

Analysis incomplete - sum of electrical values
does not come out to electrical neutrality

Water balance of dump (IN = OUT) was grossly miscalculated
Gardner Lee admitted they did not know and gave
up, making no further attempts.

Sampling methods regarding leachate plume were
blamed by Gardner Lee for their testimony
contradicting the plume evidence of their own work.

Bad groundwater invasion was claimed to be the source of
high concentrations underground although the
pressure profiles made such invasion impossible.

These deficiencies obscure the presence and the extent
of the leachate plume. The EPA approval for expanding
the present site was given on that basis, although it
was ordered to determine the extent of the leachate plume.

However, the monitoring data, if not totally dismissed,
indicate the presence and progression of a leachate plume
(...2)

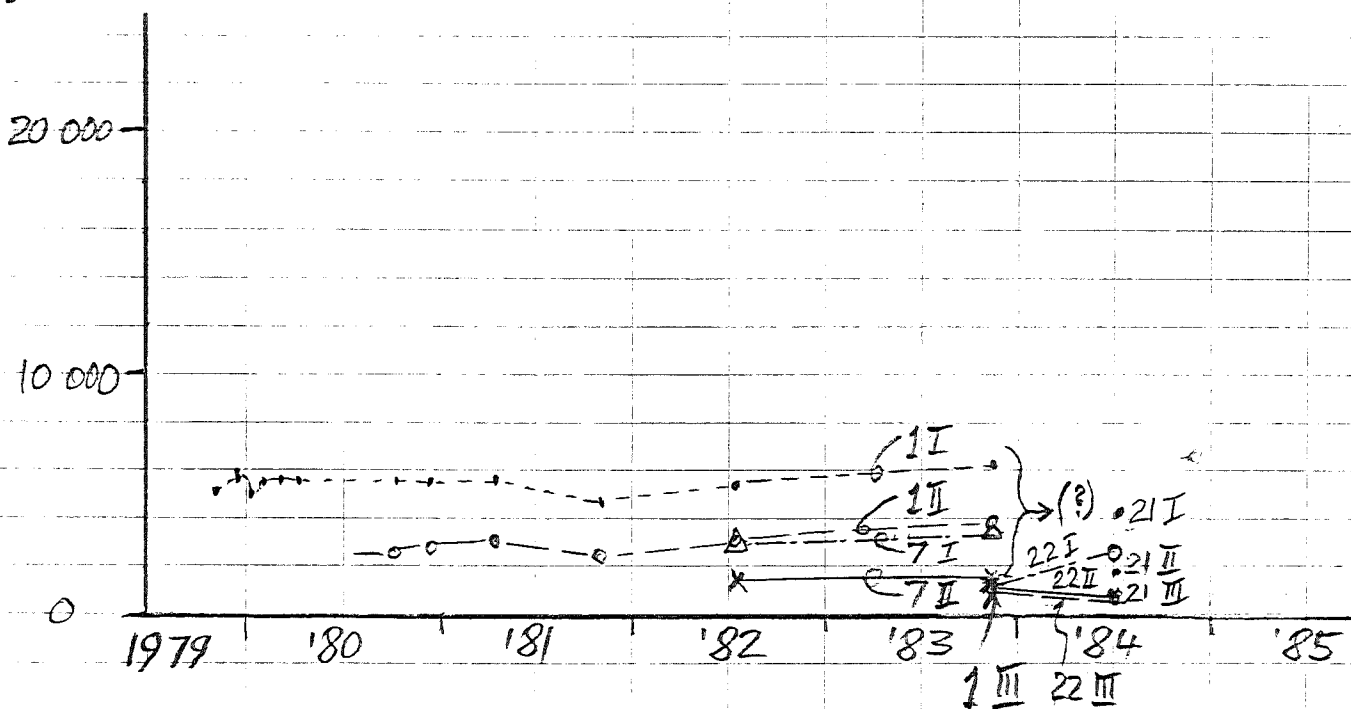
in agreement with the direction of the measured pressure profiles (which are not in question)

We request:

1. Completion of a credible Water Balance for the present regional landfill
2. Sufficient leachate analyses of samples from the mid-depth wells as well as from the collection system to prove the completion of electrical neutrality.
3. Evaluation of the analyses of well samples (monitoring reports) and their concentration changes with time for plotting the progress of the concentration changes.
4. Review of piezometer well data and plotting of pressure profiles as they may have changed with time
5. Installation of two additional monitoring wells in the predominant down-hill direction from the oldest part of the landfill, i.e. near the entrance road from N. Service Rd. to the weigh scale.

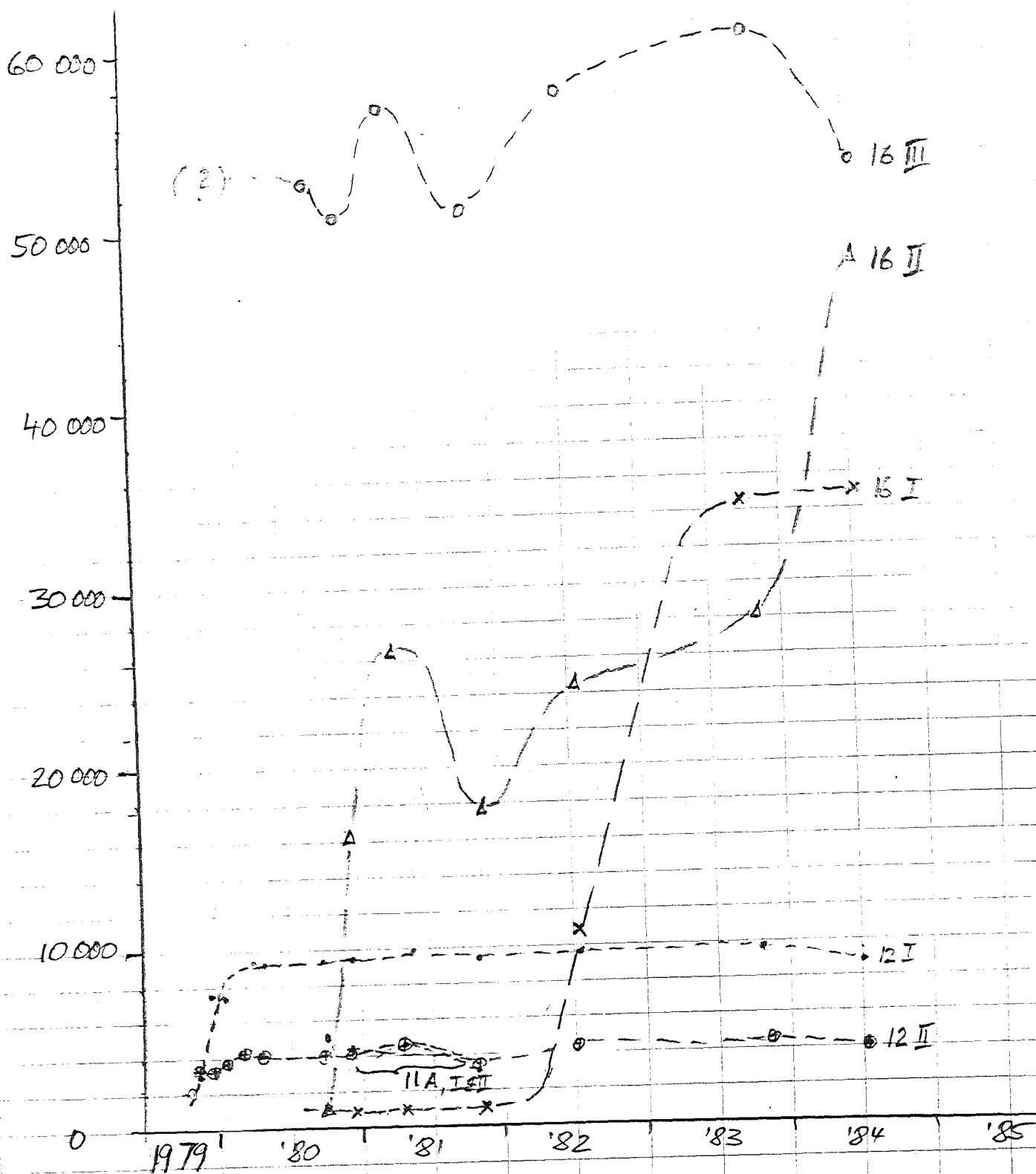
Conductivity - Background levels (uphill)

μ mhos/cm



Conductivity

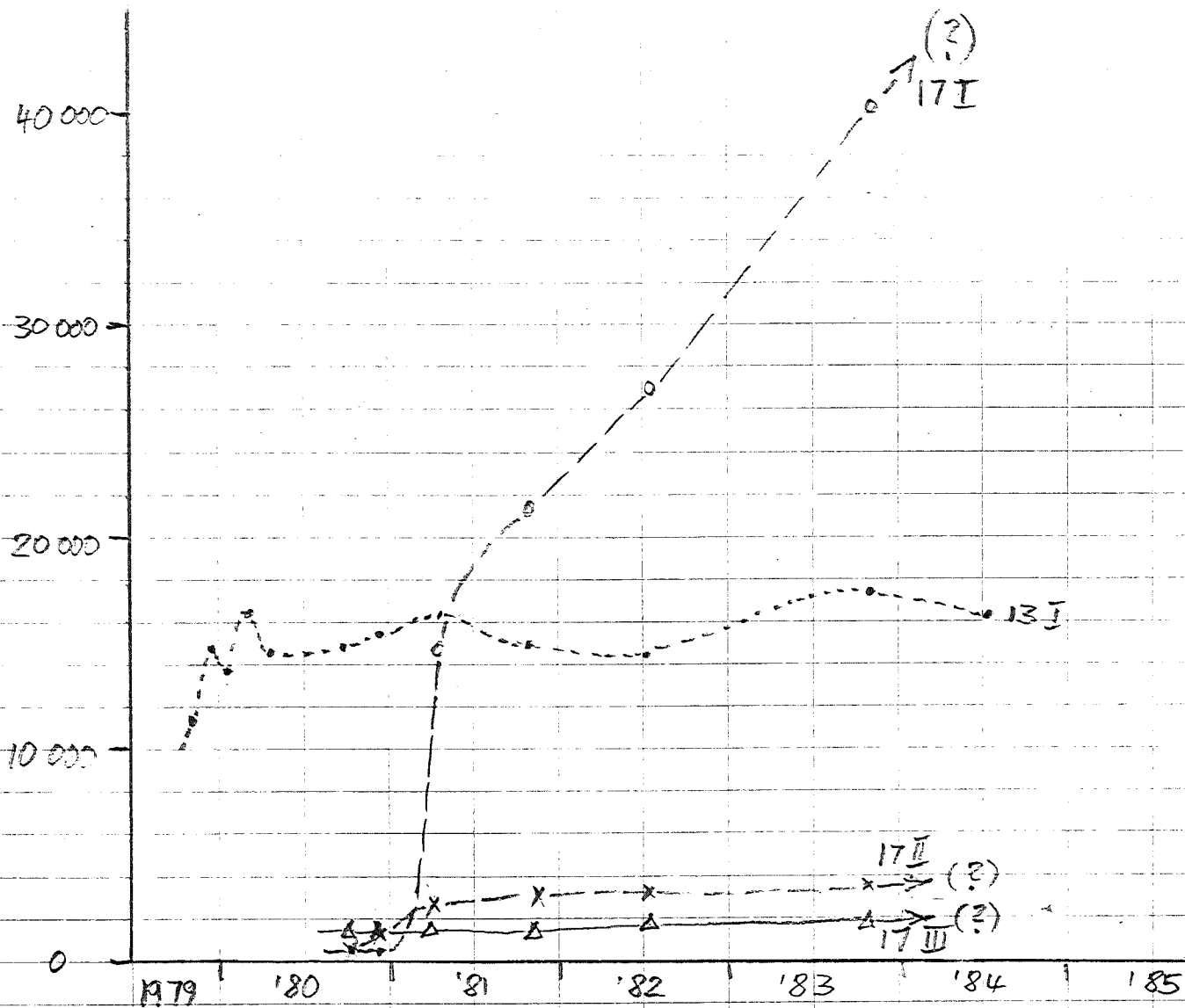
μ mhos/cm

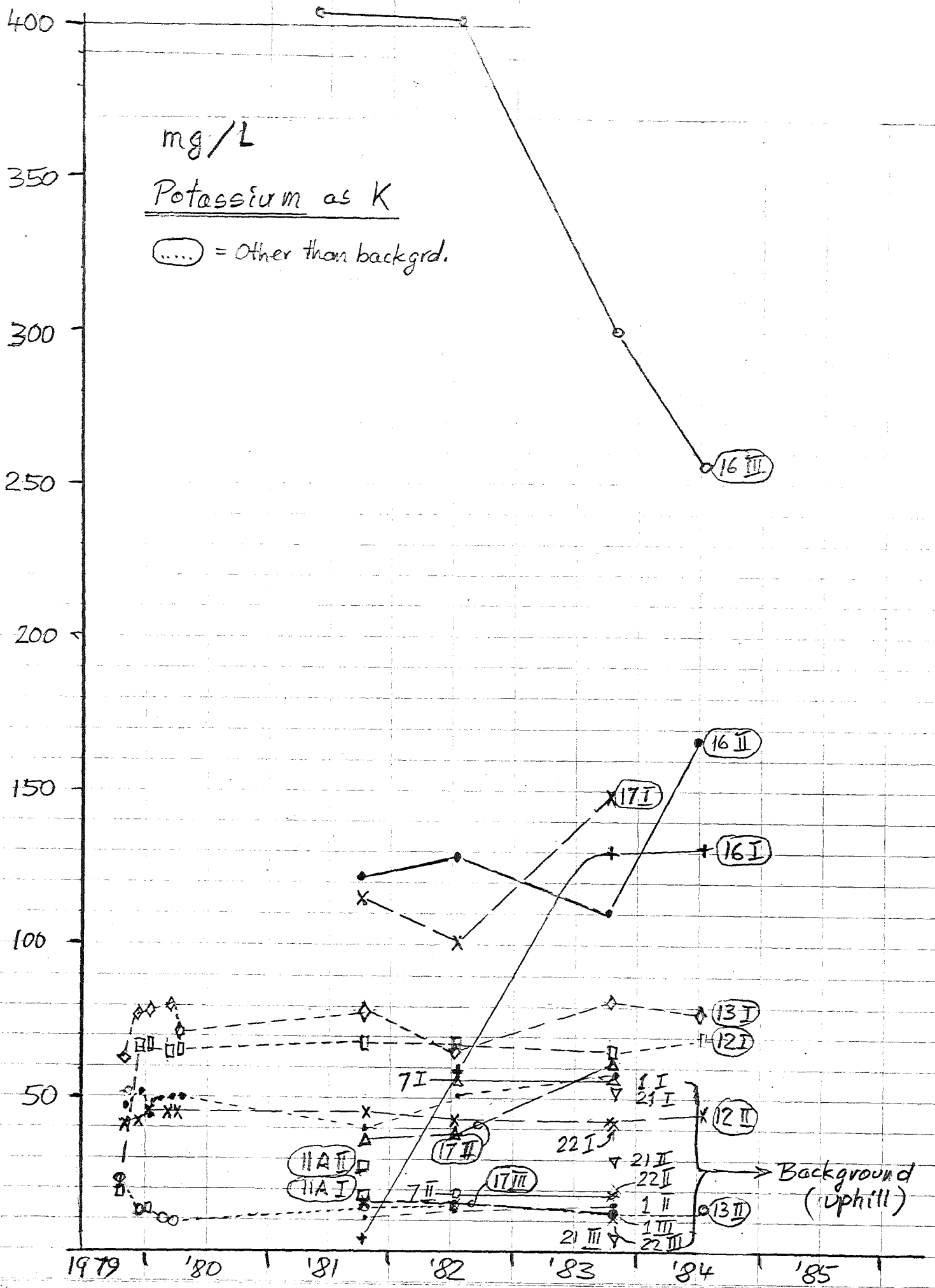


(cont'd: 13 and 17)

Conductivity, cont.'d

μ mhos/cm

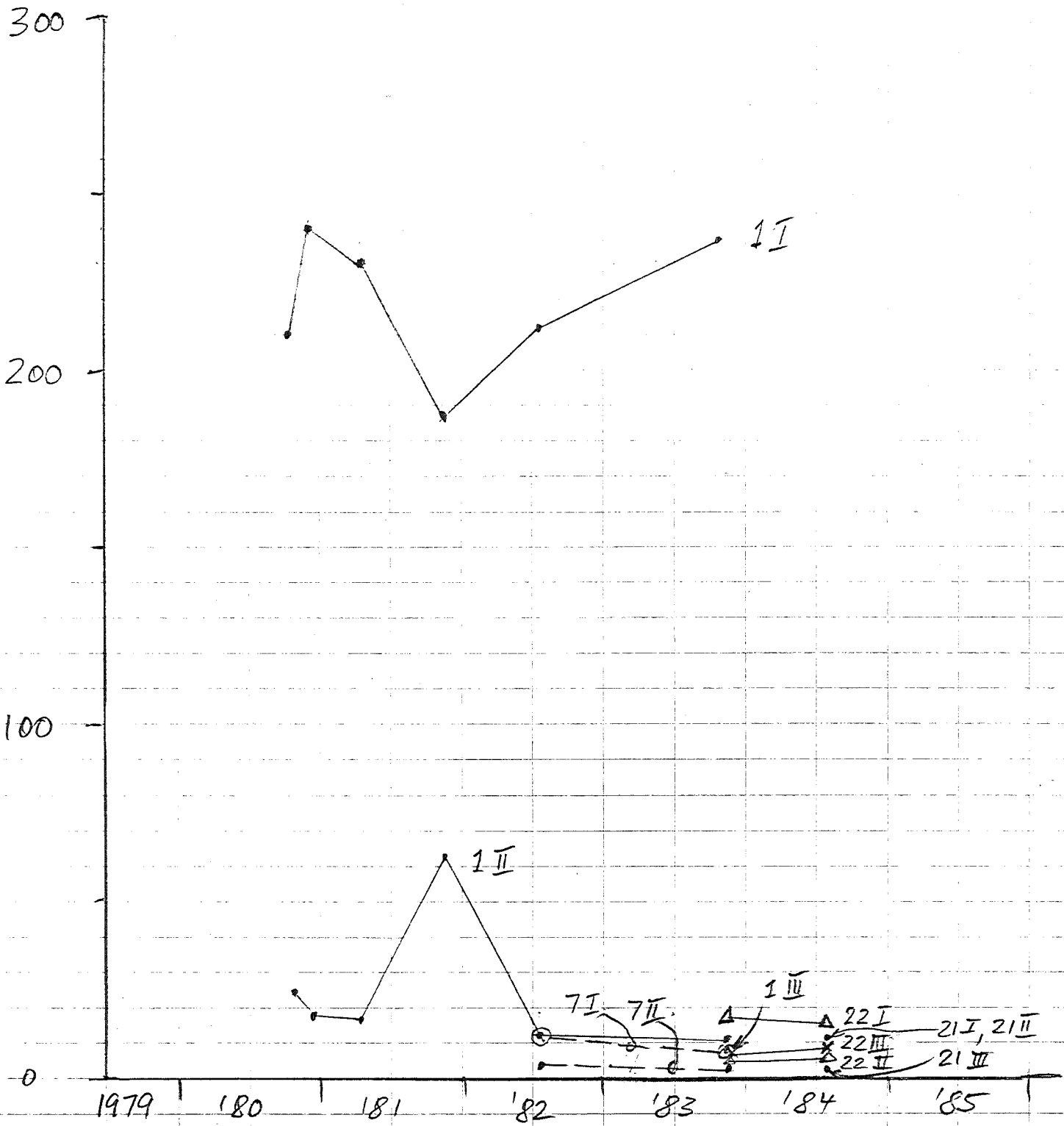




Chloride (Cl)

ppm

Uphill boreholes ("background")



Chloride (Cl)
ppm

6000

5000

4000

3000

2000

1000

See
uphill
range

0

1979

180

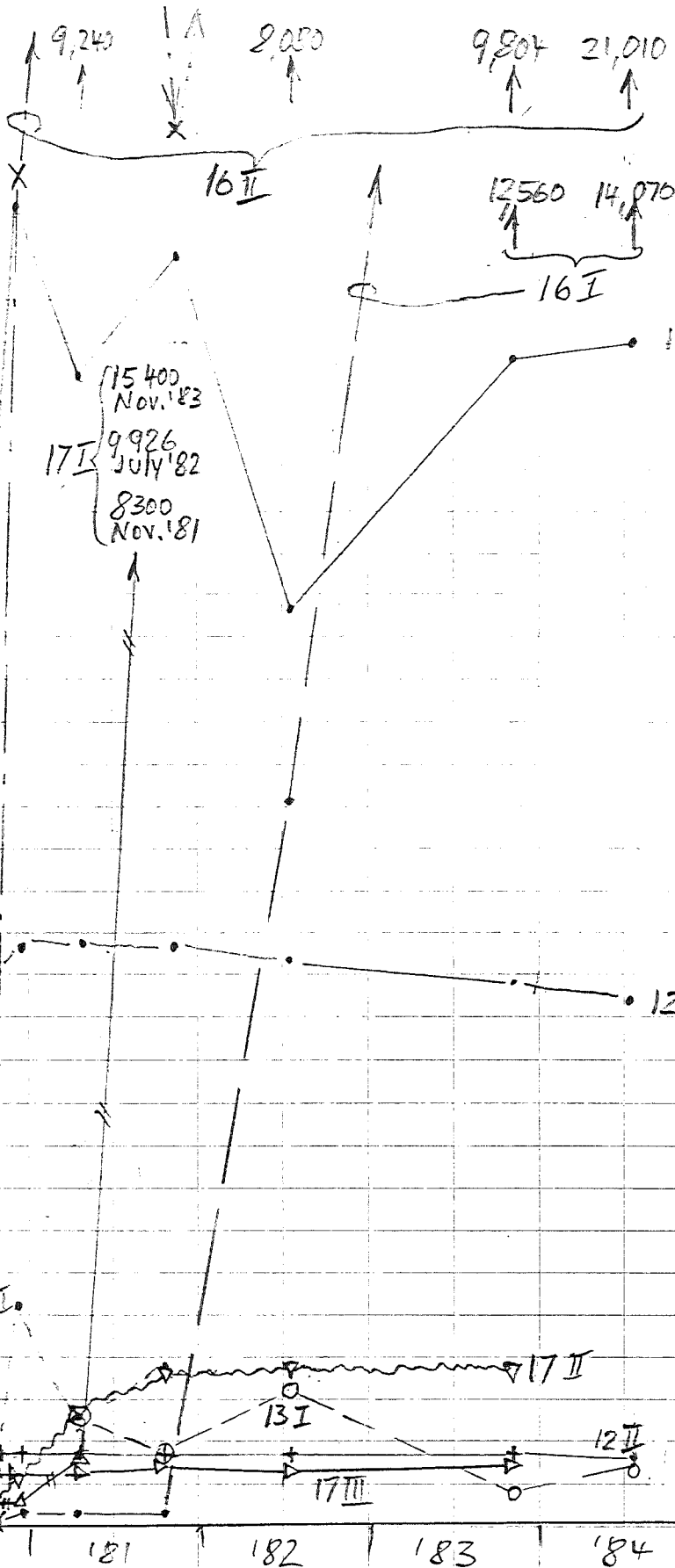
181

182

183

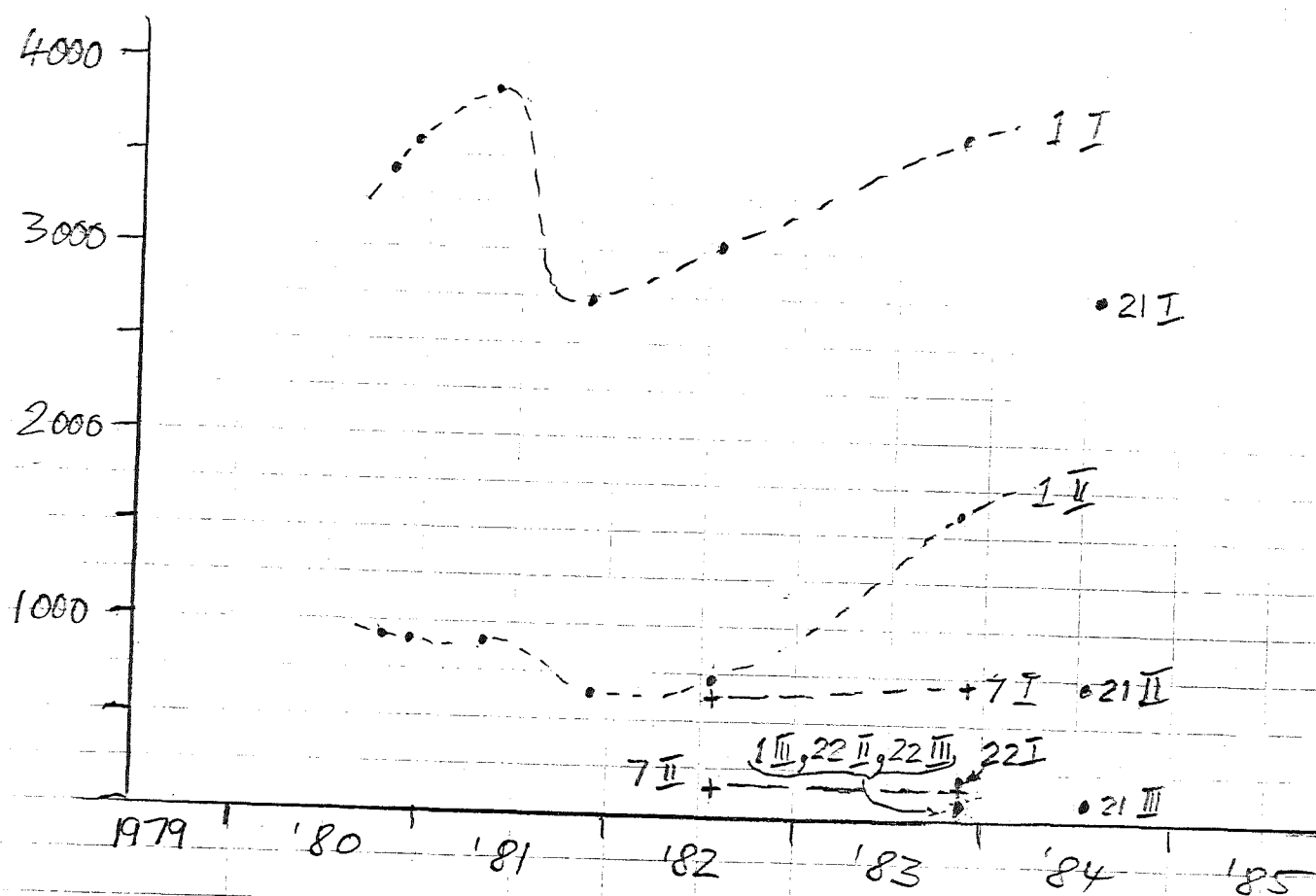
'84

'85

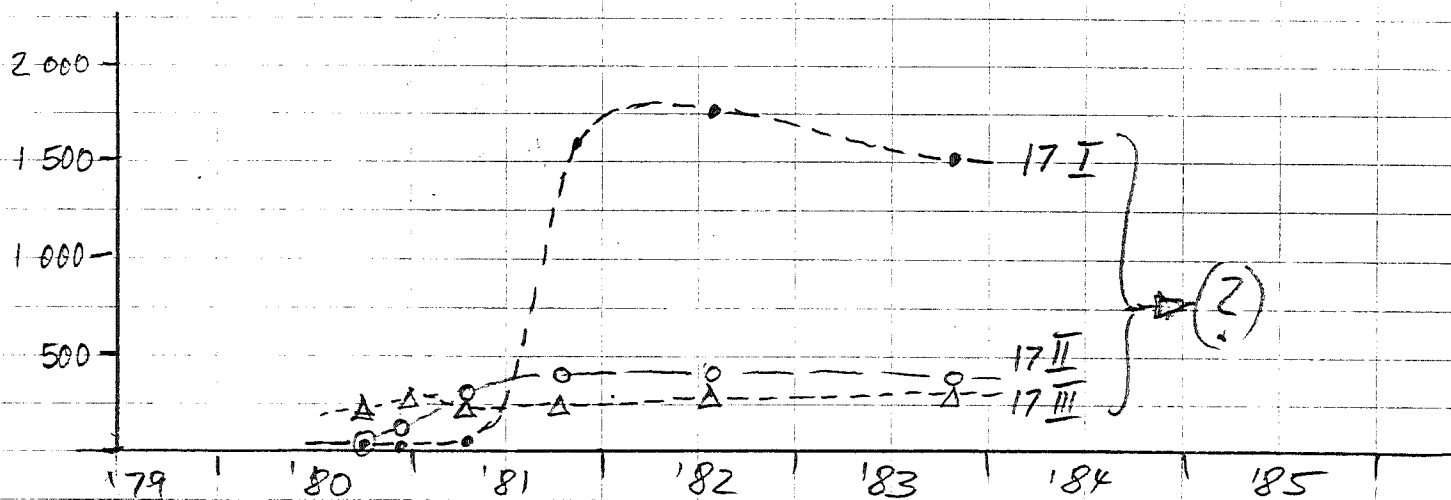
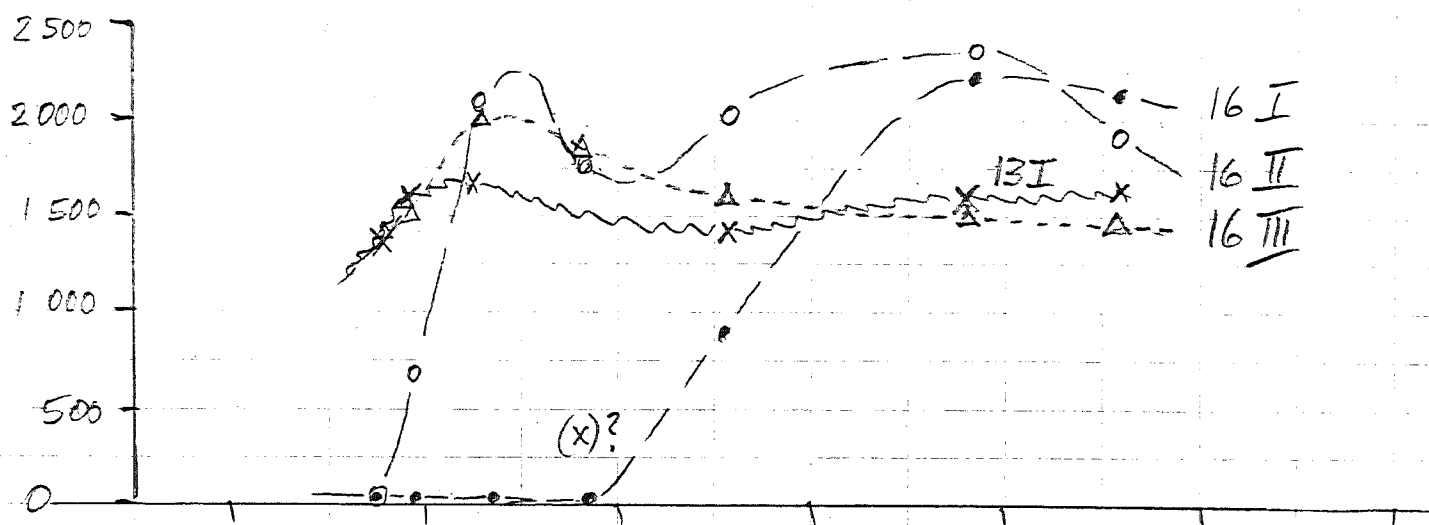
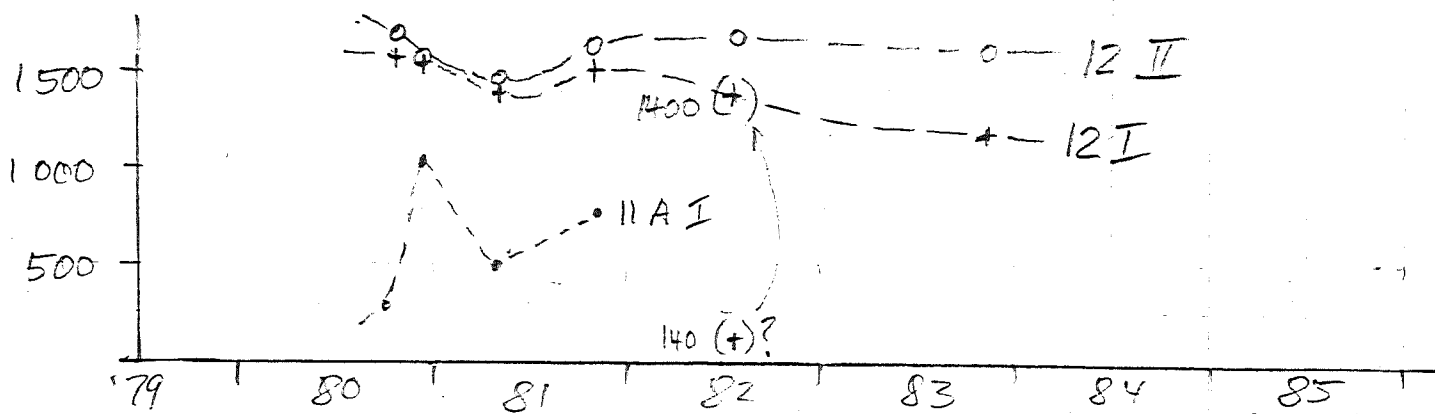


300

Sulphates (SO_4) ppm
Background

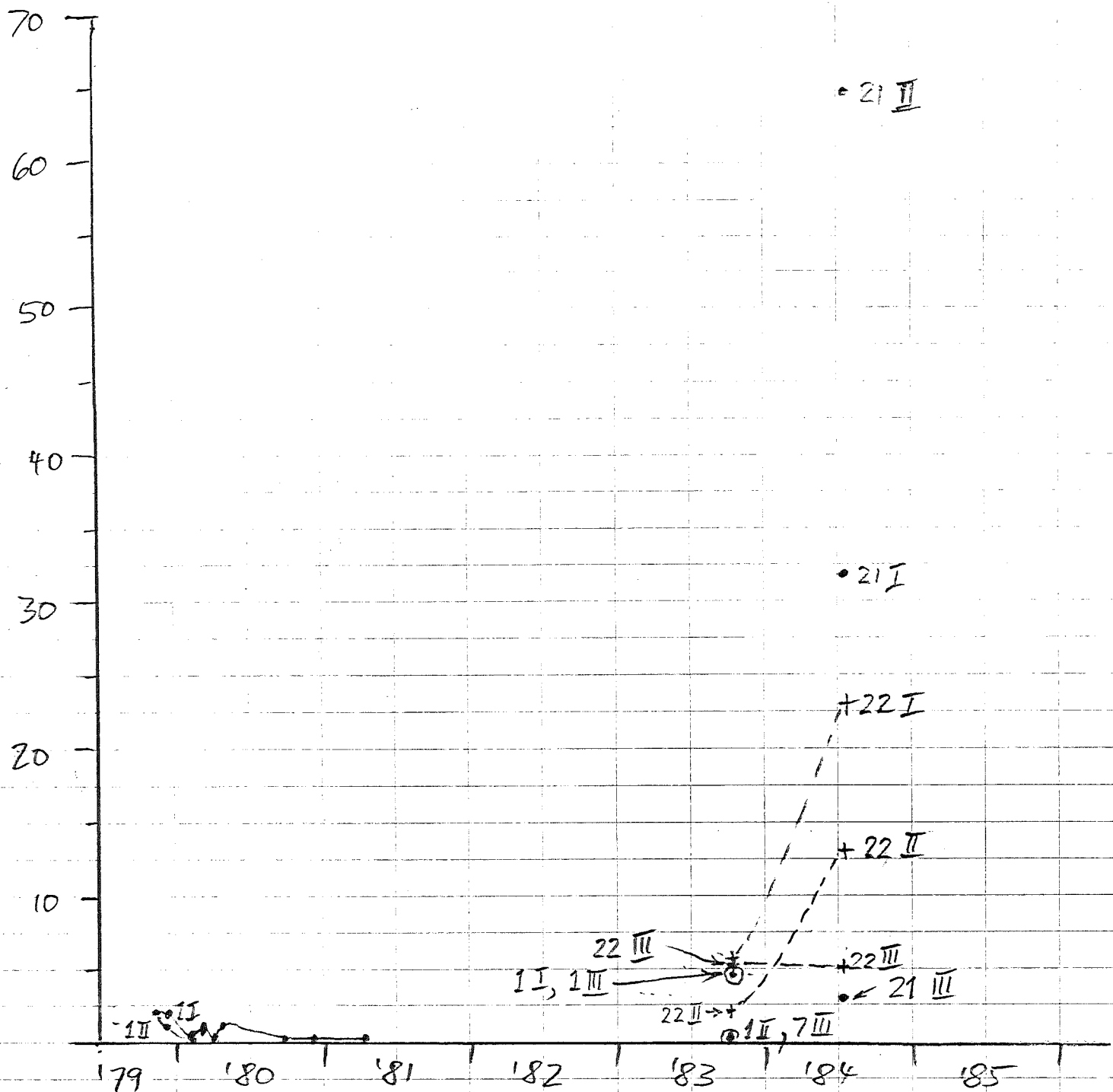


Sulphates (SO_4) ppm



Phenols, ($\mu\text{g/L}$ or ppb)

Uphill boreholes ("background")



Phenols $\mu\text{g/L} (\approx \text{ppb})$

