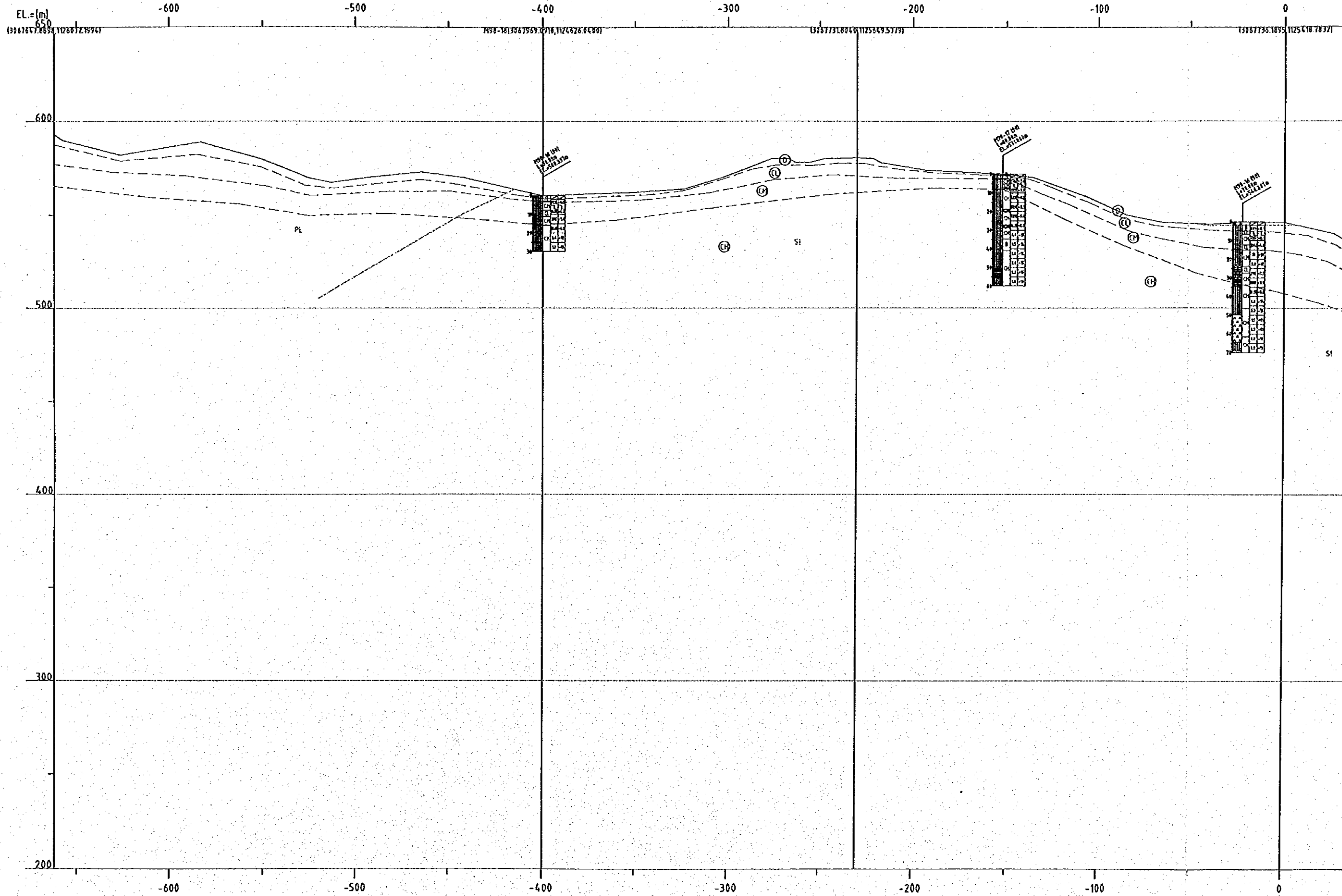
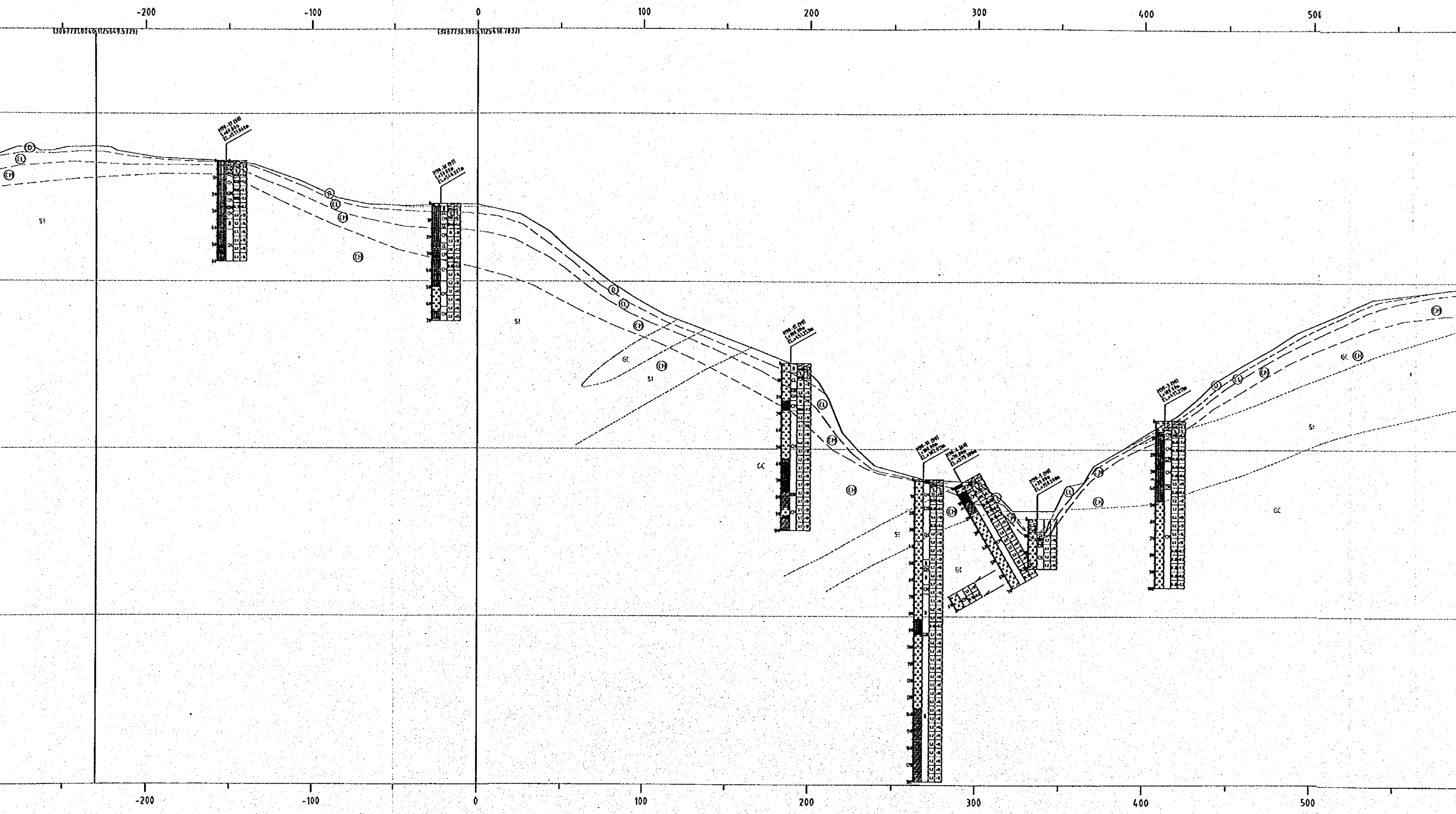


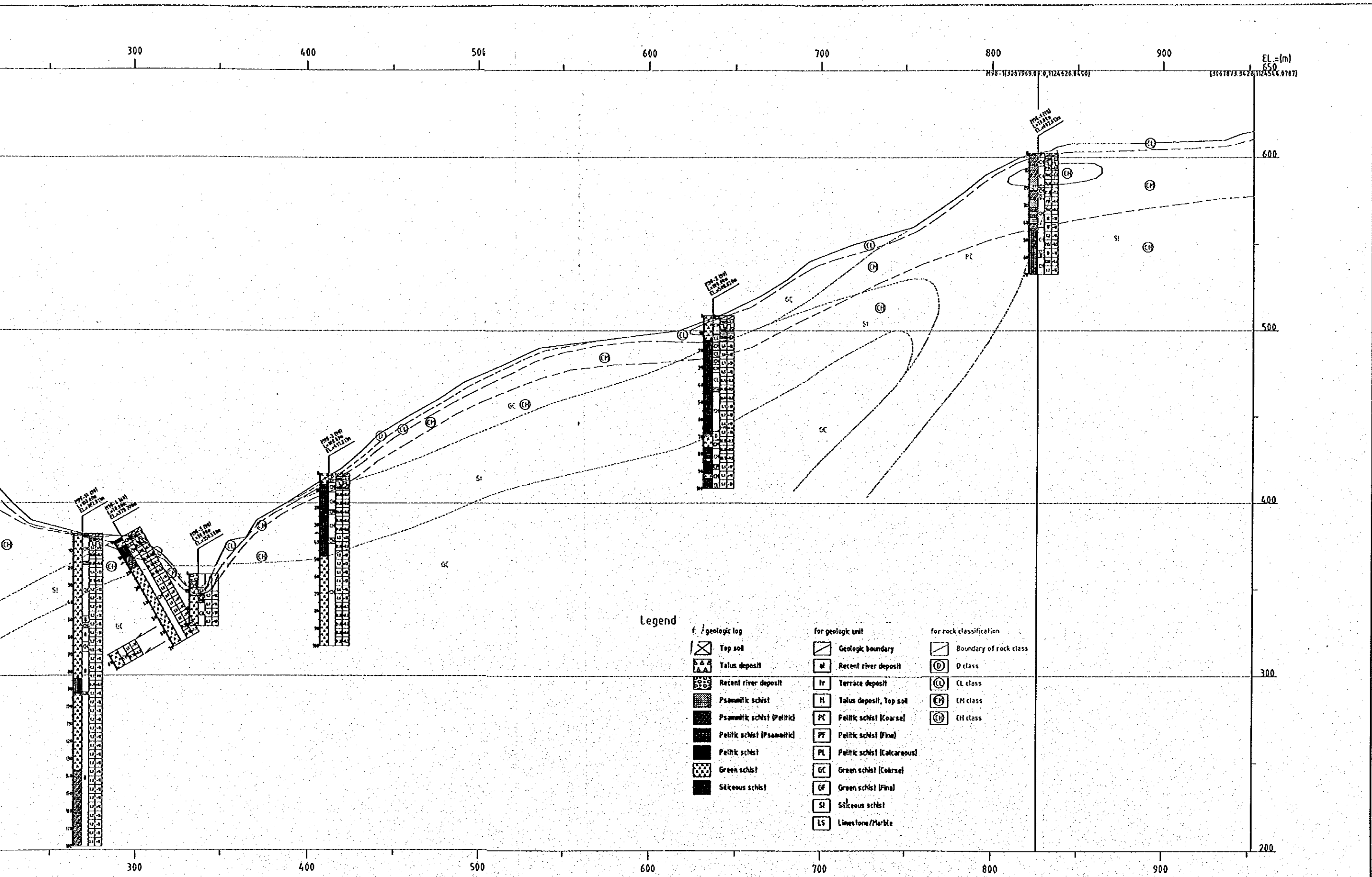
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 ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT  
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Figure B3.2  
 Geological Investigation of Dam Site  
 Location Map



83.3-1

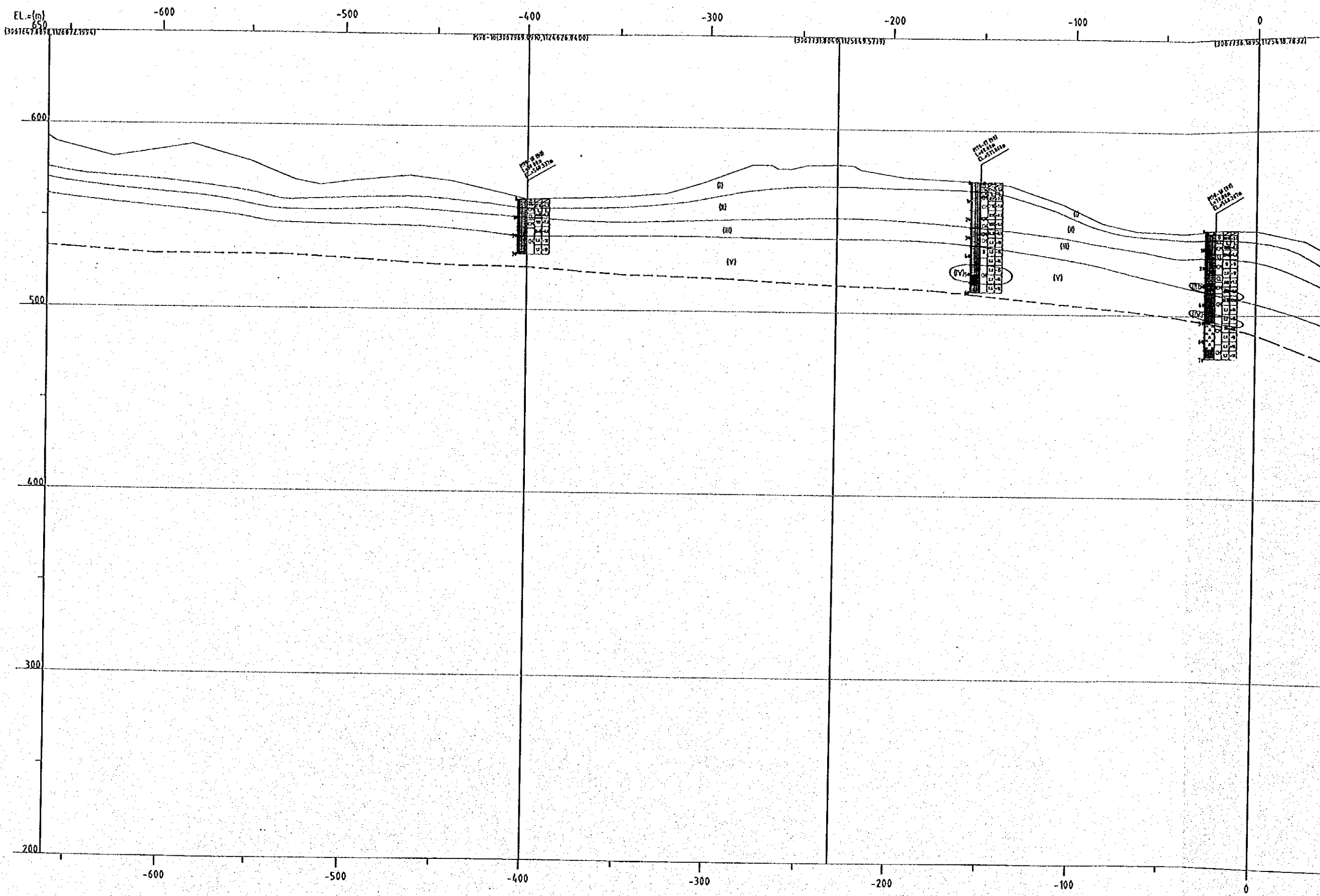




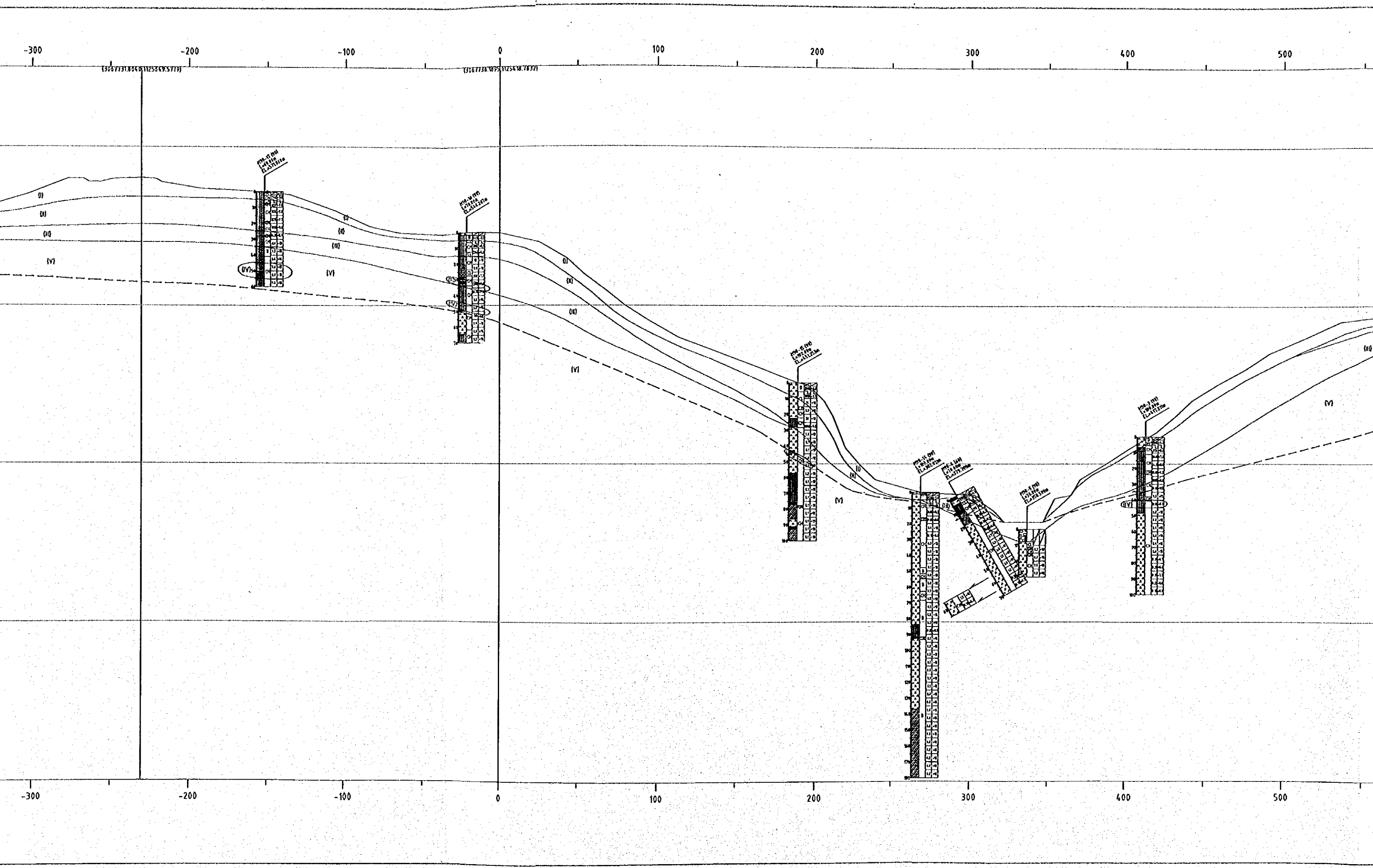
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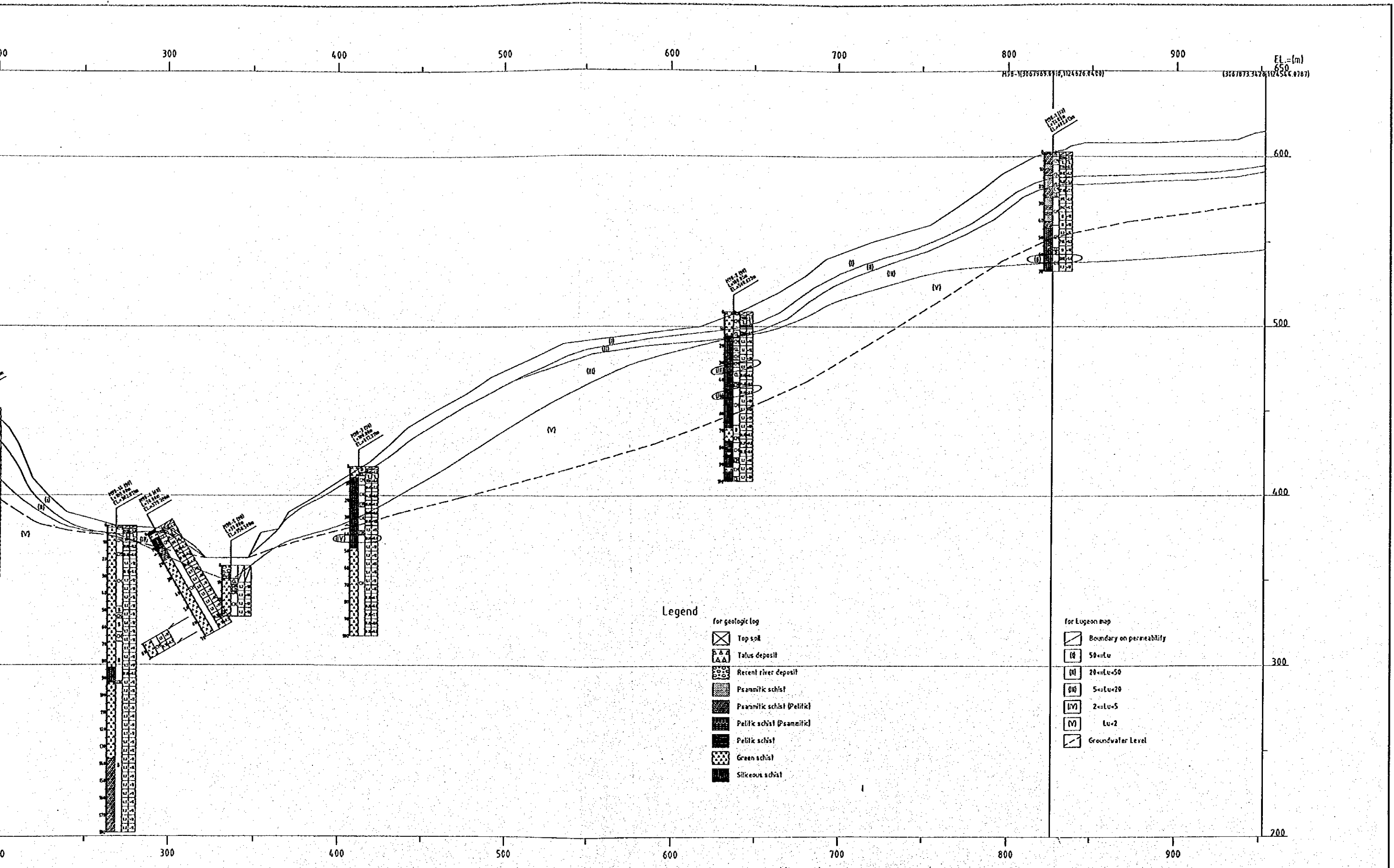
Figure B3.3-1  
Geological Profile on the Dam Axis





B.3.2

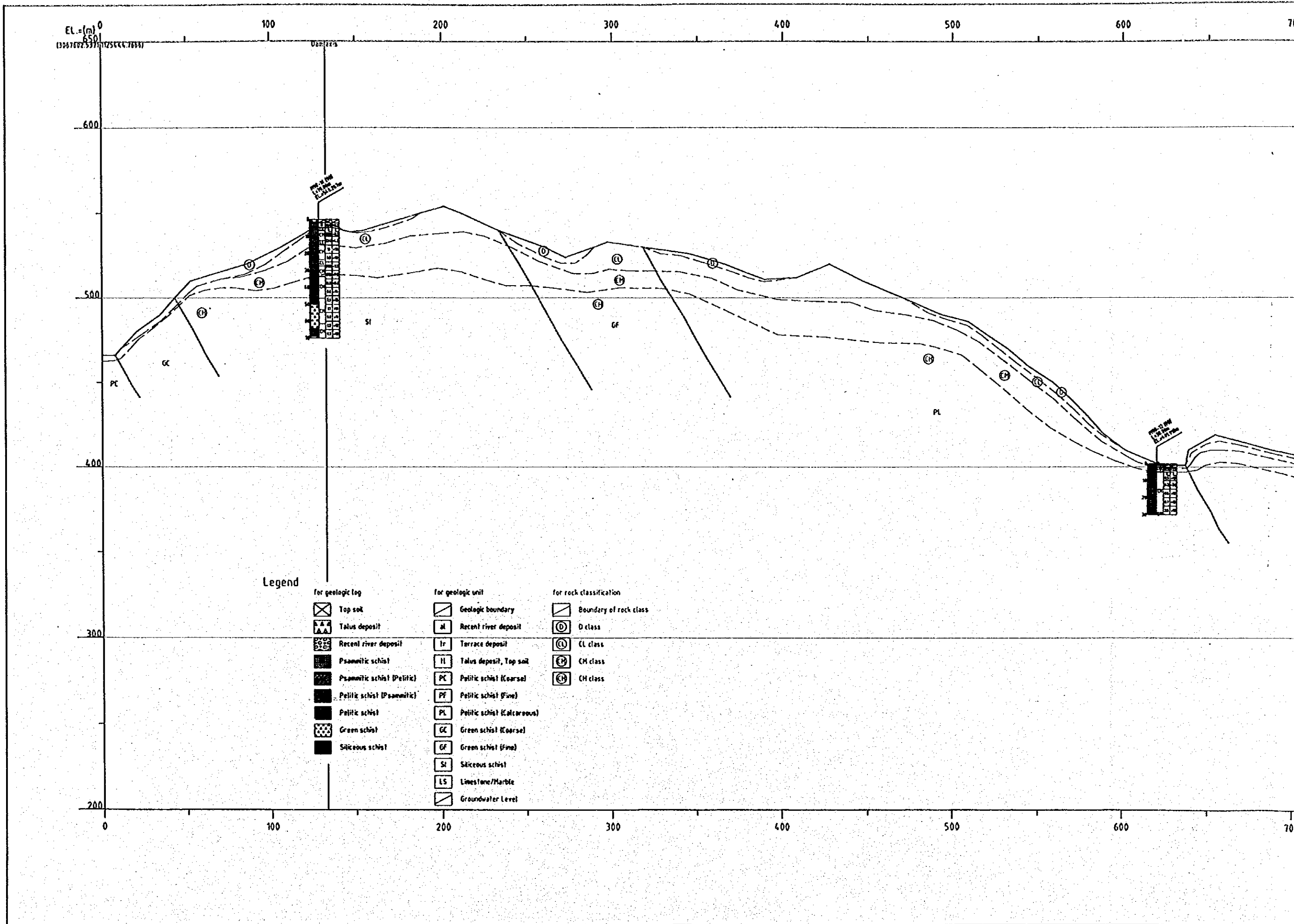


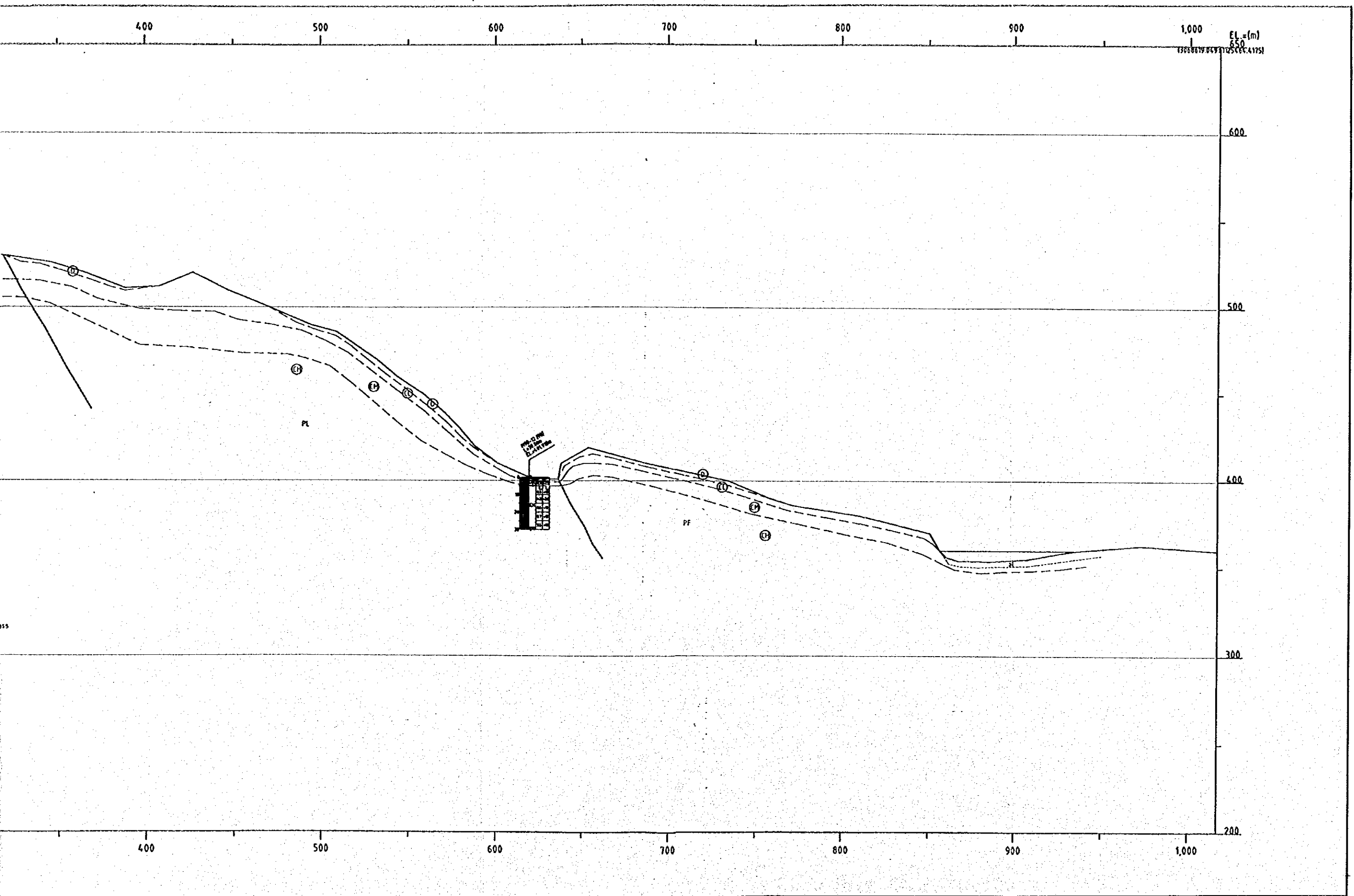


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Figure B3.3-2  
 Lugeon Map on the Dam Axis

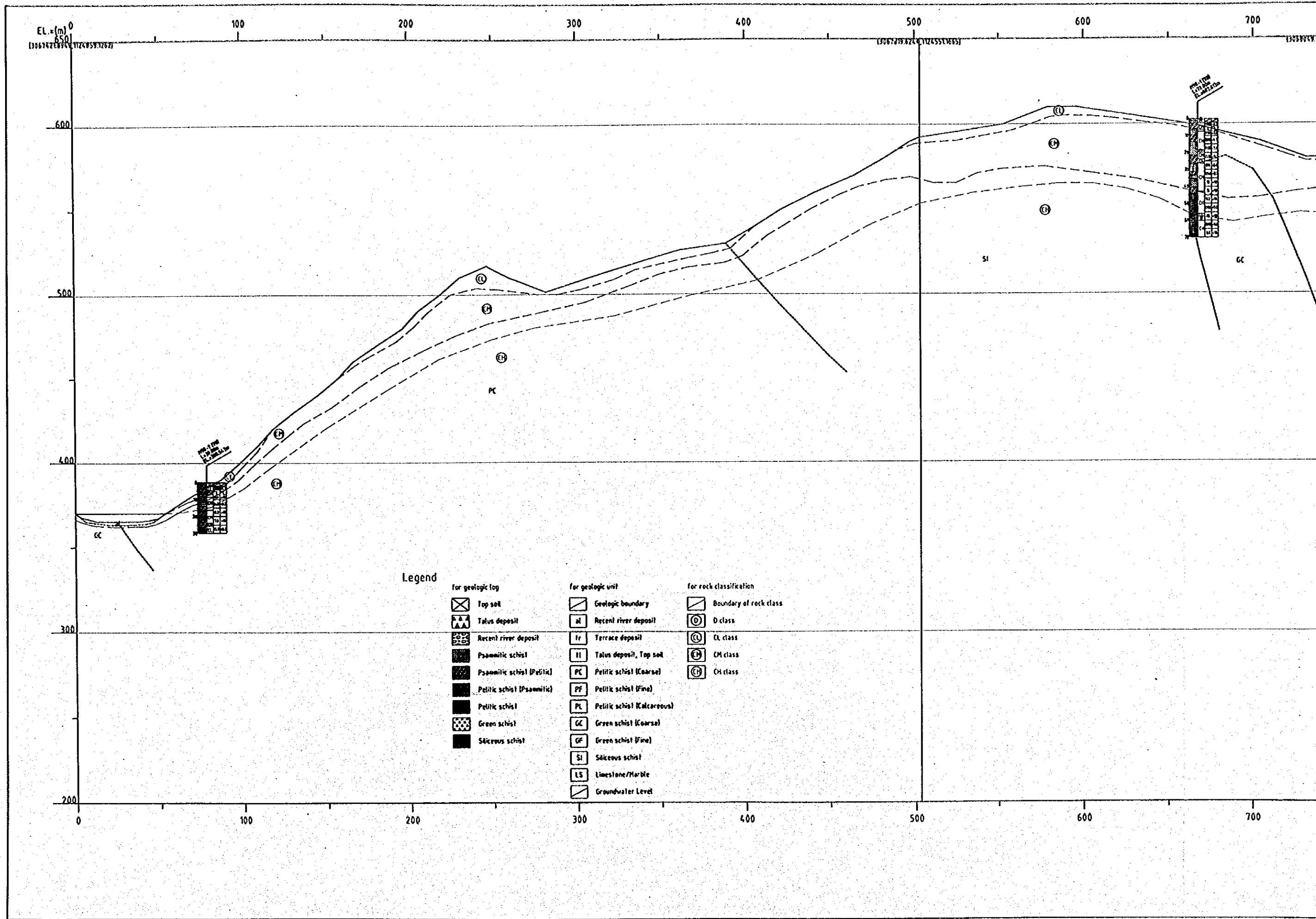


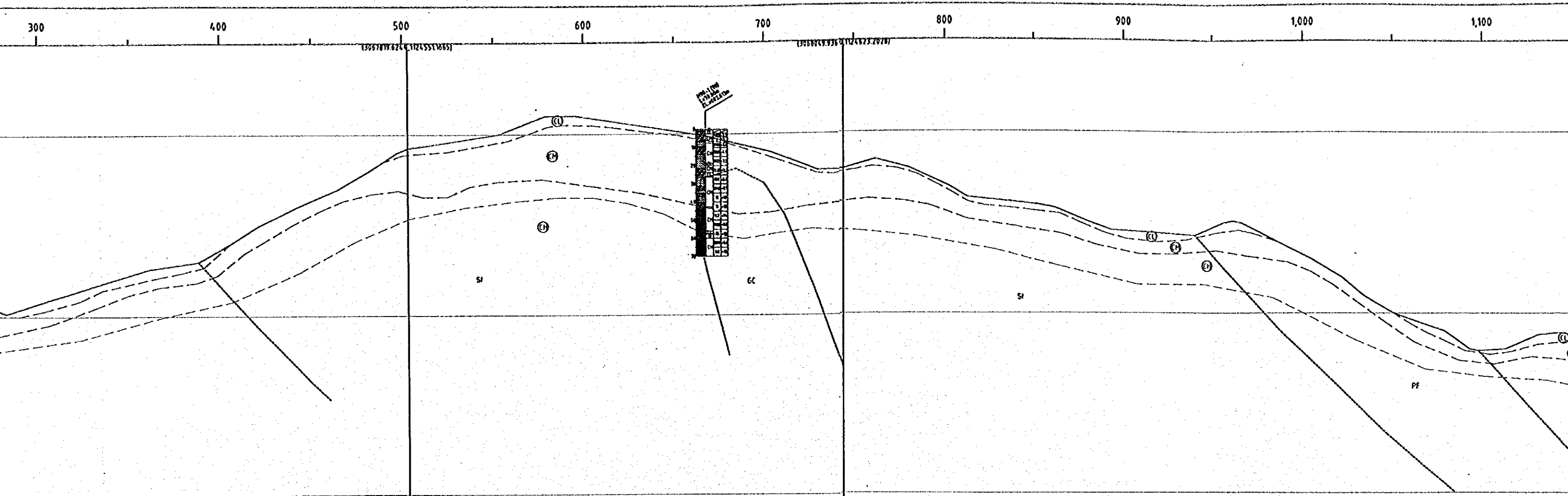




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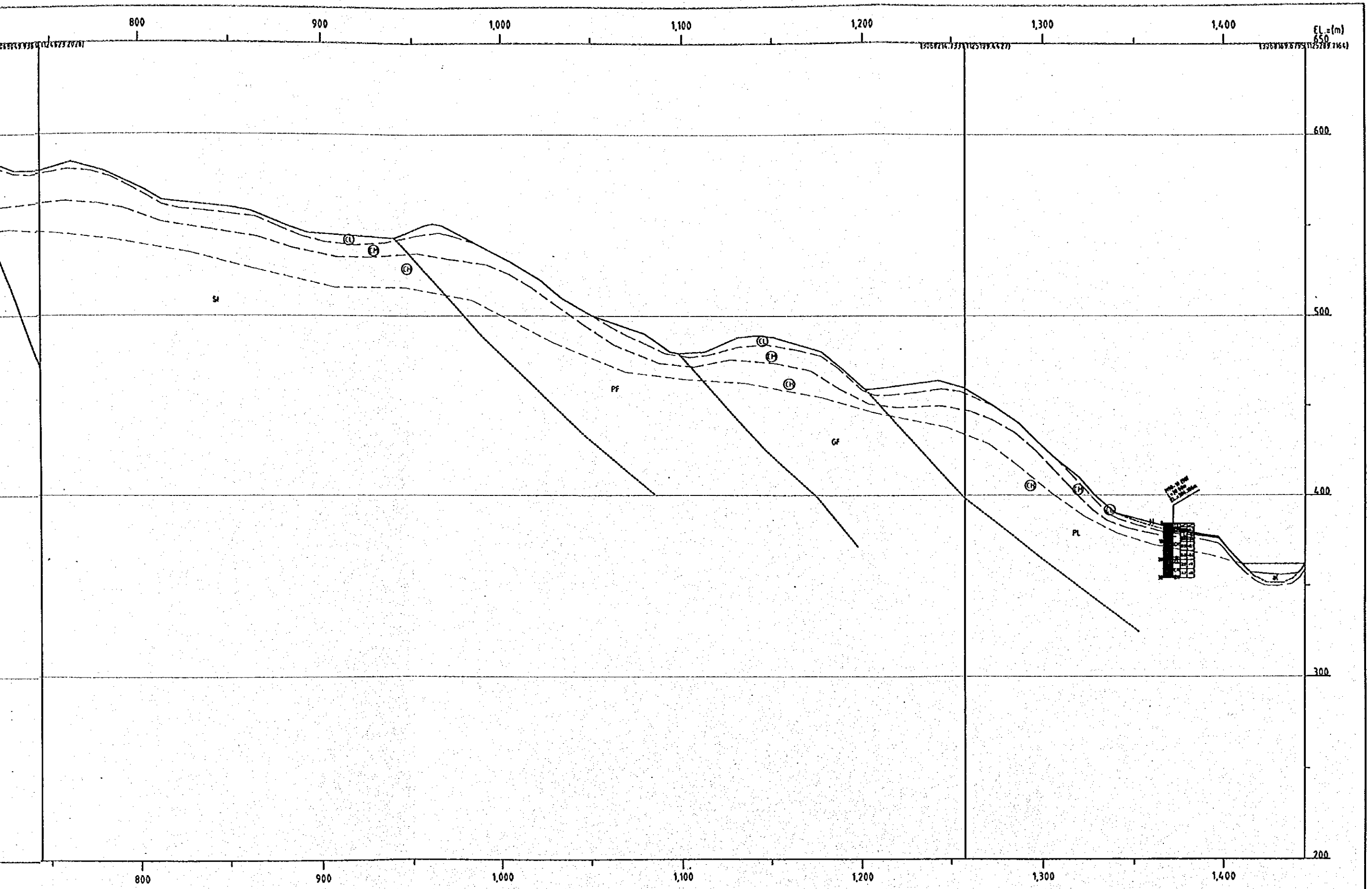
Figure B3.3-3  
 Geological Profile on the Spillway  
 (Seismic Prospecting Line S-4)





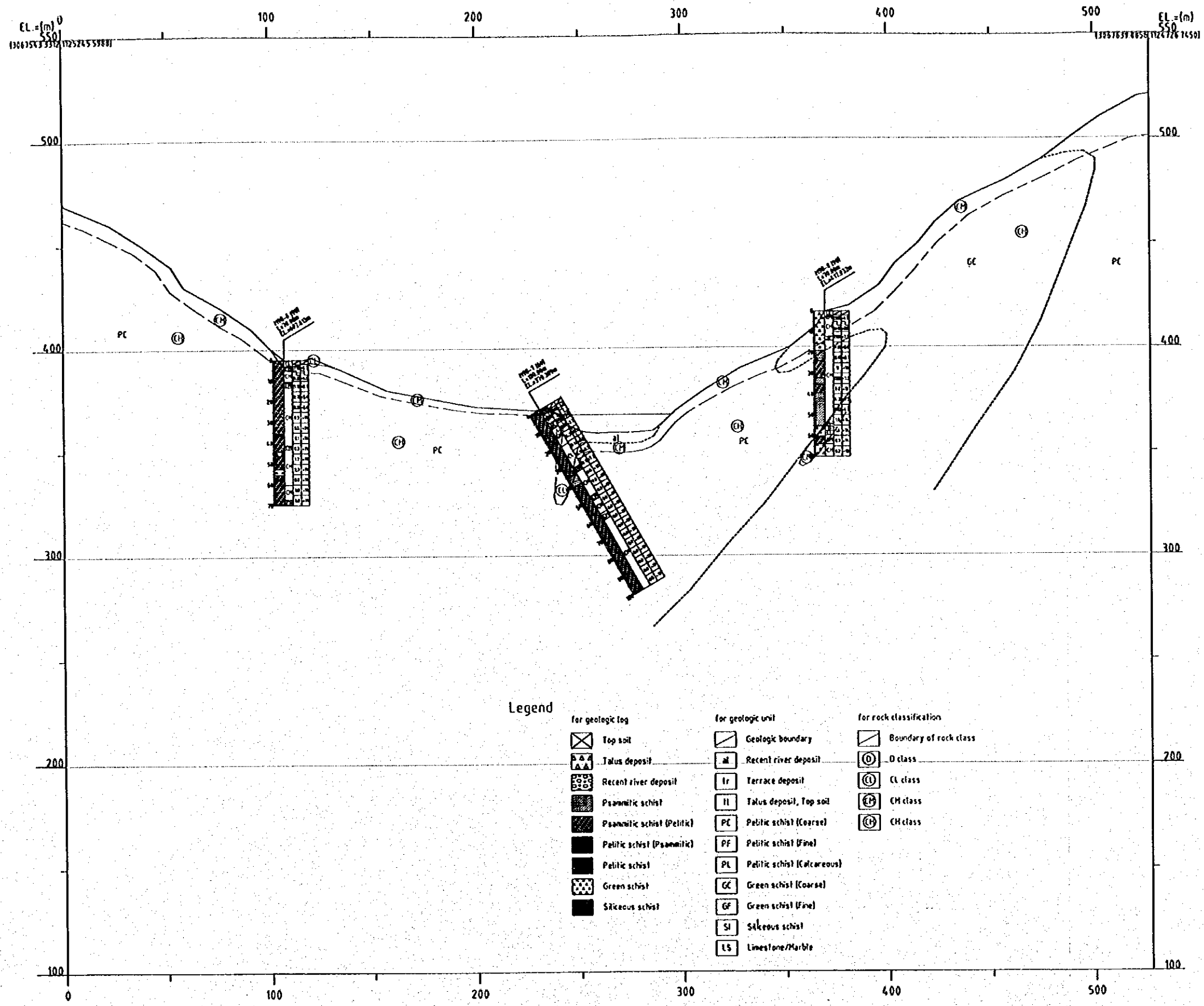
- | for geologic unit |                             | for rock classification |                        |
|-------------------|-----------------------------|-------------------------|------------------------|
|                   | Geologic boundary           |                         | Boundary of rock class |
|                   | Recent river deposit        |                         | D class                |
|                   | Terrace deposit             |                         | Ck class               |
|                   | Talus deposit, Top soil     |                         | Ch class               |
|                   | Pelitic schist (Coarse)     |                         | Ch class               |
|                   | Pelitic schist (Fine)       |                         |                        |
|                   | Pelitic schist (Calcareous) |                         |                        |
|                   | Green schist (Coarse)       |                         |                        |
|                   | Green schist (Fine)         |                         |                        |
|                   | Siltaceous schist           |                         |                        |
|                   | Limestone/Marble            |                         |                        |
|                   | Groundwater Level           |                         |                        |

300 400 500 600 700 800 900 1,000 1,100



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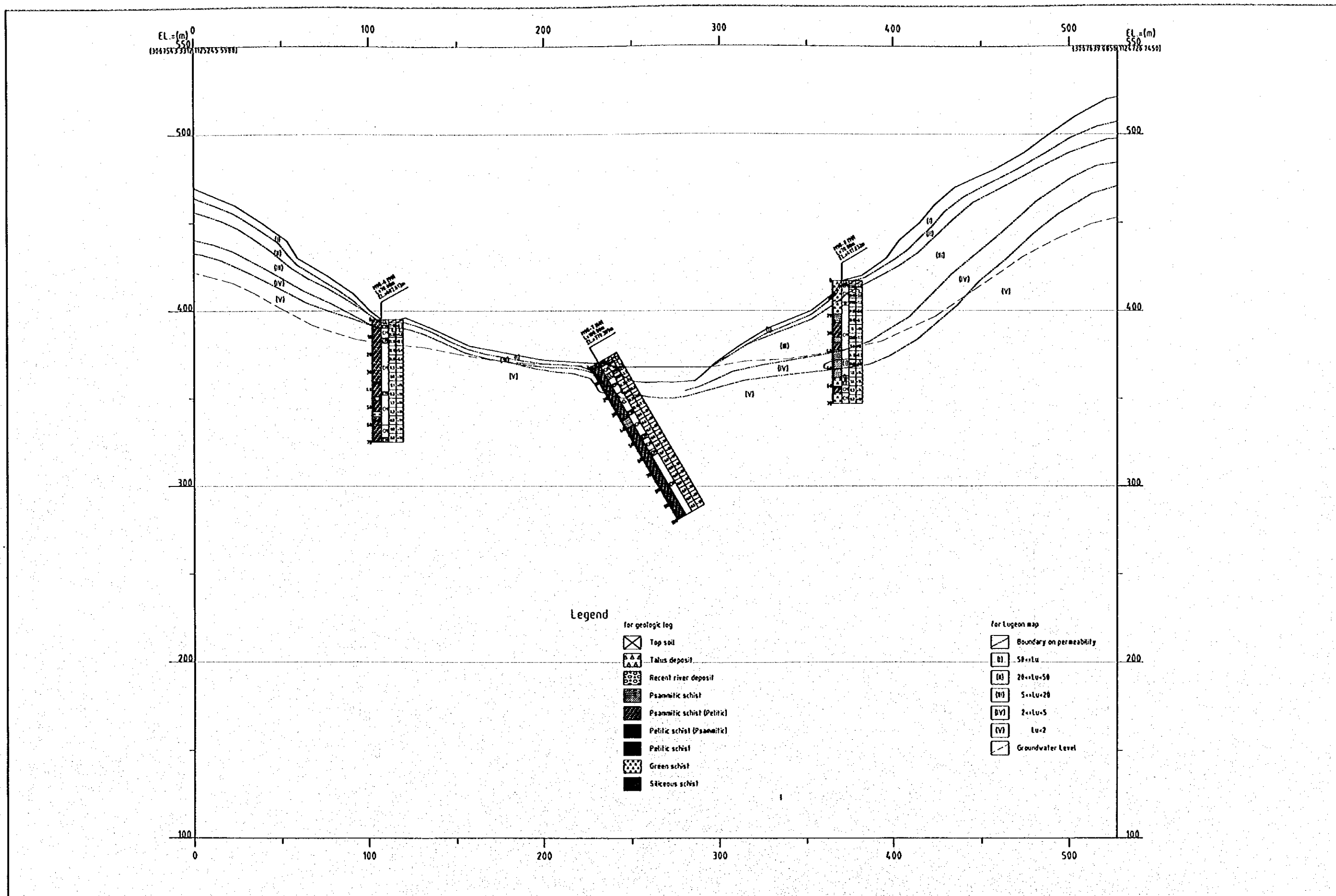
Figure B3.3-4  
 Geological Profile  
 on the Power Tunnel (Lines S-6, S-7)



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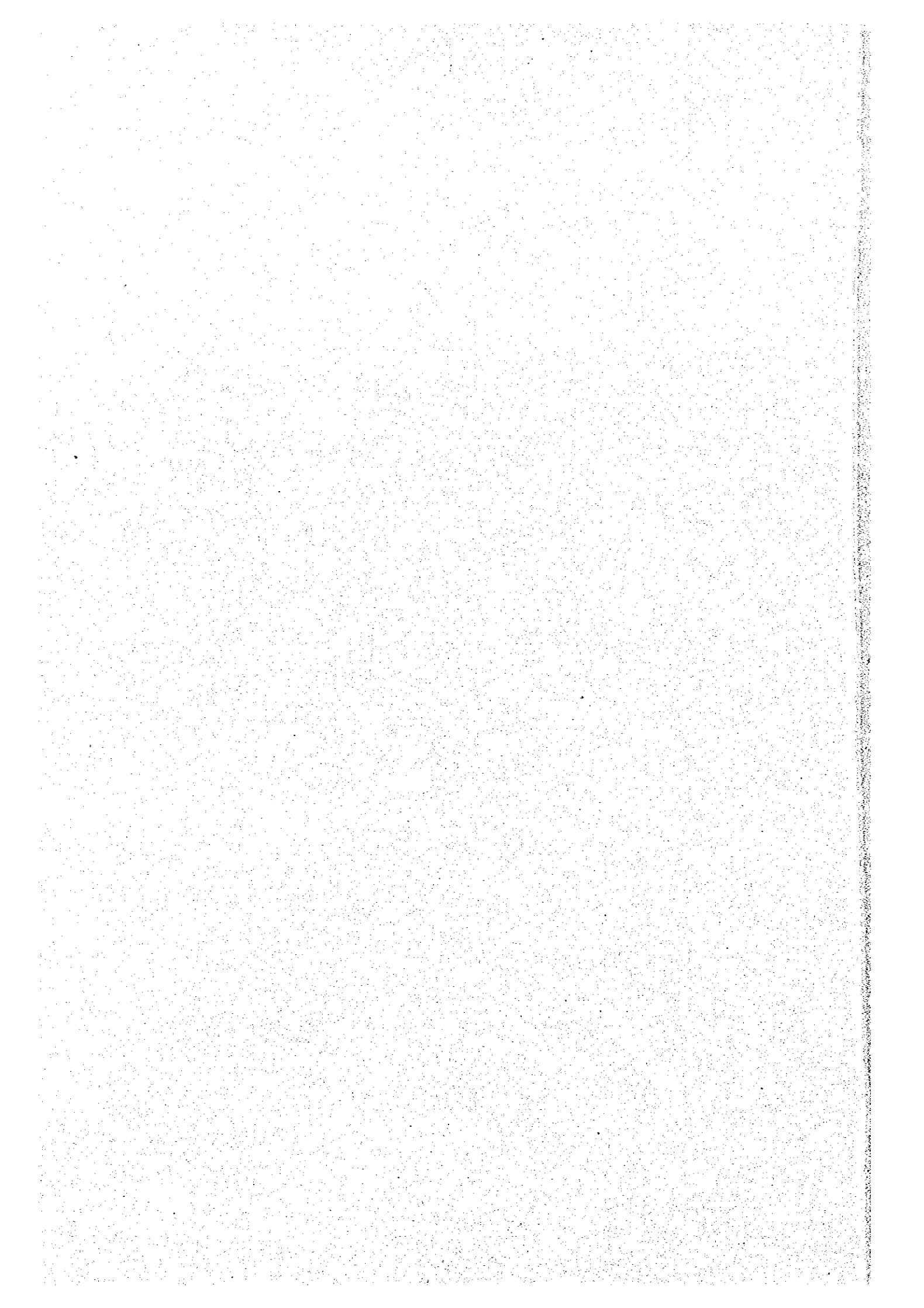
Figure B3.3-5  
 Geological Profile  
 on the Upstream Edge (Plinth) of Dam

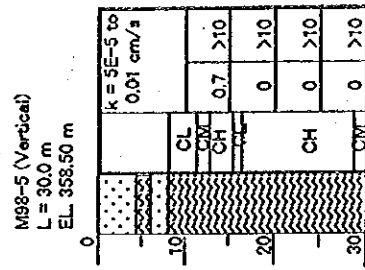




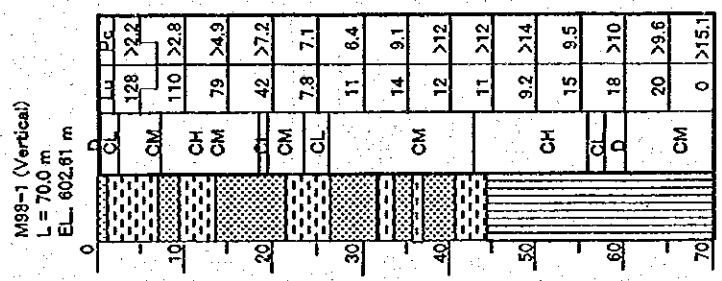
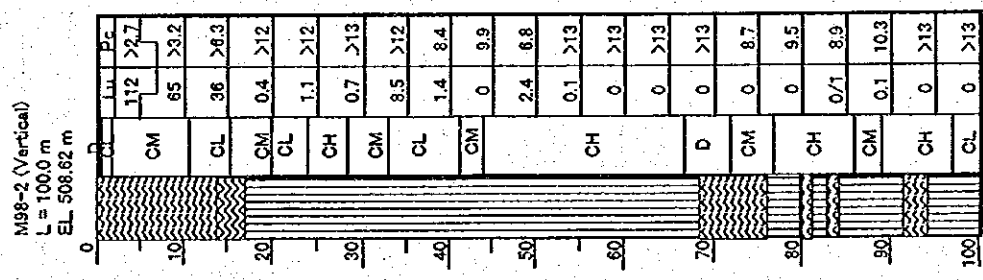
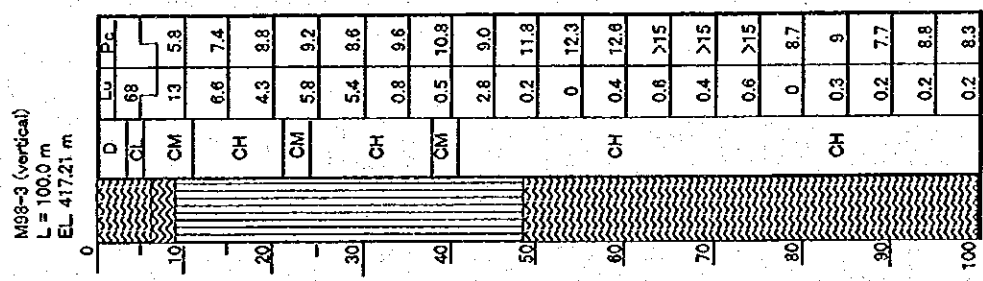
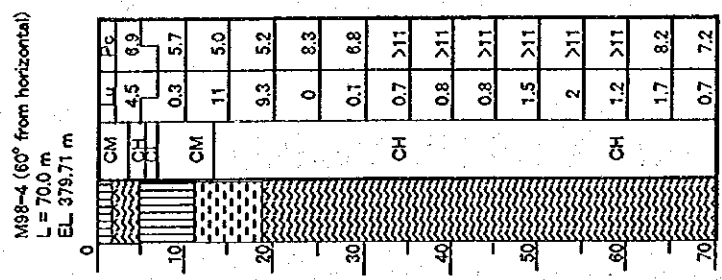
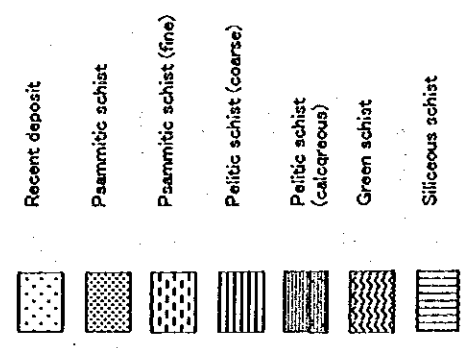
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Figure B3.3-6  
 Lugeon Map  
 on the Upstream Edge (Plinth) of Dam





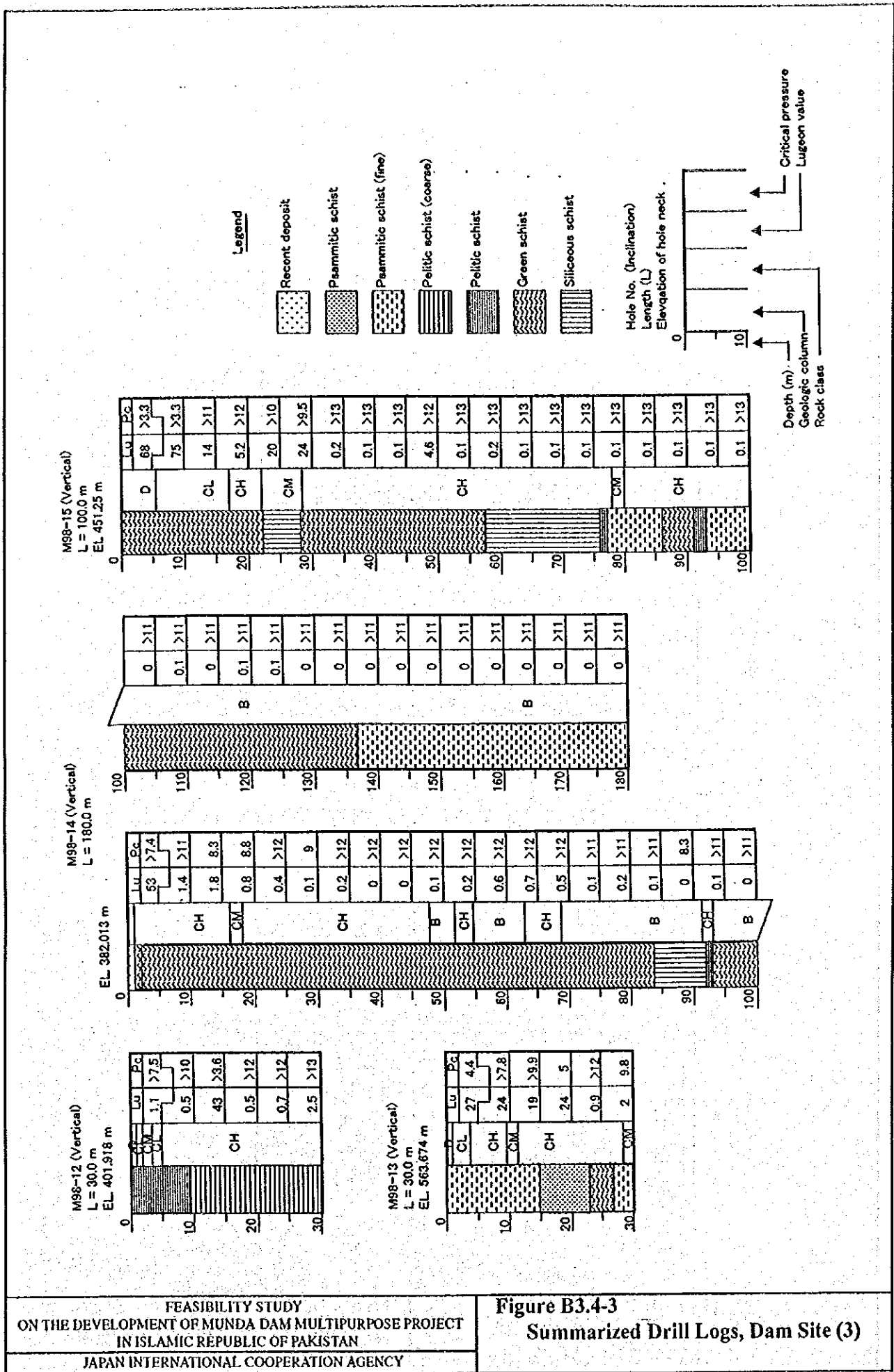
Legend



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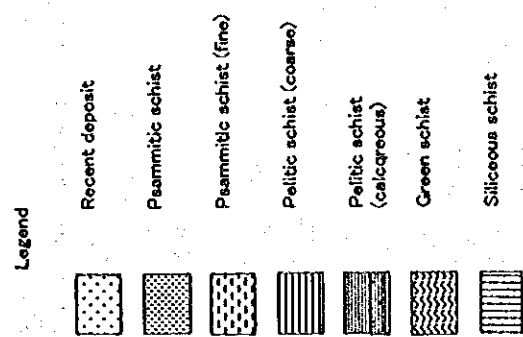
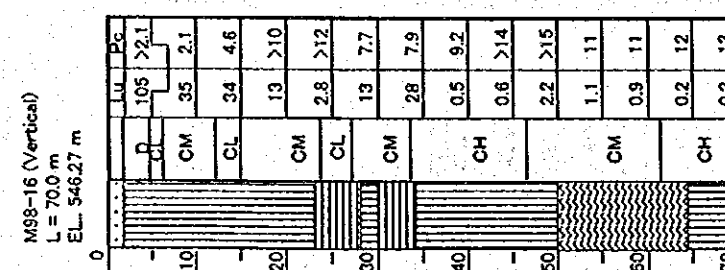
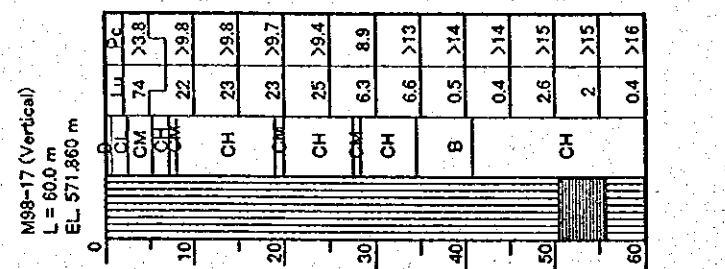
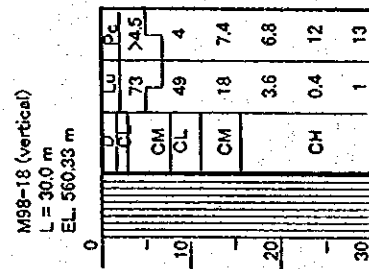
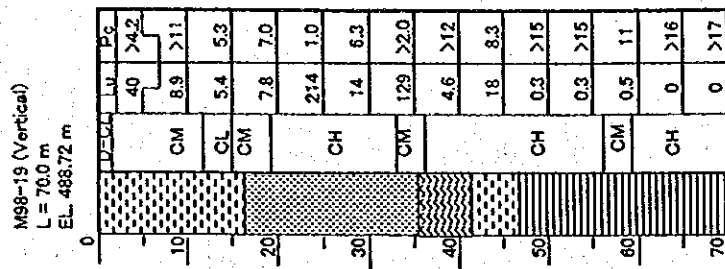
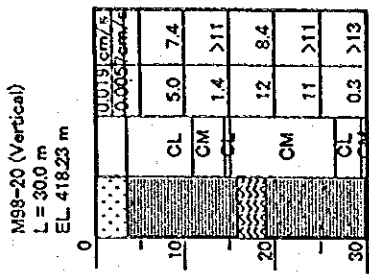
Figure B3.4-1  
Summarized Drill Logs, Dam Site (1)





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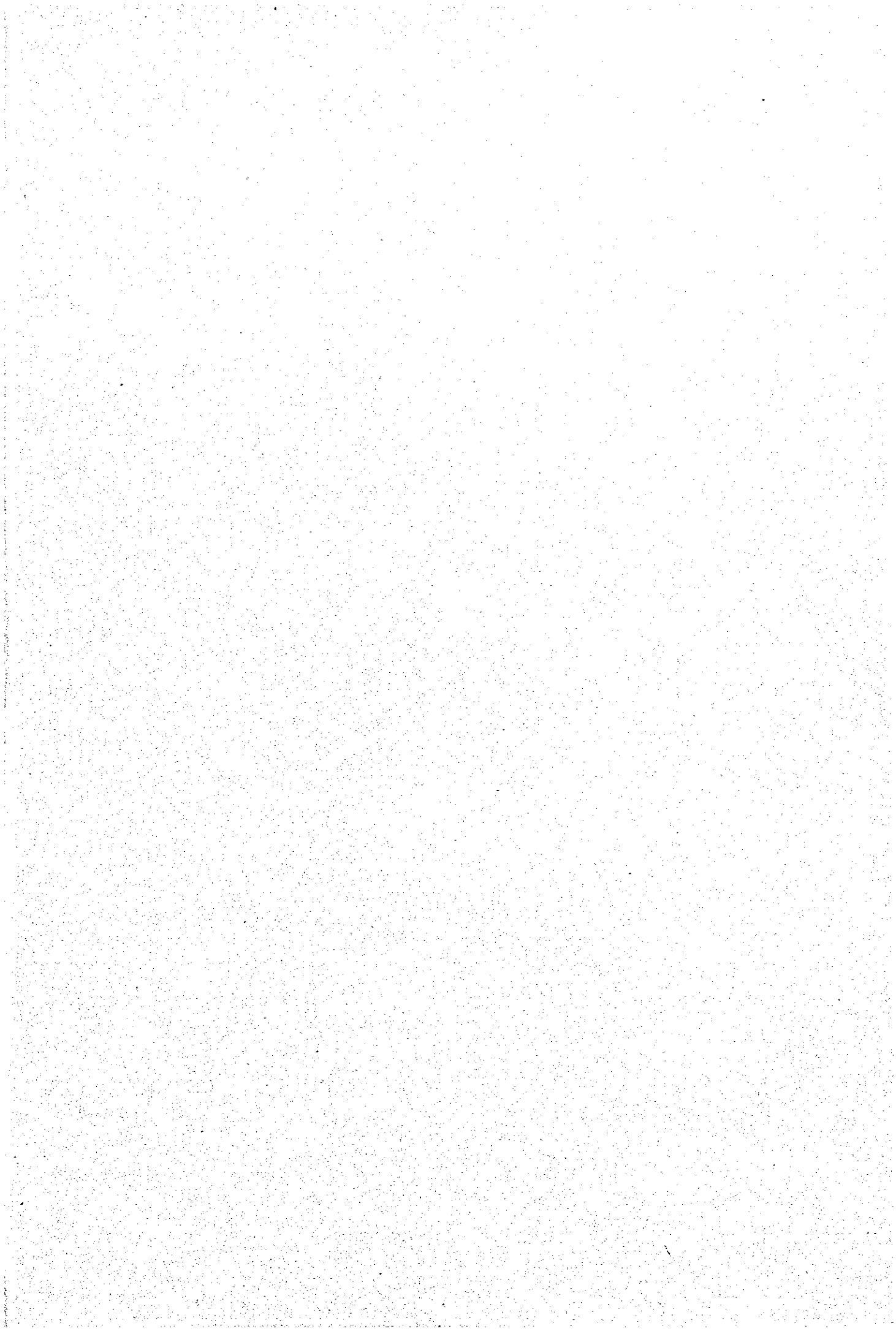
Figure B3.4-3  
 Summarized Drill Logs, Dam Site (3)



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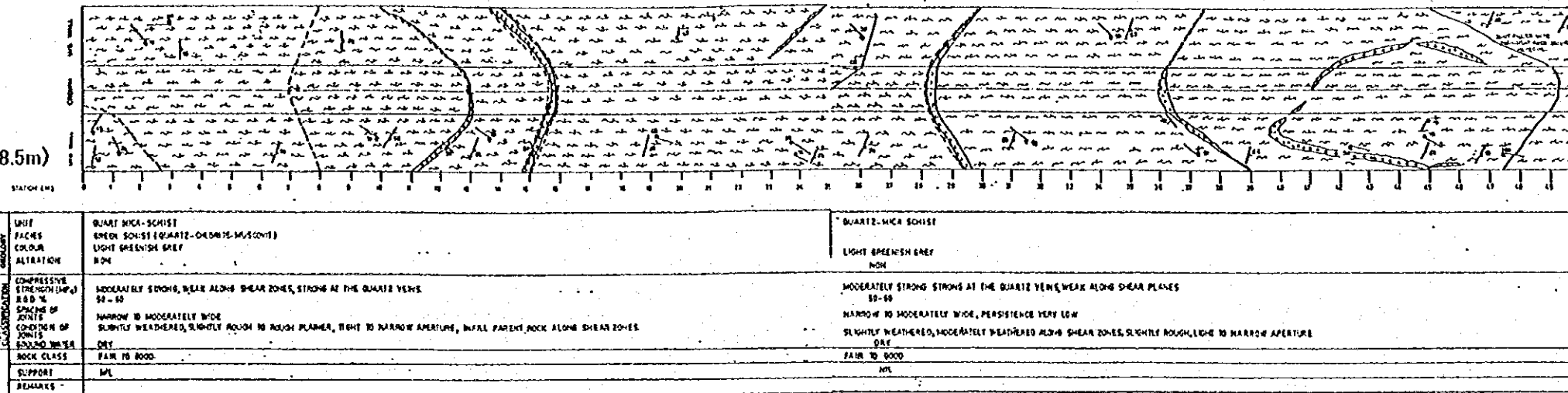
Figure B3.4-4  
Summarized Drill Logs, Dam Site (4)







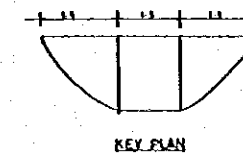
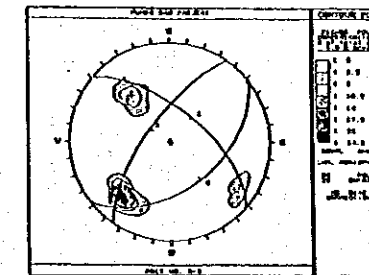
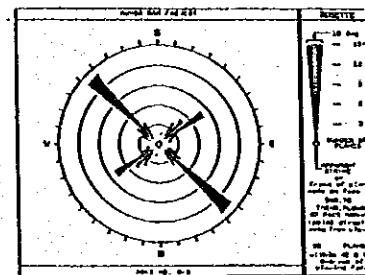
ADIT No.3  
N09°E →  
(Dam site  
Left bank, EL.538.5m)



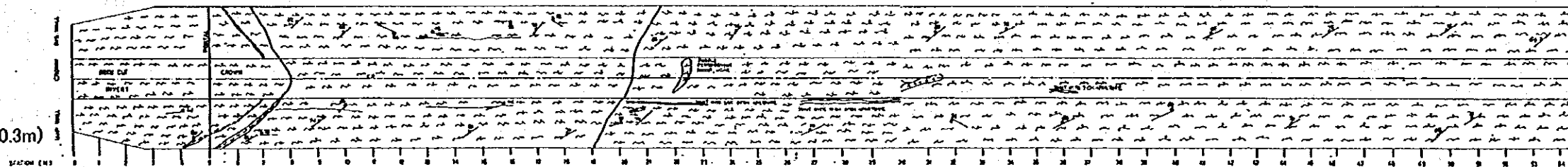
UNIT	QUARTZ-MICA SCHIST	QUARTZ-MICA SCHIST
FACIES	GREEN SCHIST (QUARTZ-DOLOMITE-MUSCOVITE)	
COLOR	LIGHT GREENISH GREY	LIGHT GREENISH GREY
ALTERATION	NONE	NONE
COMPRESSIVE STRENGTH (MPa) R & D %	MODERATELY STRONG, WEAK ALONG SHEAR ZONES, STRONG AT THE QUARTZ VENS 55-60	MODERATELY STRONG STRONG AT THE QUARTZ VENS WEAK ALONG SHEAR PLANES 55-60
SPACING OF JOINTS	NARROW TO MODERATELY WIDE	NARROW TO MODERATELY WIDE, PERSISTENCE VERY LOW
CONDITION OF JOINTS	SLIGHTLY WEATHERED, SLIGHTLY ROUGH TO ROUGH PLANES, TIGHT TO NARROW APERTURE, INFILL PARENT ROCK ALONG SHEAR ZONES	SLIGHTLY WEATHERED, MODERATELY WEATHERED ALONG SHEAR ZONES, SLIGHTLY ROUGH, LIGHT TO NARROW APERTURE
ROUNDING	DRY	DRY
ROCK CLASS	FAIR TO GOOD	FAIR TO GOOD
SUPPORT	NIL	NIL
REMARKS		

LEGEND

- LIGHT GREENISH GREY FINE GRAINED, SLIGHTLY WEATHERED QUARTZ MICA SCHIST MODERATELY STRONG WEAK ALONG SHEAR ZONE
- LIGHT GREENISH GREY FINE GRAINED, SLIGHTLY WEATHERED QUARTZ MICA SCHIST MODERATELY STRONG WEAK ALONG SHEAR ZONE
- SHEAR ZONE
- DP AND STRIKE OF FAULTING SCHISTOSITY
- DP AND STRIKE OF JOINT
- DP AND STRIKE OF SHEAR PLANE



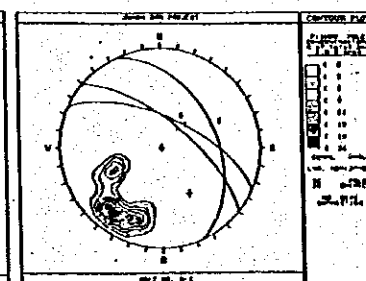
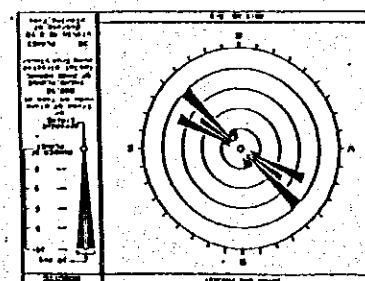
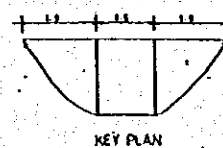
ADIT No.4  
S16°E →  
(Dam site  
Right bank, EL.540.3m)



UNIT	QUARTZ-MICA SCHIST	CHLORITE QUARTZ MICA SCHIST	CHLORITE QUARTZ-MICA SCHIST
FACIES	GREEN SCHIST (QUARTZ-MUSCOVITE-DOLOMITE)		
COLOR	LIGHT GREENISH GREY FRESH SURFACE PURPLE STAINING AT JOINT SURFACES	LIGHT GREENISH GREY AT FRESH SURFACE PURPLE ALONG JOINT SURFACE	LIGHT GREENISH GREY AT FRESH SURFACES, PURPLE ALONG JOINT PLANES
ALTERATION	NONE	CHLORITE	CHLORITE
COMPRESSIVE STRENGTH (MPa) R & D %	MODERATELY STRONG TO STRONG 70-80	MODERATELY STRONG TO MODERATELY WEAK 60-80	MODERATELY STRONG MODERATELY WEAK 55-80
SPACING OF JOINTS	WIDE TO EXTRA WIDE	NARROW	NARROW
CONDITION OF JOINTS	SLIGHTLY WEATHERED, SLIGHTLY ROUGH TO ROUGH SURFACE, APERTURE NARROW, PERSISTENCE LOW.	MODERATELY WEATHERED, SLIGHTLY ROUGH TO SMOOTH SURFACES APERTURE	MODERATELY WEATHERED, SLIGHTLY ROUGH TO SMOOTH SURFACES APERTURE
ROUNDING	DRY	DRY	DRY
ROCK CLASS	GOOD	FAIR	FAIR
SUPPORT	NIL	NIL	NIL
REMARKS			

LEGEND

- LIGHT GREENISH GREY FINE GRAINED, SLIGHTLY WEATHERED TO MODERATELY WEATHERED, QUARTZ MICA SCHIST, MODERATELY STRONG TO MODERATELY WEAK, MUSCOVITE, MICA MANGANESE
- LIGHT BROWNISH GREY FINE GRAINED, SLIGHTLY WEATHERED, SLIGHTLY FRACTURED MODERATELY STRONG TO MODERATELY WEAK AT THE CRACKED ZONES
- SHEAR ZONE
- DP AND STRIKE OF FAULTING SCHISTOSITY
- DP AND STRIKE OF JOINT
- DP AND STRIKE OF SHEAR PLANE



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Figure B3.5-2  
Geological Map of Exploratory Adits (2)

