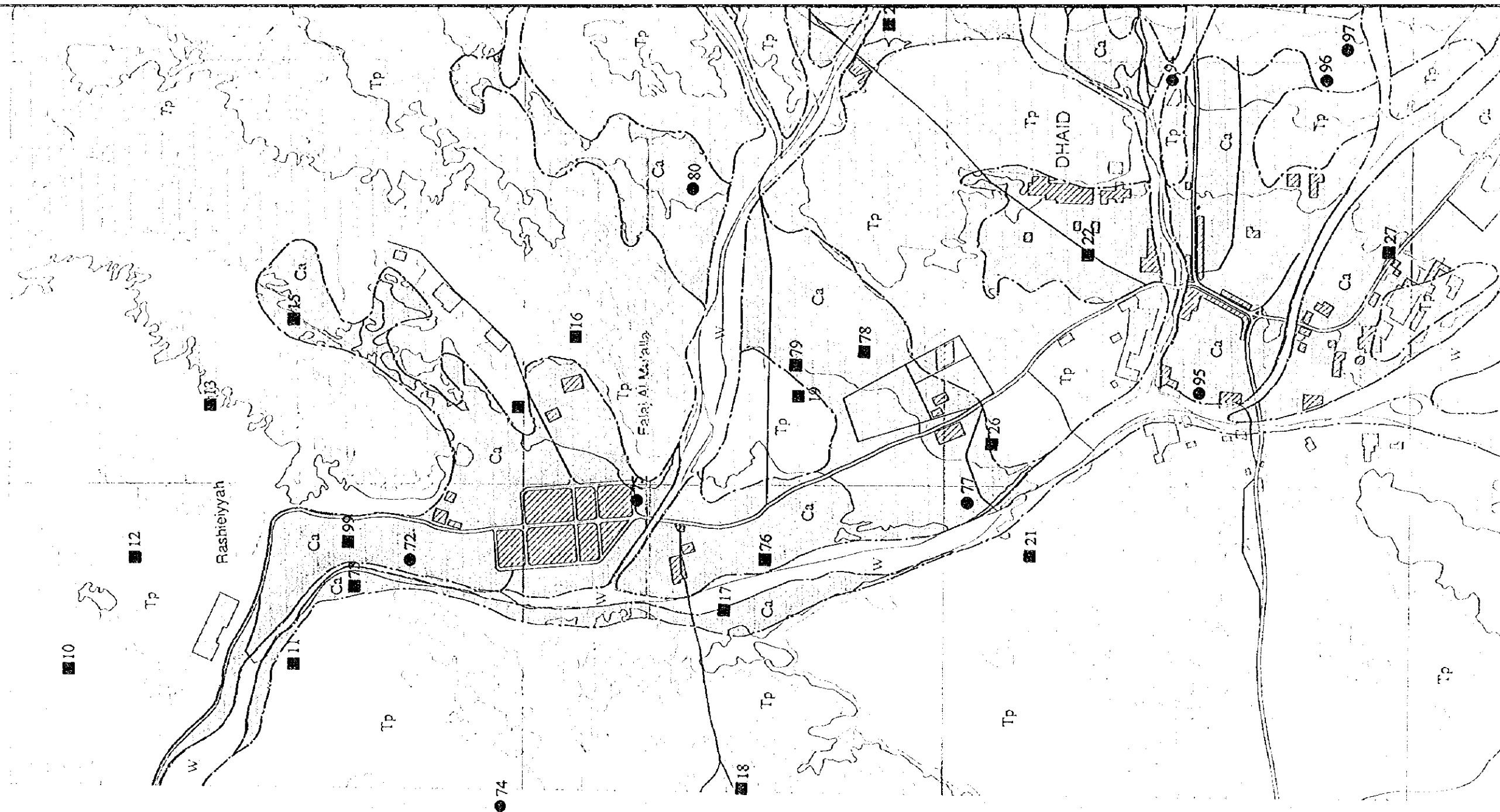
Torriothents

Soils are entisols that have formed on slopes, and in materials which are in some areas, they have formed in depths. Their texture is of loamy sand, counterparts. They range from non-saline to strongly saline.

Ca

Calciorthids

Soils are aridisols in which the second soil horizon has its upper boundary within 100 cm of the surface. Rainfall has not been sufficient to leach calcium from the soil. As a result, these soils are mostly aridisols, and, in many places, below to it. Calciorthids range from shallow to deep. In many places, calciorthids have formed in the sandstone. In terms of salinity they range from non-saline to strongly saline. They occur throughout the sedimentary sandstone which are common sources of calcium.



Tp

Torrripsaments-2

Soils are entisols. This map unit consists of nearly level and gently sloping soils on plains, and nearly level to strongly sloping soils on dunes. The dunes are less than two meters in height. Some are shifting sand dune. Soils have a calcareous composition and loamy in small areas. The soils are saline or moderately saline, and there is evidence of a drainage pattern. Small area has thin argillic layer.

Tf

Torrifluvents

Soils are entisols that have formed in the alluvial sediments of intermittent stream. They are subject to flooding. Most torrifluvents are stratified as a result of many layers of sediment accumulation, with each layer reflecting a period of flooding. Other torrifluvents, particularly those occurring in or near wadi channels, are stratified with contrasting textures ranging from silt loam to very gravelly sand and loamy in most areas. Torrifluvents are mostly deep, non-saline to moderately saline soils.

To

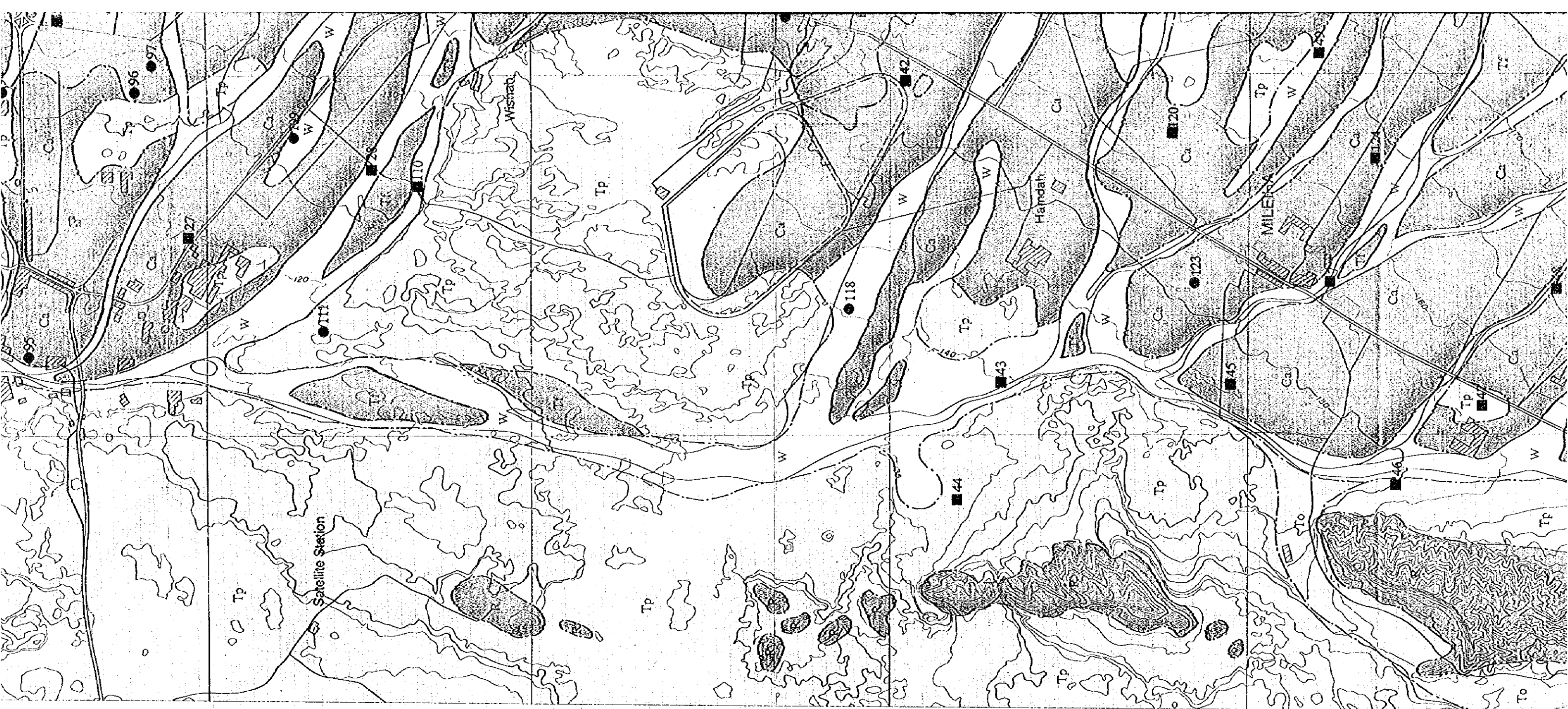
Torriothents

Soils are entisols that have formed on slopes, and in materials which are in some areas, they have formed in depths. Their texture is of loamy sand counterparts. They range from non-saline to strongly saline.

Ca

Calciorthids

Soils are aridisols in which the upper boundary of the argillic horizon has its upper boundary within 100 cm of the surface. Rainfall has not been sufficient to leach calcium from the soil. As a result, these soils are mostly aridisols, and, in many places, below to it. Calciorthids range from shallow to deep. In many places, calciorthids have formed in the sandstone. In terms of salinity they range from non-saline to strongly saline. They occur throughout the sedimentary sandstone are common sources of calcium carbonate.



Triorthents Soils are entisols that have formed mostly in residuum or in colluvium, on active eroding slopes, and in materials which are resistant to weathering. In some areas, they have formed in alluvium on stream terraces. depths. Their texture is of loamy sand, fine sandy loam, loam, or clay loam with gravelly counterparts. They range from non-saline to strongly saline.

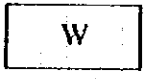


Gypsiorthids

Soils are aridisols that have a gypsic or petrogypsic horizon within one meter of the soil surface. These orthids range from very shallow to deep. They are loamy or loamy-skeletal, and their texture is mostly one of loam, fine or sandy loam, or loam with gravelly counterparts. The soils range from slightly saline to strongly saline.



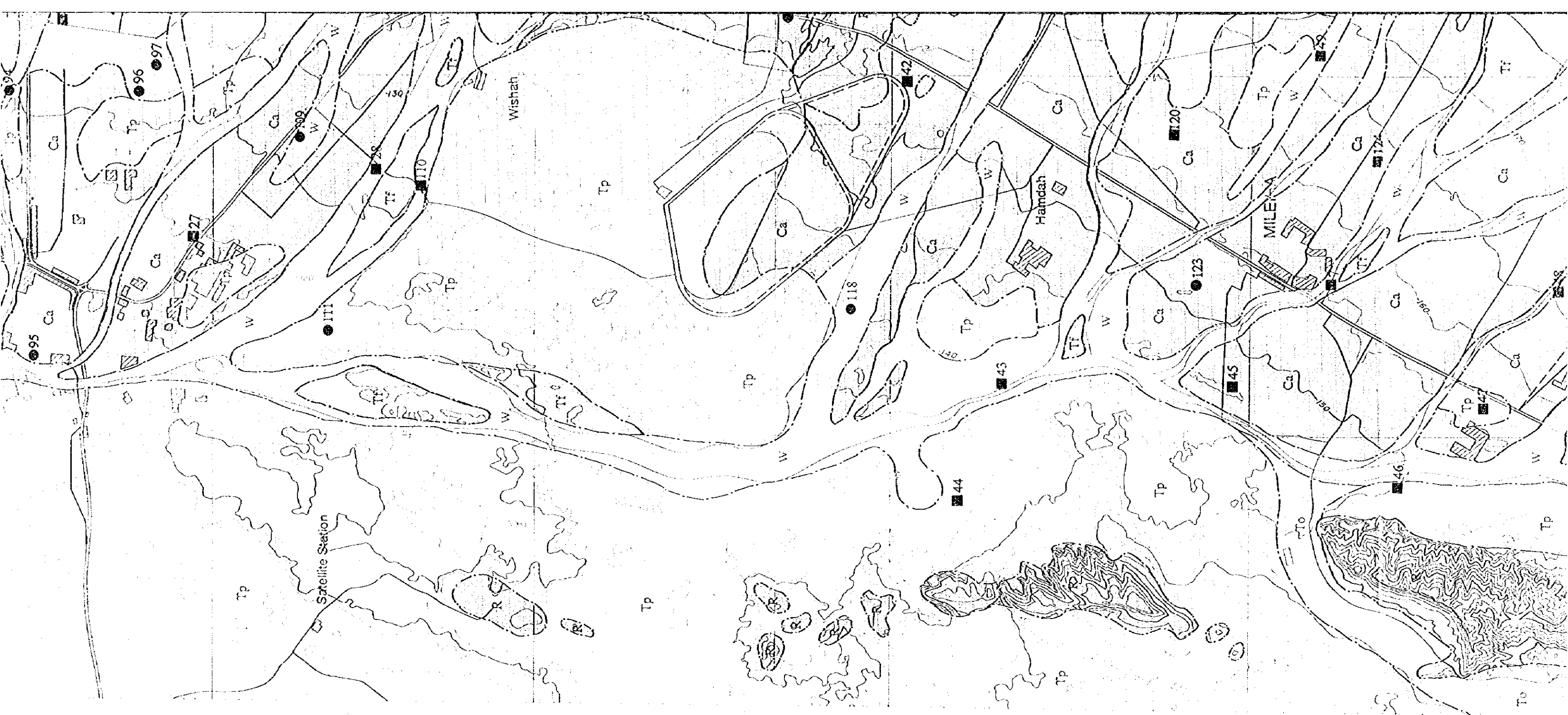
Calcorthids Soils are aridisols in which secondary carbonates have accumulated from a calcic horizon that has its upper boundary within one meter of soil surface. Rainfall has not been sufficient to leach carbonates from the upper part of soil. As a result, these soils are mostly calcareous from the surface down to the calcic horizon and, in many places, below to it. Calcorthids range from shallow to deep and are sandy and loamy. In many places, calcorthids have formed in residuum and are loamy-skeletal. In terms of salinity they range from non-saline to strongly saline. They occur throughout the sedimentary succession where limestone and calcareous sandstone are common sources of calcium carbonate.



Wadi Beds

This map unit consists of nearly level soils on wadis, mainly meandering braided streams. These streams often cut deeply into surrounding terrain. Topographically, they are the base level and drainage outlets subject to frequent and severe flooding. soils. Slopes range 0 to 1 percent. The surface is generally rugged and irregular.





Triorthids
 Soils are entisols that have formed mostly in residuum or in colluvium, on active eroding slopes, and in materials which are resistant to weathering. In some areas, they have formed in alluvium on stream terraces. Their texture is of loamy sand, fine sandy loam, loam, or clay loam with gravelly counterparts. They range from non-saline to strongly saline.

Calciorthisds
 Soils are aridisols in which secondary carbonates have accumulated from a calcic horizon that has its upper boundary within one meter of soil surface. Rainfall has not been sufficient to leach carbonates from the upper part of soil. As a result, these soils are mostly calcareous from the surface down to the calcic horizon and, in many places, below to it. Calciorthisds range from shallow to deep and are sandy and loamy. In many places, calciorthisds have formed in residuum and are loamy-skeletal. In terms of salinity they range from non-saline to strongly saline. They occur throughout the sedimentary succession where limestone and calcareous sandstone are common sources of calcium carbonate.

Gp

Gypsiorthids

Soils are aridisols that have a gypsic or petrogypsic horizon within one meter of the soil surface. These orthids range from very shallow to deep. They are loamy or loamy-skeletal, and their texture is mostly one of loam, fine or sandy loam, or loam with gravelly counterparts. The soils range from slightly saline to strongly saline.

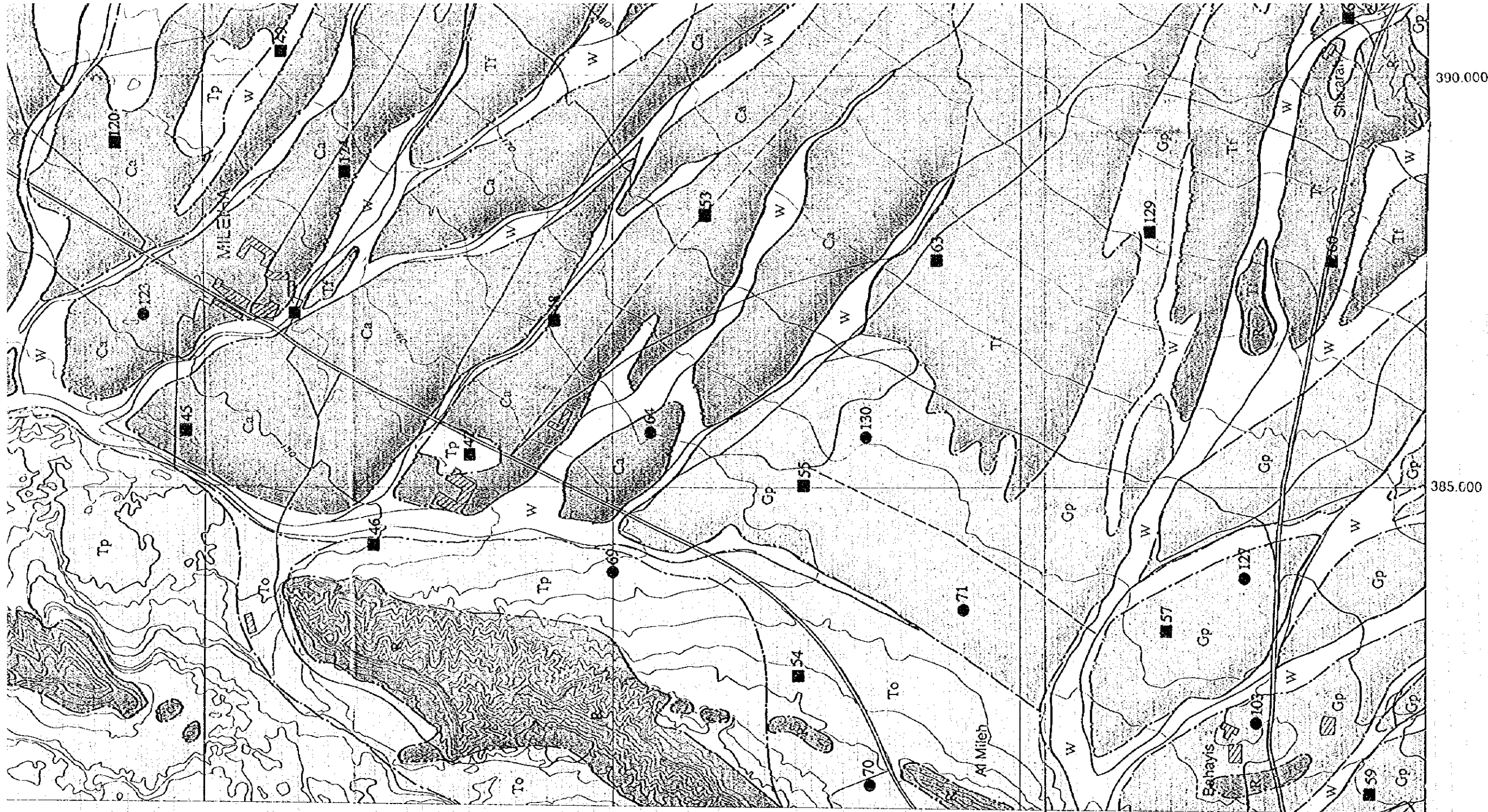
W

Wadi Beds

This map unit consists of nearly level soils on wadis, mainly meandering braided streams. These streams often cut deeply into surrounding terrain. Topographically, they are the base level and drainage outlets subject to frequent and severe flooding. Slopes range 0 to 1 percent. The surface is generally rugged and irregular.

R

■
●



a gypsic or petrogypsic horizon within one meter of the soil

y shallow to deep.

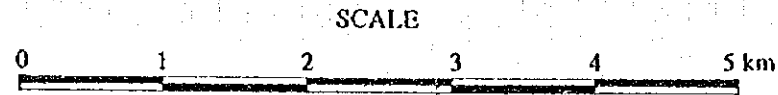
letal, and their texture is mostly one of loam, fine or sandy counterparts.

saline to strongly saline.

ly level soils on wadis, mainly meandering braided streams. y into surrounding terrain.

base level and drainage outlets subject to frequent and severe

d and irregular.



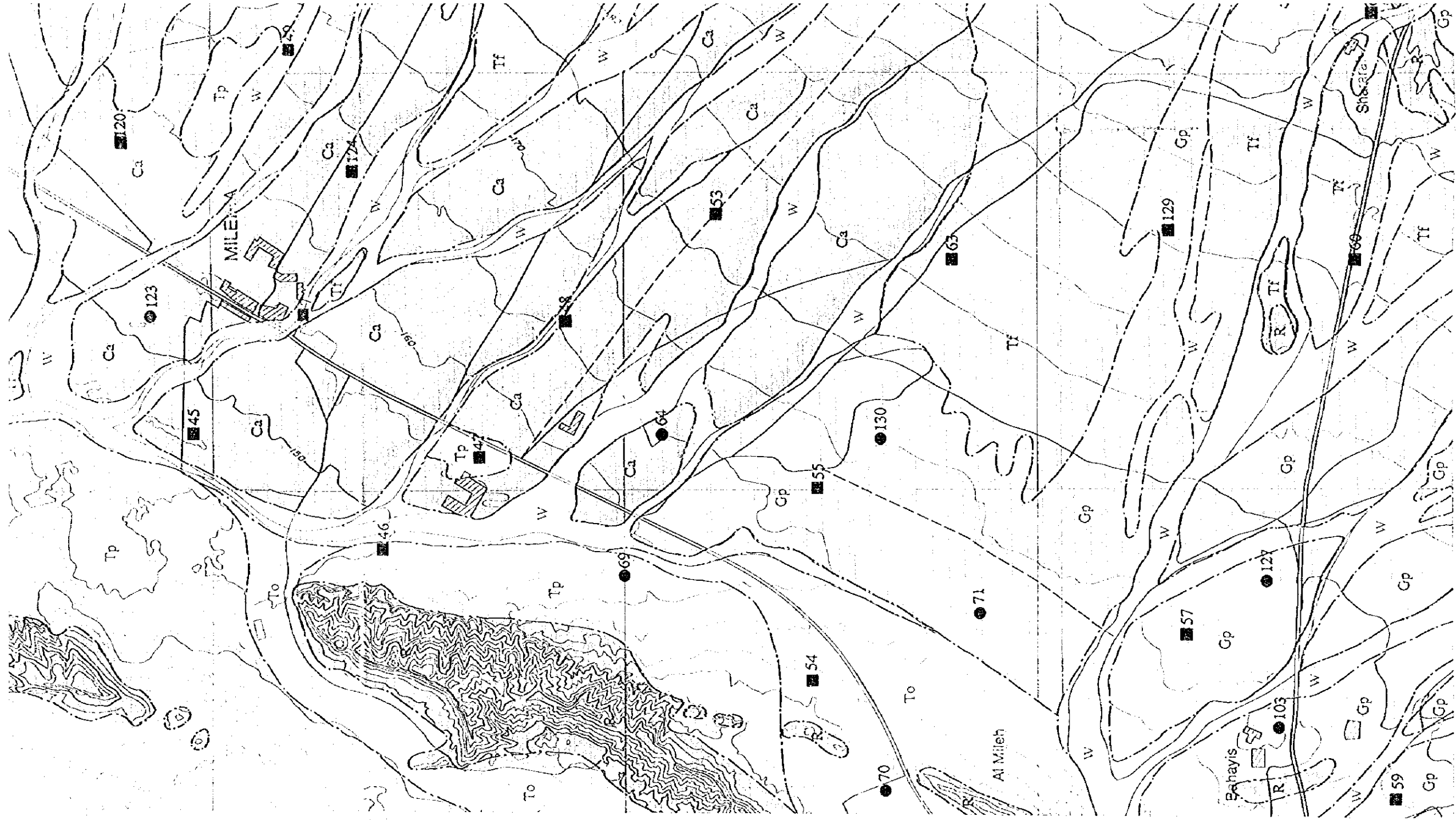
Rock Outcrop - Torriorthents

The map unit consists of rock outcrop on highly dissected mountains, low hills and steep soils on hillslope, slope ranges 0 to 10 percent.

The torriorthents and similar soils are on piedmont slopes, footslops and channels. Slope ranging from 0 to 15 percent. The torriorthents are calcareous, very gravelly loamy to sandy, shallow to deep soils.

■ observation soil pit

● soil pit sampled



... a gypsic or petrogypsic horizon within one meter of the soil

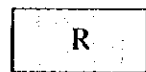
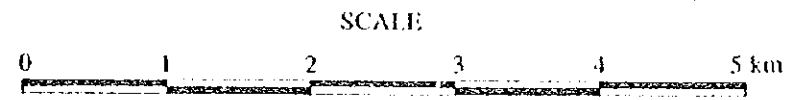
... shallow to deep
... skeletal, and their texture is mostly one of loam, fine or sandy counterparts.

... saline to strongly saline.

... only level soils on wadis, mainly meandering braided streams,
... only into surrounding terrain.

... base level and drainage outlets subject to frequent and severe

... ed and irregular.

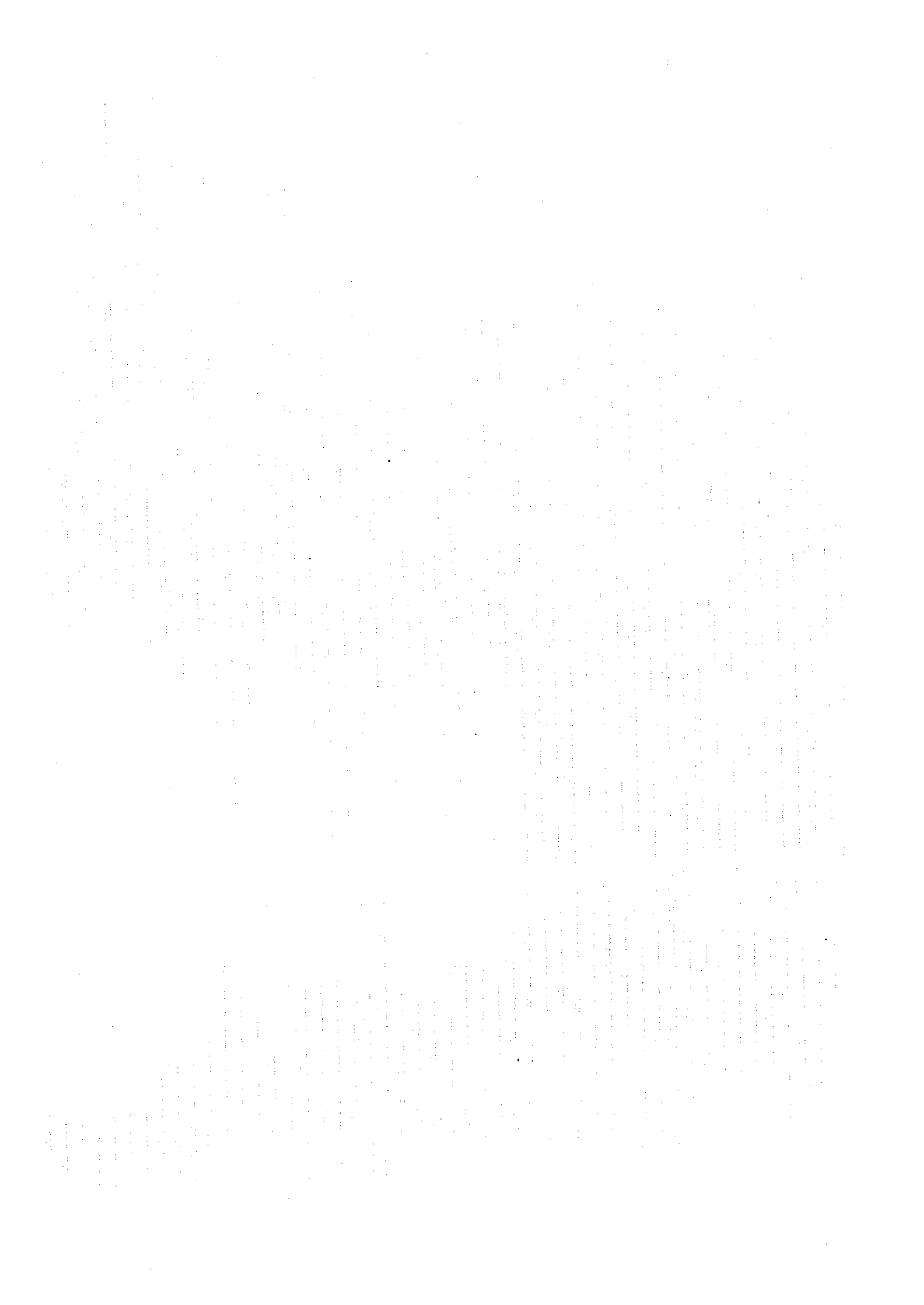


Rock Outcrop - Torrorthents

The map unit consists of rock outcrop on highly dissected mountains, low hills and steep soils on hillslope, slope ranges 0 to 10 percent. The torrorthents and similar soils are on piedmont slopes, footslopes and channels. Slope ranging from 0 to 15 percent. The torrorthents are calcareous, very gravelly loamy to sandy, shallow to deep soils.

■ observation soil pit

● soil pit sampled







JICA